

DOCKET

08-AFC-5

DATE MAR 12 2010

RECD. MAR 16 2010

Applicant's Comments on SA/DEIS

Application for Certification (08-AFC-5) Imperial Valley Solar, LLC

Submitted to:
Bureau of Land Management
1661 S. 4th Street, El Centro, CA 92243



Submitted to:
California Energy Commission
1516 9th Street , MS 15, Sacramento, CA 95814-5504



Submitted by:
Imperial Valley Solar, LLC
4800 N. Scottsdale Road, Suite 5500, Scottsdale, AZ 85251



With Support From:
URS Corporation

March 2010



March 12, 2010

Mr. Christopher Meyer
Project Manager
Attn: Docket No. 08-AFC-5
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Subject: Imperial Valley Solar (formerly Solar Two) (08-AFC-5)
Applicant's Comments on the SA/DEIS
URS Project No. 27657106.00801

Dear Mr. Meyer:

On behalf of Imperial Valley Solar (formerly Solar Two), LLC, URS Corporation Americas (URS) hereby submits the Applicant's Comments on the SA/DEIS.

I certify under penalty of perjury that the foregoing is true, correct, and complete to the best of my knowledge. I also certify that I am authorized to submit on behalf of Imperial Valley Solar, LLC.

Sincerely,

A handwritten signature in black ink, appearing to read "Angela Leiba". The signature is written in a cursive style and is positioned above the printed name and title.

Angela Leiba
Project Manager

AL: ml

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

EXECUTIVE SUMMARY

The Applicant has no comments regarding the executive summary at this time. The Applicant requests that as the following comments are evaluated and edits are made to this document, the executive summary be updated accordingly.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

INTRODUCTION

The Applicant has no comments regarding the introduction at this time. The Applicant requests that as the following comments presented in this document are evaluated and edits are made to the analysis, the introduction be updated accordingly.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

PROPOSED PROJECT

PROPOSED PROJECT Page B.1-8

Project Description Table 3, Significant Structures and Equipment states the dimensions of several proposed structures.

Comment:

Please revise as follows:

Main Services Complex Administration Building: change the length from 200 to 60, width from 150 to 70, and height from 14 to 17;

Main Services Complex Maintenance Building: change the length from 180 to 70, width from 250 to 70, and height from 44 to 17;

Main SunCatcher Assembly Building: please change the quantity from 2 to 3, length from 211 to 1,000, and width from 170 to 100.

PROPOSED PROJECT Page B.1-10

Arizona Crossings (roadway dips) would be placed along the roadways or low-flow culverts consisting of a small-diameter storm drain with a perforated stem pipe, as needed to cross the minor or major channels/swales. These designs would be based on Best Management Practices (BMPs) for erosion and sediment control.

Comment:

This paragraph should be removed as the Arizona Crossings to be placed along roadways and low-flow culverts have been eliminated.

PROPOSED PROJECT Page B.1-10

Regarding the Arizona Crossings to be used for major washes, the document reads "roadway protection from a concrete cut-off wall along the edges of the roadway with un-grouted (loose) riprap upstream and downstream of the concrete cut-off wall..." Additionally, in this same paragraph it is stated that "if polymeric stabilizers are selected, no protection measures would be used or protection may be limited to un-grouted (loose) riprap at critical areas."

Comment:

This should instead read that un-grouted (loose) riprap will only be placed downstream of the concrete cut-off wall. Additionally, protection measures would be the use of a cut-off wall, if warranted, in addition to protection from un-grouted (loose) riprap at critical areas.

PROPOSED PROJECT Page B.1-10

The section of roadway to be used as a designated evacuation route will be designed such that the roadway section shall have its driving surface constructed above the projected profile of a 25-year event.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Comment:

The driving surface of the section of roadway to be used as a designated evacuation route shall be constructed above the projected profile of a minimum of six inches below the 100-year flood event. Please revise accordingly.

PROPOSED PROJECT Page B.1-11

It is anticipated that the unpaved roadway sections may need to be both bladed to remove soil deposition, along with sediment removal from stem pipe risers at the culvert locations.

Comment:

Only the unpaved roadway sections may need to be bladed to remove soil deposition and it is not expected that sediment removal would be necessary. Please revise accordingly.

PROPOSED PROJECT Page B.1-11

The final bullet listed under expected flow reduction factors states, "The proposed perforated risers to be constructed upstream of the roadway culverts would provide for additional detention,"

Comment:

Please delete this bullet, as the proposed perforated risers have been eliminated.

PROPOSED PROJECT Page B.1-11

In descriptions of the buildings, the SA/DEIS describes the dimensions of project administration offices and personnel facilities.

Comment:

Dimensions of the buildings have been revised, so the operation and administration building would measure approximately 60 feet long rather than 200 feet long, by 70 feet wide rather than 150 feet wide, and by 17 feet high rather than 14 feet high.

PROPOSED PROJECT Page B.1-12

In descriptions of the buildings, the original document describes the dimensions of project administration offices and personnel facilities.

Comment:

Dimensions of the buildings have been revised, so the maintenance building would measure 70 feet wide rather than 180 feet wide, by 70 feet long rather than 250 feet long, and by 17 feet in height rather than 44 feet in height.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

ALTERNATIVES

The Applicant has no comments regarding alternatives at this time. Please note that the applicant is concerned that the alternatives analysis did not address the feasibility of the alternatives, particularly the 300 MW and the alternatives intended to avoid construction in the washes. We anticipate discussing this with the CEC staff at the workshops and, if necessary, during the hearings.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

CUMULATIVE SCENARIO

The Applicant has no comments regarding cumulative scenario at this time. The Applicant believes the cumulative analysis would benefit from having a more detailed discussion of regional cumulative impacts and a discussion of the geographic scope of each resource area associated with the cumulative impacts associated with past, present, and reasonably foreseeable future projects. The Applicant docketed this analysis in April, 2009 and will submit this information as part of its testimony and requests that the analysis be incorporated into the SSA/FEIS.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

AIR QUALITY

General Comment:

The discussion and subsequent conditions seem appropriate for the Solar Two Project. The majority of the conditions (AQ-1 through AQ-4 and AQ-7) are mitigation measures to control dust that Tessera Solar North America (TSNA) already planned to implement. Conditions AQ-5 and AQ-6 are intended to mitigate emissions from diesel construction equipment, and maintenance and operations vehicles. Condition AQ-9 requires that the emergency generator engine meet or exceed the NSPS Subpart IIII emission standards for the model year that corresponds to the date of purchase. Condition AQ-10 requires that the gasoline tank and appurtenances meet or exceed all vapor recovery and standing loss requirements in affect at the time of construction.

AIR QUALITY Page C.1-12

Background air quality data used by staff in air analyses were different than presented in the AFC or subsequent data request responses.

Comment:

While the modeling conclusions do not change from those presented in the AFC or subsequent data request, the Applicant requests that Staff evaluate both sets of data to ensure the most thorough analysis.

AIR QUALITY Page C.1-17

CEC staff re-calculated the daily VOC emissions from the gasoline tank to include a tank refill and 500 gallons of vehicle filling

Comment:

Staff's recalculation of daily VOC emissions increased from 5.05 lb/day to 31.78 lb/day from those determined by the Applicant. While Staff's estimates were well above the activities expected by the Applicant, this increase did not change any significance determination.

AIR QUALITY Page AIR.1-7

The discussion about project emission sources includes "two diesel-fueled emergency engines".

Comment:

The Applicant will only use one emergency engine and requests the language be changed as noted: "one diesel-fueled emergency engine".

AIR QUALITY Page AIR.1-12

Comment:

The text refers to the project as "SES One", please change to "Solar Two".

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

AIR QUALITY Page AIR.1-18

Comment:

The text refers to the project as "Solar One", please change to "Solar Two".

AIR QUALITY Page C.1-49

Staff states "The project owner shall provide an AQCMP, for approval, which details the steps that will be taken and the reporting requirements necessary to ensure compliance with Conditions of Certification AQ-SC3, AQ-SC4, and AQ-SC5. Verification must be at least 60 days prior to the start of any ground disturbance."

Comment:

Applicant requests that verification of the condition be revised from 60 days to 30 days.

AIR QUALITY Page C.1-51

Condition of Certification AQSC-4 states, "The AQCMM or Delegate shall implement the following procedures for additional mitigation measures in the event that such visible dust plumes are observed:

Step 1: The AQCMM or Delegate shall direct more intensive application of the existing mitigation methods within 15 minutes of making such a determination.

Step 2: The AQCMM or Delegate shall direct implementation of additional methods of dust suppression if Step 1, specified above, fails to result in adequate mitigation within 30 minutes of the original determination.

Step 3: The AQCMM or Delegate shall direct a temporary shutdown of the activity causing the emissions if Step 2, specified above, fails to result in effective mitigation within one hour of the original determination. The activity shall not restart until the AQCMM or Delegate is satisfied that appropriate additional mitigation or other site conditions have changed so that visual dust plumes will not result upon restarting the shutdown source. The owner/operator may appeal to the CPM or BLM Authorized Officer any directive from the AQCMM or Delegate to shut down an activity, if the shutdown shall go into effect within one hour of the original determination, unless overruled by the CPM or BLM Authorized Officer before that time.

Comment:

The Applicant requests, that because of the specific nations of this language that it be presented as verification for Condition AQSC-4 rather than as part of the condition itself.

AIR QUALITY Page C.1-54

Staff states "The project owner shall provide a site Operations Dust Control Plan including all applicable fugitive dust control measures identified in the verification of AQ-SC3 that would be applicable to reducing fugitive dust from ongoing operations. Plan identifies the dust and erosion control procedures, including effectiveness and environmental data for the proposed soil stabilizer, that will be used during operation of the project and that identifies all locations of the speed limit signs. The performance requirements of AQ-SC4 shall also be included in the Operations Dust Control Plan. At

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

least 60 days prior to the start of commercial operation, the project owner shall submit... for review and approval a copy of the site Operations Dust Control Plan.”

Comment:

Applicant requests that submittal date of the condition be revised from 60 days to 30 days prior to the start of commercial operation.

AIR QUALITY Page C.1-54

Staff states “Report identifying the locations of all speed limit signs, and a copy of the project employee and contractor training manual that clearly identifies that project employees and contractors are required to comply with the dust and erosion control procedures and on-site speed limits.”

Comment:

Applicant requests that the submittal date of the condition be revised from 60 days to 30 days prior to the start of commercial operation.

AIR QUALITY Page C.1-56

Under the Equipment Description, Part A, Emergency Generator Engine, staff describes the engine being driven by a Cummins, QSL9 GNR3, 335 hp, T2 diesel engine.

Comment:

The Applicant request that one manufacturer not be specified, however, and the general type of diesel engine should instead be listed.

AIR QUALITY Page C.1-58

Comment:

Under the Equipment Description, the original document describes the Emergency Generator Engine being driven by a Cummins, QSL9 GNR3, 335 hp, T2 diesel engine. One manufacturer should not be specified, however, so the general type of diesel engine should instead be listed.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

BIOLOGICAL RESOURCES

BIOLOGICAL RESOURCES Page C.2-1

Page C.2-1 states that staff is examining whether or not the provision of funds is adequate for FTHL mitigation under CEQA.

Comment:

Staff should also state whether or not it is considered adequate under NEPA. Since it is based on the FTHL Rangewide Management Strategy, provision of funds is adequate.

BIOLOGICAL RESOURCES Page C.2.1-3

State or federal listed plants or California Native Plant Society (CNPS) listed species were not included in the focused special status plant surveys conducted by the applicant, including one species which is known from the project site. Just over half the surveys were done in conjunction with FTHL surveys, utilizing biologists with varying degrees of botanical expertise to conduct the rare plant surveys. Staff would expect rare plant surveys to be conducted by qualified botanists without the distraction of looking for certain special status wildlife species. No special status plant surveys were conducted in the fall after the late summer/early fall monsoonal rains, which stimulate another bloom. Thus, survey results were not considered adequate to assess presence or absence of a species within the project area. Staff has proposed Condition of Certification BIO-19 which requires botanical surveys to be conducted spring and fall of 2010 and avoidance of rare plants during project construction and operation. Implementation of this condition would reduce impacts to special status plants to less than significant levels under CEQA.

Comment:

Implementation of the botanical surveys was consistent with agency guidelines in force at the time of the survey effort. URS provided project specific survey protocols to CEC & BLM staff for approval prior to conducting both 2007 and 2008 survey effort. CEC approved the timing of the botanical survey effort. Neither CEC nor BLM staff requested fall surveys be conducted and could have done so in their reviews of the proposed protocols for 2007 and 2008 and during the data request phase of the CEC process. It is not clear why fall surveys are necessary since all species on the current focal species list have typical spring blooming periods. A few species on the list may also bloom in fall if significant monsoonal rains occur to stimulate fall blooming. Fall rains were 70% of normal in 2007 and 1% of normal in 2008. To our knowledge, BLM nor CEC has not previously requested fall botanical surveys be conducted as a condition of approval for a project.

All rare plants known from within 10 miles of the project areas were included in the focal species list for the 2007 & 2008 botanical surveys. Four additional species (dwarf germander, pink fairy duster, Thurber's pilostyles and chaparral sand verbena) currently known from the project vicinity were added to the CNDDDB database after the 2008 surveys were conducted.

All personnel utilized were qualified to participate in the surveys as defined by agency survey guidelines and were supervised by experienced botanists. Rather than denigrate the survey effort done to date, CEC and BLM staff should acknowledge that the level of

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

effort was deemed appropriate given the practicality of the size of the survey area (8,000+ acres), habitat conditions, and species that were the focus of the survey. All areas of the proposed action were visited during the appropriate time of the year to expect probable detection of regionally significant populations of rare species, if actually present during the survey year. A total of 120 plant species were recorded during the field effort. The rate of coverage during the 2008 surveys is estimated at less than 20 acres per survey hour. The 2008 rare plant survey effort is estimated at 960 field hours.

The lack of detection of rare plants onsite is likely attributable to poor rainfall conditions during each survey year. 2007 was an extremely poor rainfall year (<10% of normal) and 2008 had only moderately better conditions (<50% of normal). CEC and BLM staff did not request additional botanical survey effort during fall 2008 or spring or fall of 2009. 2010 is expected to be an above normal year for the spring blooming period. The project extent was also increased in late April 2009 with the addition of the reclaimed waterline to the Seeley WWTP. This project component was added too late to conduct botanical surveys in 2009 along this extended pipeline route.

TSNA has consented to conduct two spring period botanical surveys in 2010. Requiring fall botanical surveys as a condition of approval is unnecessary to allow agencies to identify potentially significant impacts as all target species bloom during the spring/summer/ survey periods and therefore the additional surveys to be conducted will be adequate to assess presence or absence of these species in the Project area.

Recommended text modifications:

State or federal listed plants or California Native Plant Society (CNPS) listed species were not included in the focused special status plant surveys conducted by the applicant, including one species which is known from the project site. Just over half the surveys were done in conjunction with FTHL surveys, utilizing biologists with varying degrees of botanical expertise to conduct the rare plant surveys. Staff would expect rare plant surveys to be conducted by qualified botanists without the distraction of looking for certain special status wildlife species. No special status plant surveys were conducted in the fall after the late summer/early fall monsoonal rains, which stimulate another bloom. Thus, survey results were not considered adequate to assess presence or absence of a species within the project area. The poor rainfall conditions that existed during the 2007 and 2008 survey years may have resulted in a lower than average number of species being present on the Project site and therefore, could have resulted in a false negative result for some species. 2007 was an extremely low rainfall year (less than 10% of normal) and 2008 had only moderately better conditions (less than 50% of normal). 2010 is expected to be an above normal year for the spring blooming period. The project extent was also increased in late April 2009 with the addition of the reclaimed waterline east of the West Main Canal to the Seeley WWTP. This project component was added too late to conduct appropriately timed botanical surveys in 2009 along this extended pipeline route. Staff has proposed Condition of Certification BIO-19 which requires botanical surveys to be conducted spring and fall of 2010 and avoidance of rare plants during project construction and operation, where practicable. Implementation of this condition would reduce impacts to special status plants to less than significant levels under CEQA.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

BIOLOGICAL RESOURCES Page C.2.1-3 and C.2.1-4

In review of the issues regarding mitigation for Waters of the U.S., staff considers the project alternatives proposed by the USACE preferable to the applicant proposed project. These alternatives would reduce development of permanent structures either within the primary drainages on the 6,063.1-acre site (Drainage Avoidance #1) or reduce the project site to 3,153 acres (Drainage Avoidance #2), avoiding the major ephemeral washes on the western and eastern end of the applicant proposed project site. Drainage Avoidance #1 Alternative would reduce permanent impacts from 165 acres to 48 acres and reduce energy production from 750 megawatts to 632 megawatts. Drainage Avoidance #2 Alternative would reduce permanent impacts from 165 acres to 71 acres and reduce energy production by 423 megawatts. However, due to the permanent impact the SES Solar Two project has on FTHL habitat, staff prefers Drainage Avoidance #2 Alternative as the impacts to FTHL habitat and to FTHL populations would be decreased by approximately 50%.

Comment:

Please add the following at the end of this text:

It should be noted that neither Drainage Avoidance #1 or Drainage Avoidance #2 meets the stated Project objectives and the ACOE has not yet determined whether either is practicable. The project as proposed is also consistent with the agency approved FTHL Management Strategy.

BIOLOGICAL RESOURCES Page C.2-6

California Code of Regulations (Title 14, section 460)	Lists state protected fur-bearing mammals.
--	--

Comment:

It is not clear whether Title 14, Section 460 is applicable to the CEQA assessment of this project. The section relates to CDFG Trapping regulations, and does not prohibit land development effects on fur-bearing mammals.

Recommend deletion of this section from the LORS table.

BIOLOGICAL RESOURCES Page C.2-5

Comment:

Table 1 on page C.2-5 is referred to as the "significance thresholds", but it does not contain any specific thresholds, rather it is a list of various LORS applicable to the project. At the least, they should refer back to the CEQ regulations. With respect to CEQA, they should state the thresholds rather than state that Appendix G of the *State CEQA Guidelines* was used so that the reader understands how significance was determined.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

BIOLOGICAL RESOURCES Page C.2-7

Nest or Eggs (Fish and Game Code section 3503)	Protects California's birds by making it unlawful to take, possess, or needlessly destroy the nest or eggs of any bird.
--	---

Comment:

Recommend revising text as follows:

Protects California's birds by making it unlawful to take, possess, or needlessly destroy the active nest or eggs of any native bird.

BIOLOGICAL RESOURCES Page C.2-7

Birds of Prey (Fish and Game Code section 3503.5)	Unlawful to take, possess, or destroy any birds in the orders Falconiformes and Strigiformes or to take, possess, or destroy the nest or eggs of any such bird.
---	---

Comment:

Birds of Prey (Fish & Game Code section 3503.5)	Unlawful to take, possess, or destroy any birds in the orders Falconiformes and Strigiformes or to take, possess, or destroy the <u>active</u> nest or eggs of any such bird
---	--

BIOLOGICAL RESOURCES Page C.2-7

Fur-bearing Mammals (Fish and Game Code sections 4000 and 4002)	Lists fur-bearing mammals which require a permit for take.
---	--

Comment:

It is not clear whether CDFG Trapping regulations are applicable to the CEQA assessment of this project. The section relates to CDFG Trapping regulations, on restrictions on land development effects on fur-bearing mammals.

Recommend deletion of this section from the LORS table.

BIOLOGICAL RESOURCES Page C.2-7

California Desert Native Plants Act of 1981 (Food and Agricultural Code section 80001 et seq. and California Fish and Game Code sections 1925-1926)	Protects non-listed California desert native plants from unlawful harvesting on both public and private lands in Imperial, Inyo, Kern, Los Angeles, Mono, Riverside, San Bernardino, and San Diego counties. Unless issued a valid permit, wood receipt, tag, and seal by the commissioner or sheriff, harvesting, transporting, selling, or possessing specific desert plants is prohibited.
---	---

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Comment:

It is not clear that this regulation is applicable to the CEQA assessment of this project. The project does not include a request to harvest desert native plants for commercial purposes.

Recommend deletion of this section from the LORS table.

BIOLOGICAL RESOURCES Page C.2-7

Comment:

Please add the following LORS:

Fully Protected Species (Fish & Game Code sections 3511, 4700, 5050, and 5515)	Designates certain species as fully protected and prohibits the take of such species unless for scientific purposes (see also California Code of Regulations Title 14, section 670.7)
--	---

BIOLOGICAL RESOURCES Page C.2-9

Plant Site and Surrounding Area

The project's plant site is bounded by the Union Pacific Railroad to the north and Interstate 8 to the south. The western edge would be located approximately one mile west of the junction of the Union Pacific Railroad and Interstate 8, and the eastern edge would be located west of Dunaway Road. The United States Gypsum Corporation (Plaster City) processing plant is just north of the project along Evan Hewes Highway. Sand and gravel operations occur north of Evan Hewes Highway. Off-highway vehicle (OHV) use is designated as limited within the project site to designated routes only. North of the project site is the Plaster City Open OHV Area which is designated by BLM as being open to off road travel. Areas to the west and south of the project site are undeveloped, whereas the area to the east includes sand and gravel operations and agricultural production. More sand and gravel operations occur five miles west of the site in unincorporated Ocotillo. Sand and gravel operations occurred in the past on the project site, but the site has been subsequently revegetated. The plant site consists of Sonoran creosote bush scrub habitat.

Comment:

Please add additional text placing the project site in a regional context that acknowledges existing infrastructure that physically isolates the site from other large open space areas, especially areas already conserved and managed for biological values (e.g., Yuha Desert and West Mesa MAs). Also, a substantial level of OHV activity occurs onsite. Existing adverse edge effects are extant on the project site and along the linear project components.

BIOLOGICAL RESOURCES Page C.2-11

However, the BLM Yuha Desert FTHL Management Area is located immediately south of Interstate 8, on the south edge of the project site and USFWS-designated critical

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

habitat for Peninsular bighorn sheep is located approximately six miles west of the project site.

Comment:

Interstate 8 is a substantial feature affecting existing biological resources in the project vicinity. Recommend the following text modification

However, the BLM Yuha Desert FTHL Management Area is located immediately south of Interstate 8, ~~on the south edge of the project site~~ and USFWS-designated critical habitat for Peninsular bighorn sheep is located approximately six miles west of the project site.

BIOLOGICAL RESOURCES Page C.2-13

Biological Resources Table 2 includes special status species that are known to occur in the project area and vicinity according to the California Natural Diversity Database (CNDDDB) (CDFG 2009) or have the potential of occurring. There is no indication that a special status species list was solicited from the USFWS. None of the special status plant species listed below was detected during the 2007 and 2008 surveys (SES 2008a and SES 2009q), although those surveys had limitations to the extent that staff is requiring additional surveys to be conducted in 2010. Five special status wildlife species were detected during the surveys, and are discussed in more detail below. Species observed during the 2007/2008 surveys are indicated by bold-face type.

Comment:

Please delete the text indicated below. BLM requested a list from the USFWS early in the Section 7 consultation process. See comments above regarding rare plant survey effort.

Biological Resources Table 2 includes special status species that are known to occur in the project area and vicinity according to the California Natural Diversity Database (CNDDDB) (CDFG 2009) or have the potential of occurring. ~~There is no indication that a special status species list was solicited from the USFWS.~~ None of the special status plant species listed below was detected during the 2007 and 2008 surveys (SES 2008a and SES 2009q), ~~although those surveys had limitations to the extent that staff is requiring additional surveys to be conducted in 2010.~~ Five special status wildlife species were detected during the surveys, and are discussed in more detail below. Species observed during the 2007/2008 surveys are indicated by bold-face type.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

BIOLOGICAL RESOURCES Page C.2-13 through C.2-16

**Biological Resources Table 2
Special Status Species Known or Potentially Occurring in the SES Solar 2 Area**

PLANTS		
Common Name (<i>Scientific Name</i>)	Status State/Fed/BLM/CNPS	Potential for Occurrence
chaparral sand verbena (<i>Abronia villosa</i> var. <i>aurita</i>)	__/__/S/1B.1	Low —not observed though not specifically targeted during surveys along proposed water pipeline during the appropriate blooming period. Historic CNDDDB occurrence in Seeley in the area of the proposed water pipeline.
Harwood's milk-vetch (<i>Astragalus insularis</i> var. <i>harwoodii</i>)	__/__/2.2	Moderate —Surveys insufficient to determine presence or absence. Closest CNDDDB occurrence two miles southwest of project site. Suitable habitat occurs on project site.
pink fairy duster (<i>Calliandra eriophylla</i>)	__/__/2.3	Moderate —Surveys insufficient to determine presence or absence. Suitable habitat occurs on the project site. Nearest CNDDDB record is from 1989 approximately 4 miles southwest of the project site.
crucifixion thorn (<i>Castela emoryi</i>)	__/__/2.3	Moderate —Surveys insufficient to determine presence or absence. Nearest CNDDDB record is from 1997 from the BLM Crucifixion Thorn Natural Area approximately 5.5 miles south of the project site. Suitable habitat occurs on the project site.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Comment:

Project proponent has no control of annual rainfall conditions onsite during survey years. CNDDDB database was appropriately queried in both years. Large scrub/tree species like crucifixion thorn would likely have been detected regardless of rainfall conditions. The reported nearby sighting of *Croton wigginsii* has been withdrawn by BLM staff. *Croton wigginsii* is not known within 10 miles of the site. Suitable dune habitat is limited on the project site. All known *Croton wigginsii* locations occur east of El Centro and Brawley. (http://www.calflora.org/cgi-bin/occform.cgi?taxon=Croton%20wigginsii&add_syn=t&aflag=all&oform=html&out_map=t&action=t&cc=IMP&ttime=1266718071)

The assessment does not adequately describe the individual species or the habitat within which it is found, making it difficult to determine the actual significance of the impact. For instance, it does not indicate that the only listed plant, Wiggin's croton (state rare), is a perennial shrub/subshrub and does not describe whether any *Croton* sp. were seen at the site. Croton shrubs if present would have been detectable and probably identifiable at the time of the surveys. In addition, this particular plant is found in sand dune habitat, a habitat type that is relatively rare within the site. Just stating "suitable habitat occurs on the project site" implies that all or most of the site contains suitable habitat. This is important because a question that can potentially arise is the feasibility of Mitigation Measure BIO-19, which heavily relies on new surveys and subsequent avoidance if sensitive plants are found.

Recommend the following text modifications:

chaparral sand verbena (<i>Abronia villosa</i> var. <i>aurita</i>)	__/__/S/1B.1	<p>Low—not observed though not specifically targeted during surveys along proposed water pipeline during the appropriate blooming period. Historic CNDDDB occurrence in Seeley in the area of the proposed water pipeline. This CNDDDB location was added to the database after 2007/2008 surveys were completed. The segment of waterline route east of the West Main Canal was added to the project in late April 2009 and the opportunity for rare plant surveys along this segment were limited.</p>
---	--------------	---

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Harwood's milk-vetch (<i>Astragalus insularis</i> var. <i>harwoodii</i>)	___/___/___/2.2	Moderate—Surveys insufficient to determine presence or absence. Closest CNDDB occurrence two miles southwest of project site. Suitable habitat occurs on project site.
pink fairy duster (<i>Calliandra eriophylla</i>)	___/___/___/2.3	Moderate—Surveys insufficient to determine presence or absence. Suitable habitat occurs on the project site. Nearest CNDDB record is from 1989 approximately 4 miles southwest of the project site.
crucifixion thorn (<i>Castela emoryi</i>)	___/___/___/2.3	Moderate—Surveys insufficient to determine presence or absence. Nearest CNDDB record is from 1997 from the BLM Crucifixion Thorn Natural Area approximately 5.5 miles south of the project site. Suitable habitat occurs on the project site.
flat-seeded spurge (<i>Chamaesyce platysperma</i>)	___/___/___/S/1B.2	Moderate—Surveys insufficient to determine presence or absence. Nearest CNDDB record is from the vicinity of Superstition Mountain approximately 14 miles north of the project site. Suitable habitat occurs on the project site.
Wiggins' croton (<i>Croton</i> <i>wigginsii</i>)	___R/___/___/S/2.2	Moderate—Surveys insufficient to determine presence or absence. Known to occur in the Yuha Desert south of the project site (Trouette 2010). Suitable habitat occurs on the project site.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Utah vine milkweed (<i>Cynanchum utahense</i>)	_/_/_/4.2	Present— Detected onsite in 2009. No CNDDB sightings are recorded within 10 miles of project area.
annual rock nettle (<i>Eucnide rupestris</i>)	_/_/_/2.2	Low— Surveys insufficient to determine presence or absence. Nearest CNDDB record is approximately 4.5 miles northwest of the project site. Suitable rock or talus substrate habitat occurs is limited on the project site; however, the site is located below the typical elevation range that this species usually occurs.
Baja California ipomopsis (<i>Ipomopsis effusa</i>)	_/_/_/2.1	Moderate— Surveys insufficient to determine presence or absence. Nearest CNDDB record is from Pinto Wash immediately north of Highway 98 approximately 9 miles southeast of the project site. Suitable habitat occurs on the project site.
slender-leaved ipomopsis (<i>Ipomopsis tenuifolia</i>)	_/_/_/2.3	Low— Surveys insufficient to determine presence or absence. Nearest CNDDB record is a historic record (1927) from the summit of Mountain Springs Grade approximately 10 miles southwest of the project site. Suitable habitat occurs on the project site; however, the site is located below the typical elevation range that this species usually occurs.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Mountain springs bush lupine (<i>Lupinus excubitus</i> var. <i>medius</i>)	___/___/___ /S/1B.3	Low Surveys insufficient to determine presence or absence. Nearest record is from Myers Valley approximately 9 miles southwest of the project site. Suitable habitat does not occur on the project site.
brown turbans (<i>Malperia tenuis</i>)	___/___/___ /2.3	Moderate Surveys insufficient to determine presence or absence. The nearest CNDDDB record is from the Yuha Desert, south of Pinto Wash, approximately 5 miles south-east of the project site. Suitable habitat occurs within the site.
hairy stickleaf (<i>Mentzelia hirsutissima</i>)	___/___/___ /2.3	Moderate Surveys insufficient to determine presence or absence. The nearest CNDDDB occurrence is from Mountain Spring Grade approximately 11 miles southwest of the project site (beyond the 10-mile assessment area). Suitable habitat occurs is limited within the project site.
slender cottonheads woolly- heads (<i>Nemacaulis denudata</i> var. <i>gracilis</i>)	___/___/___ /2.2	Moderate Surveys insufficient to determine presence or absence. The nearest CNDDDB record is approximately 3 miles west of the site. Suitable dune habitat occurs is limited within the project site.
Thurber's pilostyles (<i>Pilostyles thurberi</i>)	___/___/___ /4.3	High Present Surveys insufficient to determine presence or absence. Detected onsite in February 2010. Historic CNDDDB occurrence on northwest edge of project site. The CNDDDB locations of this

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

		species were added to the database after 2007/2008 surveys were completed. Suitable habitat is present as three species of <i>Psorothamnus</i> spp., the host plants for Thurber's pilostyles, occur on project site. Note: List 4 species do not qualify as CEQA sensitive species (CDFG 2009).
dwarf germander (<i>Teucrium cubense</i> ssp. <i>depressum</i>)	___/___/___/2.2	Moderate—Surveys insufficient to determine presence or absence. Nearest CNDDDB occurrence six miles southwest of project site. Suitable dune habitat occurs is limited within the project site.
Orcutt's woody-aster (<i>Xylorhiza orcuttii</i>)	___/___/___/S/1B.3	Moderate—Surveys insufficient to determine presence or absence. Nearest CNDDDB record is from Basin Wash into Tule Wash in the Anza-Borrego State Park approximately 12.5 miles northwest of the project site (beyond the 10-mile assessment area).. Suitable habitat occurs on project site.

BIOLOGICAL RESOURCES Page C.2-16

flat-tailed horned lizard (<i>Phrynosoma mcallii</i>)	CSC/___/S	species. High —observed on project site during surveys.
--	-----------	---

Comment:

flat-tailed horned lizard (<i>Phrynosoma mcallii</i>)	CSC/Expected to be Proposed for Listing per recent Court Order/S	High Present—four individuals were detected observed on project site and near T-Line during surveys.
--	--	--

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

BIOLOGICAL RESOURCES Page C.2-16

golden eagle (<i>Aquila chrysaetos</i>)	SFP/ __/ __	Moderate —not observed though within winter range of this species. Rarely seen in Imperial County, only five known occurrences documented in Imperial County; nearest occurrence approximately two miles northeast of Seeley (McCaskie 2010). Suitable nesting habitat does not occur on the project site; however, suitable foraging habitat does occur on the project site.
burrowing owl (<i>Athene cunicularia</i>)	CSC/BCC/S	High —observed on project site during surveys.

Comment:

The “potential for occurrence” discussion for wildlife appears arbitrary. If only five known occurrences for golden eagle in Imperial County, how can the probability for occurrence at the site be “Moderate”?

Golden eagle (<i>Aquila chrysaetos</i>)	SFP/BEA/S	Low Moderate —not observed though within winter range of this species. Rarely seen in Imperial County, only five known occurrences documented in Imperial County; nearest occurrence approximately two miles northeast of Seeley (McCaskie 2010). Suitable nesting habitat does not occur on the project site or immediate project vicinity; however, suitable foraging habitat does occur on the project site.
burrowing owl (<i>Athene cunicularia</i>)	CSC/ __/ S	High—observed on east of project site near agricultural fields; detected near T-Line and waterline during surveys. Potential owl burrows occur onsite.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

BIOLOGICAL RESOURCES Page C.2-18

<p>pallid bat (<i>Antrozous pallidus</i>)</p>	<p>CSC/__/S</p>	<p>Moderate—no roost sites observed during field survey although focused surveys for bat roosts were not conducted; nearest CNDDDB record is 20 miles northwest of the project site at Fish Creek Wash at the south end of Split Mountain in Anza Borrego State Park in 1996. Suitable foraging habitat occurs in the project area and suitable roosting habitat occurs along the Evan Hewes Highway for the proposed recycled water pipeline.</p>
<p>western yellow bat (<i>Lasiurus xanthinus</i>)</p>	<p>CSC/__/__</p>	<p>High—no roost sites observed during field surveys although focused surveys for bat roosts were not conducted; nearest CNDDDB occurrence is 11 miles east of the project site in El Centro during 1989-1990. Suitable roosting and foraging habitat occurs along the proposed recycled water pipeline.</p>
<p>big free-tailed bat (<i>Nyctinomops macrotis</i>)</p>	<p>CSC/__/__</p>	<p>Low—no roost sites observed during field survey although focused surveys for bat roosts were not conducted; nearest CNDDDB occurrence is near El Centro during 1987 approximately 12 miles east of the project site. Though the project site may be suitable foraging habitat, roosting habitat does not occur on the project site.</p>

Comment:

CEC never requested focused surveys for bats. Survey protocols were reviewed and approved by CEC staff prior to implementation. With respect to the bats, it should be mentioned that the entire Colorado Desert is suitable foraging habitat, not just the site, with the key consideration being the lack of suitable breeding or roost sites within the site.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

<p>pallid bat (<i>Antrozous pallidus</i>)</p>	<p>CSC/___/S</p>	<p>Moderate—no roost sites observed during field survey although focused surveys for bat roosts were not conducted; nearest CNDDB record is 20 miles northwest of the project site at Fish Creek Wash at the south end of Split Mountain in Anza Borrego State Park in 1996 (beyond the 10-mile assessment area). Suitable foraging habitat occurs in the project area and suitable roosting habitat (buildings) occurs along the Evan Hewes Highway for the proposed recycled water pipeline.</p>
<p>western yellow bat (<i>Lasiurus xanthinus</i>)</p>	<p>CSC/___/___</p>	<p>High Moderate—no roost sites observed during field surveys although focused surveys for bat roosts were not conducted; nearest CNDDB occurrence is 11 miles east of the project site in El Centro during 1989-1990 (beyond the 10-mile assessment area). Suitable roosting (buildings, palm trees) and foraging habitat occurs along the proposed recycled water pipeline.</p>
<p>big free-tailed bat (<i>Nyctinomops macrotis</i>)</p>	<p>CSC/___/___</p>	<p>Low—no roost sites observed during field survey although focused surveys for bat roosts were not conducted; nearest CNDDB occurrence is near El Centro during 1987 approximately 12 miles east of the project site (beyond the 10-mile assessment area). Though the project site may be suitable foraging habitat, roosting habitat does not occur on the project site.</p>

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

BIOLOGICAL RESOURCES Page C.2-19

Federal

FE: Federally listed endangered: species in danger of extinction throughout a significant portion of its range

FT: Federally listed, threatened: species likely to become endangered within the foreseeable future

BCC: Fish and Wildlife Service: Birds of Conservation Concern: Identifies migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent highest conservation priorities
<http://www.fws.gov/migratorybirds/NewReportsPublications/SpecialTopics/BCC2008/BC C2008.pdf>

D: Delisted taxon that is considered recovered

Comment:

Please rewrite as:

Federal

FE: Federally listed endangered: species in danger of extinction throughout a significant portion of its range

FT: Federally listed, threatened: species likely to become endangered within the foreseeable future

BCC: Fish and Wildlife Service: Birds of Conservation Concern: Identifies migratory and non-migratory bird species (beyond those already designated as federally threatened or endangered) that represent highest conservation priorities
<http://www.fws.gov/migratorybirds/NewReportsPublications/SpecialTopics/BCC2008/BC C2008.pdf>

BEA: Bald Eagle Act, includes golden eagle.

D: Delisted taxon that is considered recovered

BIOLOGICAL RESOURCES Page C.2-19

Special Status Plants

The project area is known to support a variety of special status plant species. Of the 16 special status species identified in Table 2, none are federally listed, five are BLM Sensitive species, and one is state listed. Due to the suitable habitat being present, most of the special status plant species listed in Table 3 have a moderate potential of occurring on the project site, though they were not detected during surveys. The low potential for occurrence for other species, with the exception of chaparral sand verbena, is mainly due to the project site being located below the typical elevation range for the particular species. During a California Natural Diversity Database search (CDFG 2009), staff identified four additional special status plant species with the potential to occur on the project site. These four species include chaparral sand verbena, pink fairy duster, Thurber's pilostyles, and dwarf germander, which were not targeted during special status plant surveys. Another species, Wiggins' croton, was also identified with the potential to

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

occur on the site as it is known to occur in the Yuha Desert south of the proposed SES Solar Two site (Trouette 2010). Since element occurrences of chaparral sand verbena and Thurber's pilostyles have been recorded on the project site by the CNDDDB, both species are discussed in more detail below.

Comment:

BIOLOGICAL RESOURCES Page C.2-19

Comment:

See comments on Section C.1

The project area is known to support a variety of special status plant species. Of the 16 special status species identified in Table 2, none are federally listed, five are BLM Sensitive species, and one is state listed. Due to the suitable habitat being present, most of the special status plant species listed in Table 3 have a moderate potential of occurring on the project site, though they were not detected during surveys. The low potential for occurrence for other species, with the exception of chaparral sand verbena, is mainly due to the project site being located below the typical elevation range for the particular species. During a California Natural Diversity Database search (CDFG 2009), staff identified four additional special status plant species with the potential to occur on the project site. These four species include chaparral sand verbena, pink fairy duster, Thurber's pilostyles, and dwarf germander were additions to the CNDDDB database after the 2007/2008 botanical surveys were completed. ~~which were not targeted during special status plant surveys. Another species, Wiggins' croton, was also identified with the potential to occur on the site as it is known to occur in the Yuha Desert south of the proposed SES Solar Two site (Trouette 2010).~~ Since element occurrences of chaparral sand verbena and Thurber's pilostyles have been recorded on the project site by the CNDDDB, both species are discussed in more detail below.

BIOLOGICAL RESOURCES Page C.2-20

Though the estimated 75% coverage rate for the site and the 100% coverage rate for habitats which have a greater chance of special status plant species occurrences, such as ephemeral washes, were targeted for the surveys, the possibility of missing or overlooking special status plant species is increased for the following reasons: the varying degree of botanical expertise (trained botanists to those with little or no botanical experience), 11 of the 21 rare plant survey days conducted concurrently with the FTHL surveys, an incomplete list of potential special status plants that may occur on the project site, and not conducting special status plant surveys in the fall after the late summer/early fall monsoonal rains. Staff is concerned that the applicant utilized wildlife biologists to conduct many of the rare plant surveys. Although many wildlife biologists are well trained in plant identification, not only were wildlife biologists conducting rare plant surveys, they were conducting them during wildlife surveys where the focus and methods may be different. Also, many ephemerals bloom after the summer monsoonal rains in the desert so the documentation of the occurrence of many additional plant species may be lacking. Thus, survey results were not considered adequate to assess presence or absence of a species within the project area.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Comment:

See comments on Section C.1

~~Though~~ The 2008 surveys had an estimated 75% coverage rate for the site and a 100% coverage rate for habitats which have a greater chance of special status plant species occurrences, such as ephemeral washes, ~~were targeted for the surveys~~. The level of effort was deemed appropriate given the practicality of the size of the survey area (8,000+ acres), habitat conditions, and species that were the focus of the survey. The surveys were implemented consistent with agency guidelines and the protocol approved by the CEC. All areas encompassed by the proposed action were visited during the appropriate time of the year to expect probable detection of regionally significant populations of rare species, if actually present during the survey year. A total of 120 plant species were recorded during the field effort. The rate of coverage during the 2008 surveys is estimated at less than 20 acres per survey hour. The 2008 rare plant survey effort is estimated at 960 field hours. The lack of detection of rare plants onsite is likely attributable to poor rainfall conditions during each survey year. 2007 was an extremely poor rainfall year (<10% of normal) and 2008 had only moderately better conditions (<50% of normal). CEC and BLM have requested additional botanical surveys be conducted in 2010 due to the more favorable rainfall conditions occurring at site this year. ~~, the possibility of missing or overlooking special status plant species is increased for the following reasons: the varying degree of botanical expertise (trained botanists to those with little or no botanical experience), 11 of the 21 rare plant survey days conducted concurrently with the FTHL surveys, an incomplete list of potential special status plants that may occur on the project site, and not conducting special status plant surveys in the fall after the late summer/early fall monsoonal rains. Staff is concerned that the applicant utilized wildlife biologists to conduct many of the rare plant surveys. Although many wildlife biologists are well trained in plant identification, not only were wildlife biologists conducting rare plant surveys, they were conducting them during wildlife surveys where the focus and methods may be different. Also, many ephemerals bloom after the summer monsoonal rains in the desert so the documentation of the occurrence of many additional plant species may be lacking. Thus, survey results were not considered adequate to assess presence or absence of a species within the project area.~~

BIOLOGICAL RESOURCES Page C.2-20

Chaparral Sand Verbena (*Abronia villosa* var. *aurita*)

Chaparral sand verbena is an annual herb found in Los Angeles, Orange, and San Diego Counties and the Sonoran Desert in San Bernardino, Riverside, and Imperial Counties. It occurs in chaparral, coastal scrub, and desert dune habitats from 260 to 5,250 feet in elevation and blooms from January to September (CNPS 2009). The California Natural Diversity Database (CNDDDB) (CDFG 2009) shows a historic occurrence of this species from 1949 in the Seeley area. Though general biological surveys were conducted when chaparral sand verbena would be identifiable, no focused special status species surveys were conducted for this species within the study area during the site visits. The sensitive species table in the AFC Supplement (SES 2009q) failed to list chaparral sand verbena with the potential to occur in the vicinity even though the CNDDDB historic record shows it may occur along the reclaimed water pipeline.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

The potential for the chaparral sand verbena to occur in the project area is low due to unsuitable habitat conditions caused by roadway and agricultural development. Also, this species would have been identifiable if sighted during the general surveys along the reclaimed water pipeline corridor as the surveys were conducted during the blooming period for this species.

Comment:

Chaparral Sand Verbena (*Abronia villosa* var. *aurita*)

Chaparral sand verbena is an annual herb found in Los Angeles, Orange, and San Diego Counties and the Sonoran Desert in San Bernardino, Riverside, and Imperial Counties. It occurs in chaparral, coastal scrub, and desert dune habitats from 260 to 5,250 feet in elevation and blooms from January to September (CNPS 2009). The California Natural Diversity Database (CNDDDB) (CDFG 2009) shows a historic occurrence of this species from 1949 in the Seeley area. This sighting was added to the CNDDDB database after the 2007/2008 botanical surveys were completed. The waterline segment east of the West Main Canal was also added late in the 2009 spring season and the opportunity for rare plant surveys along this segment were limited. 2010 spring botanical surveys of the entire waterline route are planned. ~~The sensitive species table in the AFC Supplement (SES 2009c) failed to list chaparral sand verbena with the potential to occur in the vicinity even though the CNDDDB historic record shows it may occur along the reclaimed water pipeline.~~ The potential for the chaparral sand verbena to occur in the project area is low due to unsuitable habitat conditions caused by roadway and agricultural development. Also, ~~this species would have been identifiable if sighted during the general surveys along the reclaimed water pipeline corridor as the surveys were conducted during the blooming period for this species.~~

BIOLOGICAL RESOURCES Page C.2-21

Sonoran desert scrub habitat in San Diego and Imperial Counties (CDFG 2009) from 0 to 1,200 feet in elevation and blooms in January (CNPS 2009). CNDDDB (CDFG 2009) shows a historic element occurrence of this species from 1957 in the project area two miles west of Plaster City. The sensitive species table in the AFC (SES 2008a) failed to list Thurber's pilostyles with the potential to occur in the vicinity even though the CNDDDB historic record shows it has occurred on the project site. Three species of *Psorothamnus* spp., including Emory indigobush, have been observed on the project site, thus increasing the potential of Thurber's pilostyles occurrence. Over half of the special status plant species surveys were conducted concurrently with the FTHL surveys. During FTHL surveys, the search for special status species would focus on the soil surface rather than the interior of indigobush shrubs, thus missing possible occurrences of Thurber's pilostyles.

Comment:

Sonoran desert scrub habitat in San Diego and Imperial Counties (CDFG 2009) from 0 to 1,200 feet in elevation and blooms in January (CNPS 2009). CNDDDB (CDFG 2009) shows a historic element occurrence of this species from 1957 in the project area two miles west of Plaster City. The CNDDDB locations of this species were added to the database after 2007/2008 surveys were completed. Suitable habitat is present as three species of *Psorothamnus* spp., the host plants for Thurber's pilostyles, occur on project site. ~~The sensitive species table in the AFC (SES 2008a) failed to list Thurber's~~

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

~~pilostyles with the potential to occur in the vicinity even though the CNDDDB historic record shows it has occurred on the project site. Three species of Psoralea spp., including Emory indigobush, have been observed on the project site, thus increasing the potential of Thurber's pilostyles occurrence. Thurber's pilostyles was detected onsite in February 2010. List 4 species do not typically qualify as CEQA sensitive species (CDFG 2009). Over half of the special status plant species surveys were conducted concurrently with the FTHL surveys. During FTHL surveys, the search for special status species would focus on the soil surface rather than the interior of indigobush shrubs, thus missing possible occurrences of Thurber's pilostyles.~~

BIOLOGICAL RESOURCES Page C.3-21

The SA/DEIS did not include a description of Utah Vine Milkweed.

Comment: Add the following text:

Utah vine milkweed (*Cynanchum utahense*)

Utah vine milkweed is a perennial herb that is native to western North America. There are no known observations in the CNDDDB (CDFG 2008). This species is uncommon and found in dry, sandy or gravelly areas in the Mojave Desert at elevations of less than 1000 meters. The blooming period for this species occurs from April until June. This species is not recorded in the CNDDDB database within 10 miles of the site. Utah vine milkweed was detected onsite in Fall of 2009. List 4 species do not typically qualify as CEQA sensitive species (CDFG 2009).

BIOLOGICAL RESOURCES Page C.2-22

Survey Results for Flat-Tailed Horned Lizard

A habitat assessment was conducted in March 2007 to determine suitability for flat-tailed horned lizard (FTHL). Due to the occurrence of harvester ants (*Pogonomyrmex* spp.) a primary food source for FTHL throughout the project area, and suitable soil and vegetation to support FTHL, it was determined that surveys in accordance with the FTHL Rangewide Management Strategy (FTHL ICC 2003) would be necessary. From May 1, 2007, to May 7, 2008, modified project evaluation protocol surveys were conducted for FTHL (increased plot size from 1 hectare [approximately 2.5 acres] to 4 hectares [approximately 9.9 acres]). The project site was divided into 26-acre plots. Within each 26-acre plot, a 4-hectare survey plot was surveyed for one hour by two or three biologists, giving a sample-survey coverage rate of 38% (SES 2009m). For the linear features (water line and transmission line), four transects were surveyed on each side of center. Live or dead horned lizards, their scats and tracks were recorded and mapped on a Global Positioning System (GPS) receiver with 5-meter accuracy. Photographs were taken and survey forms were completed for each horned lizard sighting. A total of eight FTHLs were observed during the biological surveys in 2007. Five of the eight FTHLs were observed within the site boundary and one was observed just outside the eastern boundary. Two dead FTHLs were observed along the off-site transmission line. During the surveys in 2008, two FTHLs were detected in the project site (SES 2008a).

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Comment:

Please rewrite as follows:

Survey Results for Flat-Tailed Horned Lizard

A habitat assessment was conducted in March 2007 to determine suitability for flat-tailed horned lizard (FTHL). Due to the occurrence of harvester ants (*Pogonomyrmex* spp.) a primary food source for FTHL throughout the project area, and suitable soil and vegetation to support FTHL, it was determined that surveys in accordance with the FTHL Rangewide Management Strategy (FTHL ICC 2003) would be necessary. From May 1, 2007, to May 7, 2008, modified project evaluation protocol surveys were conducted for FTHL (increased plot size from 1 hectare [approximately 2.5 acres] to 4 hectares [approximately 9.9 acres]). The project site was divided into 26-acre plots. Within each 26-acre plot, a 4-hectare survey plot was surveyed for one hour by two or three biologists, giving a sample-survey coverage rate of 38% (SES 2009m). For the 2008 flat-tailed horned lizard surveys, BLM requested that the transect survey protocol be applied to the two off-site linear Project features (waterline and transmission line). During the second year, transect survey protocol was four parallel transects on each side of the linear Project feature center-line. ~~For the linear features (water line and transmission line), four transects were surveyed on each side of center.~~ Live or dead horned lizards, their scats and tracks were recorded and mapped on a Global Positioning System (GPS) receiver with 5-meter accuracy. Photographs were taken and survey forms were completed for each horned lizard sighting. Two flat-tailed horned lizards were detected along the eastern site boundary were detected in the Project area during 2007 surveys. Two deceased flat-tailed horned lizards were also observed along the off-site transmission line in 2007 (SES 2008a). ~~A total of eight FTHLs were observed during the biological surveys in 2007. Five of the eight FTHLs were observed within the site boundary and one was observed just outside the eastern boundary. Two dead FTHLs were observed along the off-site transmission line. During the surveys in 2008, two FTHLs were detected in the project site~~

BIOLOGICAL RESOURCES Page C.2-22

Flat-Tailed Horned Lizard Habitat in the Project Area

The 6,063-acre plant site and the 92.8-acre off-site transmission line provide suitable habitat and food source to support FTHLs (SES 2008a). Furthermore, FTHLs were observed on the project site during surveys. Therefore, FTHLs are known to be present throughout the project site. Based on data collected by the BLM and analyzed by William Kristan, assistant professor of Biological Sciences at California State University, San Marcos, and Grant (2005), there could be potentially 2,000 to 5,000 FTHLs in the project area.

Though Interstate 8 may serve as a barrier for movement between the Yuha Desert FTHL Management Area (MA) and the proposed project site, the large culverts under the highway which are in excess of 200 feet, may allow wildlife movement between the two suitable FTHL areas. It is unlikely that FTHL would use the culverts to move between the MA and the proposed project site due to the long distance between these areas and lack of light along the length (Painter and Ingraldi 2007).

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Comment:

Recommended text changes below are consistent with the BA document submitted to the USFWS. The recent culvert assessment indicated that only one I-8 culvert was potentially accessible to FTHL.

Flat-Tailed Horned Lizard Habitat in the Project Area

The 6,063-acre plant site and the 92.8-acre off-site transmission line provide suitable habitat and food source to support FTHLs (SES 2008a). Furthermore, FTHLs were observed on the project site during surveys. Therefore, FTHLs are known to be present throughout the project site. Based on data collected by the BLM and analyzed by William Kristan, assistant professor of Biological Sciences at California State University, San Marcos, and Grant (2005). Although only two individual FTHLs were encountered during field surveys in 2007-2008, it is estimated that approximately 2,100 FTHLs may inhabit the Solar Two Project site. ~~there could be potentially 2,000 to 5,000 FTHLs in the project area.~~

Though Interstate 8 may serve as a barrier for movement between the Yuha Desert FTHL Management Area (MA) and the proposed project site, the large culverts under the highway which are in excess of 200 feet, may allow wildlife movement between the two suitable FTHL areas. However, evaluation of the culvert design along I-8 indicated that only one culvert was potentially accessible to FTHL. It is unlikely that FTHL would use the culverts to move between the Yuha Desert MA and the proposed project site due to the long distance between these areas, lack of access to the culvert, and lack of light along the length (Painter and Ingraldi 2007, URS 2010).

BIOLOGICAL RESOURCES Page C.2-22

Yuha Desert Flat-Tailed Horned Lizard Management Area

The plant site is located north of Interstate 8 outside the Yuha Desert FTHL Management Area (MA). The 92.8-acre off-site transmission line is located within the MA. The Yuha MA is one of five established by the FTHL Interagency Coordinating Committee, consisting of representatives from federal, state, and local governments who have entered into a conservation agreement with the objective of reducing threats to a candidate species or its habitat. The goal of designating the MAs is to maintain or increase self-sustaining FTHL populations within the MAs (FTHL ICC 2003).

Comment:

Please revise to say:

Yuha Desert Flat-Tailed Horned Lizard Management Area

The plant site is located north of Interstate 8 outside the Yuha Desert FTHL Management Area (MA). The 92.8-acre off-site transmission line is located within the MA and an existing BLM-designated transmission ROW. The Yuha MA is one of five established by the FTHL Interagency Coordinating Committee, consisting of representatives from federal, state, and local governments who have entered into a conservation agreement with the objective of reducing threats to a candidate species or its habitat. The goal of designating the MAs is to maintain or increase self-sustaining FTHL populations within the MAs (FTHL ICC 2003).

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

BIOLOGICAL RESOURCES Page C.2-24

The presence of Peninsular bighorn sheep on the project site was confirmed this year. A group of five ewes and/or juveniles were sighted in spring of 2009 in an ephemeral wash (SES 2009m) approximately one mile southwest of Plaster City. Peninsular bighorn sheep do use lowland habitat periodically for foraging and dispersal. Movement by bighorn sheep of this distance from known habitat approximately six miles to the west of the project site has not been previously documented. Biologists for the BLM and consultants for the applicant have speculated that the bighorn sheep sighted at the project location could have been flushed by OHV activity and possibly became disoriented and wandered onto the project site. According to Steve Torres (2009) of the CDFG, this is the furthest east that a sighting of Peninsular bighorn sheep has been documented.

Comment:

The presence of Peninsular bighorn sheep on the project site was confirmed in March 2009. ~~this year.~~ A group of five ewes and/or juveniles were sighted in spring of 2009 in an ephemeral wash (SES 2009m) approximately one mile southwest of Plaster City. Peninsular bighorn sheep do use lowland habitat periodically for foraging and dispersal. Movement by bighorn sheep of this distance from known habitat approximately ~~six~~ four miles to the west of the project site has not been previously documented. Biologists for the BLM and consultants for the applicant have speculated that the bighorn sheep sighted ~~sited~~ at the project location could have been flushed by OHV activity and possibly became disoriented and wandered onto the project site. According to Steve Torres (2009) of the CDFG, this is the furthest east that a sighting of Peninsular bighorn sheep has been documented.

BIOLOGICAL RESOURCES Page C.2-34

No western yellow bats were observed during the surveys, but no surveys were specifically conducted for this species or any other bats. A western yellow bat specimen was collected approximately 11 miles east of the project site in 1977. Other specimens were collected in El Centro from 1980 to 1999 (CDFG 2009). Due to the lack of palms on the project site and the off-site transmission line route, staff considers it unlikely that western yellow bats occur there. However, ornamental palms planted along the Evan Hewes Highway where the reclaimed water pipeline is proposed serve as potential roosting sites for the bats. Given that western yellow bats are in the project area, there is high potential for this species to be present along the reclaimed water pipeline corridor.

Comment:

No western yellow bats were observed during site surveys and targeted bat surveys were not deemed necessary by the CEC or the BLM because staff considers it unlikely that the western yellow bats would occur on the site given the lack of palms on the project site and the off-site transmission line route. Please revise as follows:

~~No western yellow bats were observed during the surveys, but no surveys were specifically conducted for this species or any other bats.~~ A western yellow bat specimen was collected approximately 11 miles east of the project site in 1977. Other specimens were collected in El Centro from 1980 to 1999 (CDFG 2009). Due to the lack of palms on the project site and the off-site transmission line route, staff considers it unlikely that western yellow bats occur there. However, ornamental palms planted along the Evan

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Hewes Highway where the reclaimed water pipeline is proposed serve as potential roosting sites for the bats. Given that western yellow bats are in the project area, there is moderate high potential for this species to be present along the reclaimed water pipeline corridor near the New River.

BIOLOGICAL RESOURCES Page C.2-33

Condition of Certification BIO-8 (Impact Avoidance and Minimization Measures) to less than CEQA significant levels. Measures to minimize dust impacts in staff's proposed Condition of Certification BIO-8 include minimizing vegetation and soil disturbance, limiting the speed limit to 15 mph for vehicular traffic, and applying water to dirt roads. Similar measures have been applied on past projects and have shown that they are effective in minimizing dust impacts.

Comment:

Typically 20-25 mph is the limit set by the USFWS. CEC needs to provide a rationale for this lower speed.

BIOLOGICAL RESOURCES Page C.2-34

Noise from construction activities could temporarily discourage wildlife from foraging and nesting immediately adjacent to the project area. Many bird species rely on vocalizations during the breeding season to attract a mate within their territory, and noise from construction could disturb nesting birds and other wildlife and adversely affect nesting and other activities. The wildlife species most likely to be affected by noise include the burrowing owl, FTHL, desert bighorn sheep, loggerhead shrike, and LeConte's thrasher.

Comment:

FTHL will be translocated offsite, so noise effects are not relevant. Bighorn sheep would not approach an area where human presence/activity is chronic (daily). Presence of bighorn sheep was deemed to be an anomalous occurrence and is not likely to be repeated with the level of human activity anticipated during construction. The perimeter fence would also preclude bighorn sheep from entering the site.

Noise from construction activities could temporarily discourage wildlife from foraging and nesting immediately adjacent to the project area. Many bird species rely on vocalizations during the breeding season to attract a mate within their territory, and noise from construction could disturb nesting birds and other wildlife and adversely affect nesting and other activities. The wildlife species most likely to be affected by noise include the burrowing owl, FTHL, ~~desert bighorn sheep~~, loggerhead shrike, and LeConte's thrasher.

BIOLOGICAL RESOURCES Page C.2-35

Whereas the CDFG recommends requiring a 1:1 mitigation ratio for impacts to ephemeral washes, the USACE has indicated they typically require a minimum of a 2:1 mitigation ratio for unavoidable impacts, with up to half (1:1 ratio) of the mitigation dedicated to preservation and the other half to enhancement or restoration within the New River watershed. Mitigation ratios typically increase if proposed outside of the watershed. Thus, mitigation within the Salton Sea watershed would likely be a 3:1 ratio or higher depending on the type and location of the proposed mitigation (e.g., restoration versus enhancement). Precise details of the required mitigation will be determined after

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

the federal CWA 404(b)(1) Alternative Analysis is complete. When this occurs, staff's proposed Condition of Certification BIO-17 would be updated to reflect mitigation requirements by the USACE.

Comment:

Please confirm that any mitigation to satisfy CWA 404 requirements can also be applied toward meeting 1602 mitigation requirements. Please see corrections below:

Whereas the CDFG recommends requiring a 1:1 mitigation ratio for impacts to ephemeral washes, the USACE has indicated they typically require a minimum of a 2:1 mitigation ratio for unavoidable impacts, with up to half (1:1 ratio) of the mitigation dedicated to preservation and the other half to enhancement or restoration within the New River watershed. Mitigation ratios typically increase if proposed outside of the watershed. ~~Thus, mitigation within the Salton Sea watershed would likely be a 3:1 ratio or higher depending on the type and location of the proposed mitigation (e.g., restoration versus enhancement).~~ Precise details of the required mitigation will be determined after the federal CWA 404(b)(1) Alternative Analysis is complete. When this occurs, staff's proposed Condition of Certification BIO-17 would be updated to reflect mitigation requirements by the USACE. Mitigation that satisfies CWA 404 requirements can also be applied toward meeting some or all of the 1602 mitigation requirements.

BIOLOGICAL RESOURCES Page C.2-35 and C.2-36

Some state and federally listed plant species and California Native Plant Society (CNPS) list species were not identified within the SES Solar Two project area during the spring surveys conducted by the applicant in 2007 and 2008. A review of the botanical data suggests that four CNPS list plant species were never mentioned as having the potential to occur, thus overlooked during the survey and assessment of potential impacts to biological resources. Staff is also concerned that the applicant conducted just over half of the rare plant surveys in concurrence with FTHL surveys and utilized biologists not specifically trained in botany to conduct many of the special status plant surveys. Another concern of staff is the lack of fall surveys conducted after the late summer/early fall monsoonal rains prevalent to the area. The monsoonal rains would stimulate another bloom. Although special status plant species were not observed, staff considers there to be a potential for some of these plants to occur in the project footprint.

Comment:

See comments on Section C.1

~~Some state and federally listed plant species and California Native Plant Society (CNPS) list species were not identified within the SES Solar Two project area during the spring surveys conducted by the applicant in 2007 and 2008. A review of the botanical data suggests that four CNPS list plant species were never mentioned as having the potential to occur, thus overlooked during the survey and assessment of potential impacts to biological resources. Staff is also concerned that the applicant conducted just over half of the rare plant surveys in concurrence with FTHL surveys and utilized biologists not specifically trained in botany to conduct many of the special status plant surveys. Another concern of staff is the lack of fall surveys conducted after the late summer/early fall monsoonal rains prevalent to the area. The monsoonal rains would stimulate another bloom. Although special status plant species were not observed,~~ Due to the poor rainfall

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

conditions that occurred during the 2007/2008 botanical surveys staff considers there to be a potential for some of rare plants to occur in the project footprint. 2010 spring botanical surveys are recommended.

BIOLOGICAL RESOURCES Page C.2-36

Ground-disturbing activity associated with the SES Solar Two has the potential to disturb either individual plants or populations of special status plant species should they be present in the project area. Direct impacts to sensitive plant species could occur from construction activities that remove vegetation, grade soils, or cause sedimentation, including the construction of the proposed SES Solar Two project, the placement of transmission lines, maintenance of construction equipment and supplies, staging of equipment and materials, the use or improvement of existing access roads, and the construction of access roads. Indirect impacts could include the disruption of native seed banks through soil alterations, the accumulation of fugitive dust, increased erosion and sediment transport, and the colonization of non-native, invasive plant species.

Comment:

Please see suggested changes below:

Ground-disturbing activity associated with the SES Solar Two has the potential to disturb either individual plants or populations of special status plant species should they be present in the project area. Direct impacts to sensitive plant species could occur from construction activities that remove vegetation, grade soils, or cause sedimentation, including the construction of the proposed SES Solar Two project, the placement of transmission lines, maintenance of construction equipment and supplies, staging of equipment and materials, the use or improvement of existing access roads, and the construction of access roads. Indirect impacts could include the disruption of native seed banks through soil alterations, the accumulation of fugitive dust, increased erosion and sediment transport, and the colonization of non-native, invasive plant species. About a third of the site will not be directly disturbed and another third will have shrub vegetation initially mowed. There will be some opportunity for annual plants to remain extant after construction is completed.

BIOLOGICAL RESOURCES Page C.2-36

Only one of the plants in Biological Resources Table 2, Wiggin's croton, is listed under the California Endangered Species Act (CESA). The remainder of the plants on the CNPS List 1A, 1B, and 2 meet the definitions of an "endangered" or "threatened" species under Sections 2062 and 2067 of the California Fish and Game Code, and are eligible for state listing (CNPS 2001). CNPS List 1B species are considered Sensitive by the BLM in California (BLM 2009). Even if a species is not a state or federally listed plant species, it still may be considered state endangered, rare, or threatened, if the species can be shown to meet the criteria in Section 15380 of the CEQA Guidelines. CEQA Section 15380 provides that a plant or animal species may be treated as 'rare or endangered' even if not on one of the official lists if, for example, it is likely to become endangered in the foreseeable future. Plants appearing on CNPS List 1B or 2 meet CEQA's Section 15380 criteria, and affects on these species are generally considered "significant". The species that would fall in this category with a moderate potential of occurring in the proposed SES Solar Two project area are listed in Biological Resources

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Table 2 and include Harwood's milk-vetch, pink fairy duster, crucifixion thorn, flat-seeded spurge, Baja California ipomopsis, brown turbans, hairy stickleaf, slender wooly-heads, dwarf germander, and Orcutt's woody-aster.

CNPS List 4 species are plants of limited distribution or infrequent throughout a broader area of California, and their vulnerability or susceptibility to threat appears low at this time. The California Natural Diversity Database (CNDDDB) has a recorded occurrence for Thurber's pilostyles, a CNPS List 4 species, on the project site. This species was overlooked during the 2007 and 2008 surveys. Very few CNPS List 4 plants meet the definition for state listing (CNPS 2001). Nevertheless, many are significantly locally if, for example, they occur at the periphery of a species' range, exhibit unusual morphology, or occur in atypical habitats, and should be evaluated in a CEQA analysis.

Comment:

See previous comments regarding Wiggin's croton and other rare plants in Table 2. CEQA significance criteria are not met with List 4 species. Please see suggested edits below:

~~Only one~~ None of the plants in Biological Resources Table 2, ~~Wiggin's croton~~, is listed under the California Endangered Species Act (CESA). The ~~remainder of the plants on the CNPS List 1A, 1B, and 2~~ meet the definitions of an "endangered" or "threatened" species under Sections 2062 and 2067 of the California Fish and Game Code, and are eligible for state listing (CNPS 2001). CNPS List 1B species are considered Sensitive by the BLM in California (BLM 2009). Even if a species is not a state or federally listed plant species, it still may be considered state endangered, rare, or threatened, if the species can be shown to meet the criteria in Section 15380 of the CEQA Guidelines. CEQA Section 15380 provides that a plant or animal species may be treated as 'rare or endangered' even if not on one of the official lists if, for example, it is likely to become endangered in the foreseeable future. Plants appearing on CNPS List 1B or 2 meet CEQA's Section 15380 criteria, and affects on these species are generally considered "significant". The species that would fall in this category with a moderate potential of occurring in the proposed SES Solar Two project area are listed in Biological Resources Table 2 and include Harwood's milk-vetch, pink fairy duster, crucifixion thorn, flat-seeded spurge, Baja California ipomopsis, brown turbans, hairy stickleaf, slender wooly-heads, dwarf germander, and Orcutt's woody-aster.

CNPS List 4 species are plants of limited distribution or infrequent throughout a broader area of California, and their vulnerability or susceptibility to threat appears low at this time. ~~The California Natural Diversity Database (CNDDDB) has a recorded occurrence for Thurber's pilostyles and Utah vine milkweed, CNPS List 4 species, are known to occur on the project site. This species was overlooked during the 2007 and 2008 surveys.~~ Very few CNPS List 4 plants meet the definition for state listing (CNPS 2001, CDFG 2009). ~~Nevertheless, many are significantly locally if, for example, they occur at the periphery of a species' range, exhibit unusual morphology, or occur in atypical habitats, and should be evaluated in a CEQA analysis.~~

BIOLOGICAL RESOURCES Page C.2-36

The applicant has not proposed specific avoidance measures to reduce potential impacts to special status plant species because none were observed during the 2007 and 2008 spring surveys. The failure to locate special status plant species does not

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

constitute evidence that they do not exist on the site. Because Energy Commission staff and BLM conclude there is a potential for special status plants to occur in the project area, staff and BLM have proposed mitigation that requires surveys for special status plants in the spring and fall of 2010, avoidance of populations of special status plants if any are...

Comment:

It is scientifically and legally impossible to "prove a negative". Two years of botanical surveys is substantial evidence that a regionally significant population of a rare plant species is less likely to be present. Given the current favorable rainfall conditions, TSNA has agreed to conduct 2010 spring botanical surveys. Significance and any subsequent mitigation requirements should be deferred until the results of the spring surveys are available.

The applicant has not proposed specific avoidance measures to reduce potential impacts to special status plant species because none were observed during the 2007 and 2008 spring surveys. ~~The failure to locate special status plant species does not constitute evidence that they do not exist on the site. Because to the poor rainfall conditions occurred during the 2007/2008 surveys, Energy Commission staff and BLM believe conclude there is a potential for special status plants to occur in the project area.~~ sCEC Staff and BLM have proposed mitigation that requires recommended 2010 spring botanical surveys for special status plants. If a rare plant species is found on the site during the 2010 surveys, avoidance and mitigation measures will be implemented to ensure that potential impacts to rare plants will be less than significant after mitigation is incorporated (BIO-8 and BIO-18). ~~in the spring and fall of 2010, avoidance of populations of special status plants if any are found, preparation of a Special Status Plant Protection Plan, and compensatory mitigation ratio of up to 2:1 if special status plants cannot be avoided. These compensation measures are described in staff's proposed Condition of Certification BIO-19 (Special Status Plant Survey and Protection Plan). Implementation of this condition would reduce impacts to special status plants to less than significant levels under CEQA.~~

BIOLOGICAL RESOURCES Page C.2-37

Impacts to Raptors and Migratory/Special Status Bird Species

Vegetation at the plant site and along linear facilities provides foraging, cover, and/or breeding habitat for migratory birds, including a number of special status bird species confirmed to be present at the site. Loggerhead shrike, LeConte's thrasher, and California horned lark are special status species known to breed and forage at the site. Western burrowing owls, which also occur at the SES Solar Two plant site and linear facilities, are discussed below. Power plant construction would eliminate nesting habitat for these and other species, and could result in direct and cumulative impacts to these species due to habitat loss or injury/fatality of individuals. No impacts to raptors are anticipated because these species occur only infrequently at the SES Solar Two area, and do not breed there.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Comment:

Please see suggested edits below:

Impacts to Raptors and Migratory/Special Status Bird Species

Vegetation at the plant site and along linear facilities provides foraging, cover, and/or breeding habitat for migratory birds, including a number of special status bird species confirmed to be present at the site. Loggerhead shrike, LeConte's thrasher, and California horned lark are special status species known to breed and forage at the site. Western burrowing owls, which also occur at near the SES Solar Two plant site and linear facilities, are discussed below. Power plant construction would eliminate nesting habitat for these and other species, and could result in direct and cumulative impacts to these species due to habitat loss or injury/fatality of individuals. No impacts to raptors (except for burrowing owl) are anticipated because these species occur only infrequently at the SES Solar Two area, and do not breed there. Impacts to raptor and other special status bird species foraging habitat are unavoidable. Compensatory mitigation for FTHL habitat would also mitigate for bird foraging habitat to a level that is less than significant.

BIOLOGICAL RESOURCES Page C.2-37 and C.2-38

Impacts to Burrowing Owls

Burrowing owls nesting on the project site could be directly impacted by construction of the SES Solar Two. Burrowing owl adults, eggs or young could be crushed or entombed by grading activities, and nesting and foraging activities would be directly and indirectly impacted by construction and operation of the project. The project would also result in permanent loss of 6,185 acres that is currently used by burrowing owls for nesting and foraging. Staff considers these potential impacts significant under CEQA.

In addition to the potential direct impacts to burrows, the SES Solar Two project would permanently eliminate a large expanse of habitat on the plant site and along the linear facilities that is currently available for foraging and breeding by burrowing owls. Habitat loss is one of the primary threats to California's burrowing owl population (Gervais et al. 2008), and the SES Solar Two project would contribute incrementally to this significant loss under CEQA.

Comment:

Burrowing owls are near the project site. Most of the site is not likely occupied, but preconstruction survey will determine actual number of territories are present and would be affected by the project. Owls near the linear components are not expected to be displaced. Please see suggested edits below:

Impacts to Burrowing Owls

Burrowing owls nesting on the project site could be directly impacted by construction of the SES Solar Two. Burrowing owl adults, eggs or young could be crushed or entombed by grading activities, and nesting and foraging activities would be directly and indirectly impacted by construction and operation of the project. Burrowing owl is known to occupy habitats adjacent to the project site and linear components. Owls near the linear components are not expected to be displaced. Pre-construction surveys for owl are required and if any owls are expected to be displaced by construction, appropriate construction BMP shall be implemented as indicated in BIO-8 and BIO-16. ~~The project~~

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

~~would also result in permanent loss of 6,185 acres that is currently used by burrowing owls for nesting and foraging. Staff considers these potential~~ Impacts to burrowing owl occupied habitat, including occupied burrows, is considered significant under CEQA. Compensatory mitigation for FTHL would also mitigate for potential burrowing owl habitat to a less than significant level.

~~In addition to the potential direct impacts to burrows, the SES Solar Two project would permanently eliminate a large expanse of habitat on the plant site and along the linear facilities that is currently available for foraging and breeding by burrowing owls. Habitat loss is one of the primary threats to California's burrowing owl population (Gervais et al. 2008), and the SES Solar Two project would contribute incrementally to this significant loss under CEQA.~~

BIOLOGICAL RESOURCES Page C.2-39

Interstate 8 from the project site. The site includes moderately suitable foraging and denning habitat for this species. The American badger is protected under Title 14, California Code of Regulations sections 670.2 and 670.5, and potential impacts to individuals of this species must be mitigated to less than significant levels under CEQA. Construction of the SES Solar Two project could kill or injure American badgers by crushing them with heavy equipment, or could entomb them within a den. Construction activities could also result in disturbance or harassment of individuals. Staff's proposed Condition of Certification BIO-15 (American Badger and Desert Kit Fox Impact Avoidance and Minimization Measures) requires that concurrent with the FTHL clearance survey, a qualified biologist would perform a pre-construction survey for badger dens in the project area, including areas within 250 feet of all project facilities, utility corridors, and access roads. Should a badger occur onsite, the applicant shall initiate passive removal of the badger and collapse the burrow after its removal per guidance provided in BIO-15. Active relocation would involve trapping (take), which is not allowed by CDFG code (California Fish and Game Code section 4000). Take is only allowed for those with fur trapping permits only and not for possible take by impacts caused by projects. In compliance with CDFG regulations, badgers can only be passively relocated followed by the collapsing of burrows.

Comment:

Title 14, Sections 670.2 & 670.5 are not applicable to American Badger. "*Species of Special Concern*" is an administrative designation and carries no formal legal status (CDFG website; <http://www.dfg.ca.gov/wildlife/nongame/ssc/>). Sections 15063 and 15065 of the CEQA Guidelines, which address how an impact is identified as significant, are particularly relevant to SSCs. Project-level impacts to listed (rare, threatened, or endangered species) species are generally considered significant thus requiring lead agencies to prepare an Environmental Impact Report to fully analyze and evaluate the impacts. In assigning "impact significance" to populations of non-listed species, analysts usually consider factors such as population-level effects, proportion of the taxon's range affected by a project, regional effects, and impacts to habitat features.

The determination that the site provides high habitat potential for badger is fairly speculative. If it was high, they would have been seen, not just a few "potential" burrows found. Is there road kill data for I-8? There is no need to discuss active relocation since passive removal is all that is necessary. Badgers are not likely to remain on site due to

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

the increased human activity/presence during construction. Biological monitoring will also allow for detection of badgers during ongoing construction. State definition of "Take" is not applicable to Badger, nor is there a prohibition of harassment. Please see the suggested edits below:

Interstate 8 from the project site. The site includes moderately suitable foraging and denning habitat for this species. ~~The American badger is protected under Title 14, California Code of Regulations sections 670.2 and 670.5, and potential impacts to individuals of this species must be mitigated to less than significant levels under CEQA.~~ Construction of the SES Solar Two project could kill or injure American badgers (if determined to be present during preconstruction surveys) by crushing them with heavy equipment, or could entomb them within a den. ~~Construction activities could also result in disturbance or harassment of individuals.~~ Staff's proposed Condition of Certification BIO-15 (American Badger and Desert Kit Fox Impact Avoidance and Minimization Measures) requires that concurrent with the ~~FTHL clearance~~ burrowing owl pre-construction survey, a qualified biologist would perform a pre-construction survey for badger dens in the project area, including areas within 250 feet of all project facilities, utility corridors, and access roads. Should a badger occur onsite, the applicant shall initiate passive removal of the badger and collapse the burrow after its removal per guidance provided in BIO-15. ~~Active relocation would involve trapping (take), which is not allowed by CDFG code (California Fish and Game Code section 4000). Take is only allowed for those with fur trapping permits only and not for possible take by impacts caused by projects. In compliance with CDFG regulations, badgers can only be passively relocated followed by the collapsing of burrows.~~

BIOLOGICAL RESOURCES Page C.2-39

The desert kit fox (*Vulpes macrotis*) is not a special status species, but it is protected under Title 14, California Code of Regulations section 460, which states that "Fisher, marten, river otter, desert kit fox, and red fox may not be taken at any time". These fur-bearing mammals are state Protected. Therefore, potential impacts to individuals of this species must be avoided. Desert kit fox sign were detected on the SES Solar Two site, and the site includes marginally suitable foraging and denning habitat for this species. Construction of the SES Solar Two project could kill or injure desert kit fox by crushing them with heavy equipment, or could entomb them within a den. Construction activities could also result in disturbance or harassment of individuals. Staff's proposed Condition of Certification BIO-15 requires that concurrent with the FTHL clearance survey, a qualified biologist would perform a pre-construction survey for kit fox dens in the project area, including areas within 250 feet of all project facilities, utility corridors, and access roads. Should a desert kit fox occur onsite, the applicant shall initiate passive removal of the kit fox and collapse the burrow after its removal per guidance provided in BIO-15. Active relocation would involve trapping (take), which is not allowed by CDFG code (California Fish and Game Code section 4000) and Title 14, California Code of Regulations section 460. Take is not allowed for this species. In compliance with CDFG regulations, desert kit foxes can only be passively relocated followed by the collapsing of burrows. Staff's proposed Condition of Certification BIO-15 would mitigate impacts to American badger and desert kit fox to less than significant levels under CEQA by avoiding take of these species.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Comment:

The desert subspecies of kit fox is not listed as a protected species. Citation of Title 14 section 460 is not applicable since this section is related to Fish Game trapping regulations and not to the effects of land development. Although preventing mortality of denning kit fox during construction is laudable, regulatory justification for this condition is suspect. State definition of "Take" is not applicable to this subspecies of kit fox, nor is there a prohibition of harassment. Desert kit fox is not a species that requires special attention under CEQA. Please see suggested edits below:

~~The desert kit fox (*Vulpes macrotis*) is not a special status species. but it is protected under Title 14, California Code of Regulations section 460, which states that "Fisher, marten, river otter, desert kit fox, and red fox may not be taken at any time". These fur-bearing mammals are state Protected. Therefore, potential impacts to individuals of this species must be avoided. Desert kit fox sign were detected on the SES Solar Two site, and the site includes marginally suitable foraging and denning habitat for this species. Construction of the SES Solar Two project could kill or injure desert kit fox by crushing them with heavy equipment, or could entomb them within a den. Construction activities could also result in disturbance or harassment of individuals. Staff's proposed Condition of Certification BIO-15 requires that concurrent with the FTHL clearance burrowing owl pre-construction survey, a qualified biologist would perform a pre-construction survey for kit fox dens in the project area, including areas within 250 feet of all project facilities, utility corridors, and access roads. Should a desert kit fox occur onsite, the applicant shall initiate passive removal of the kit fox and collapse the burrow after its removal per guidance provided in BIO-15. Active relocation would involve trapping (take), which is not allowed by CDFG code (California Fish and Game Code section 4000) and Title 14, California Code of Regulations section 460. Take is not allowed for this species. In compliance with CDFG regulations, desert kit foxes can only be passively relocated followed by the collapsing of burrows. Staff's proposed Condition of Certification BIO-15 would mitigate impacts to American badger and desert kit fox to less than significant levels under CEQA. by avoiding take of these species.~~

BIOLOGICAL RESOURCES Page C.2-40

CURE's data requests (SES 2009m) suggests that use of the site by Peninsular bighorn sheep is transitory at best. As the proposed project site is located on flat terrain, sheep entering the area are far from escape habitat and would be in a highly stressed state which could put them at great risk as the site is already surrounded by busy highways and the railroad. The site may provide marginally adequate forage and may possibly function as a corridor for bighorn sheep movement, but it is highly unlikely. The USFWS, CDFG, and BLM biologists are in agreement that the siting of bighorn sheep on the site in spring 2009 was an unusual occurrence and is unlikely to occur again. As no known lambing sites or water sites are known near the proposed project site, nor have other bighorn sheep occurrences been documented in the vicinity of the proposed project, staff concurs with the BLM assessment of project impacts that this project may affect, but is not likely to adversely affect Peninsular bighorn sheep. With implementation of avoidance and minimization measures of staff's proposed Condition of Certification BIO-8 (i.e., erecting fences and gates to prevent wildlife access and contain construction equipment; and covering excavated areas or installing wildlife escape ramps in the

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

excavated areas should sheep wander onsite), staff concludes that impacts to Peninsular bighorn sheep would be at less than significant levels under CEQA.

Comment:

The text as written is internally conflicted. Text modifications below removes the statements that conflict with the intended conclusion of no effect. Sheep are not likely to be attracted to an active construction site. Please see suggested edits below:

CURE's data requests (SES 2009m) suggests that use of the site by Peninsular bighorn sheep is transitory at best. As the proposed project site is located on flat terrain, sheep entering the area are far from escape habitat and would be in a highly stressed state which could put them at great risk as the site is already surrounded by busy highways and the railroad. The site may provide marginally adequate forage and ~~may possibly function as a corridor for bighorn sheep movement, but it is highly unlikely.~~ The USFWS, CDFG, and BLM biologists are in agreement that the ~~siting~~ sighting of bighorn sheep on the site in spring 2009 was an unusual occurrence and is unlikely to occur again. As no known lambing sites or water sites are known near the proposed project site, nor have other bighorn sheep occurrences been documented in the vicinity of the proposed project, CEC staff concurs with the BLM assessment of project impacts that this project may affect, but is not likely to adversely affect Peninsular bighorn sheep. With implementation of avoidance and minimization measures of staff's proposed Condition of Certification BIO-8 (i.e., erecting fences and gates to prevent wildlife access and contain construction equipment; and covering excavated areas or installing wildlife escape ramps in the excavated areas should sheep wander onsite), staff concludes that impacts to Peninsular bighorn sheep would be at less than significant levels under CEQA.

BIOLOGICAL RESOURCES Page C.2-40

Impacts to Flat-tailed Horned Lizard (FTHL)

Surveys conducted in 2007 and 2008 indicate that FTHL inhabits the 6,063-acre plant site and the 92.8-acre off-site transmission corridor (SES 2008a). The 12.34 acres of Sonoran creosote bush scrub and salt bush scrub located along the off-site reclaimed water line also provides suitable habitat for FTHL (SES 2008a). Construction activities within these areas would result in permanent loss of habitat.

Comment:

Only four FTHL lizards were detected during the surveys. With respect to FTHL, the SA/DEIS engages in some speculative reasoning regarding the loss of FTHL associated with attracting roundtail ground squirrels to the site. If the project actually would cause this, why isn't this regarded as a beneficial effect for burrowing owls and badgers, the former which occupies their burrows and the latter which feeds on ground squirrels? The loss of FTHL associated with an increase in predation is minor compared to the loss of vegetated habitat. It is only important if it is presumed that FTHL would continue to exist at the site, in which case, a certain amount of credit should have been provided for maintenance of FTHL habitat. Given that the BLM is considering all of the FTHL to essentially be extirpated from the site based on the mitigation requirement, there is no need for further mitigation in the form of predator control. Similarly, there is no need for traffic control within the site if the base assumption is that all FTHL will be lost and the

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

mitigation is requiring habitat acquisition to account for such loss. Please see suggested edits below:

Surveys conducted in 2007 and 2008 indicate that FTHL inhabits some portions of the 6,063-acre plant site and the 92.8-acre off-site transmission corridor (SES 2008a). The site supports suitable habitat for FTHL. The 12.34 acres of Sonoran creosote bush scrub and salt bush scrub located along the off-site reclaimed water line segment west of the West Main Canal also provides potentially suitable habitat for FTHL (SES 2008a). Construction activities within these areas would result in permanent loss of habitat. About one third of the site's vegetation will remain intact and another one third will have the shrub vegetation initially mowed. Some onsite habitat may remain potentially suitable for FTHL after construction is complete.

BIOLOGICAL RESOURCES Page C.2-41

The FTHL would be moved out of harm's way in coordination with the FTHL ICC. The FTHL ICC may choose to relocate the salvaged FTHL from the SES Solar Two project to several suitable sites within protect FTHL habitat or possibly conduct field research on FTHL. Decisions regarding the salvaged FTHL should be determined by the BLM in cooperation with the FTHL ICC prior to publication of the Staff Assessment/Final Environmental Impact Statement (Steward 2010).

Comment:

The FTHL would be moved out of harm's way in coordination with the FTHL ICC. The FTHL ICC may choose to relocate the salvaged FTHL from the SES Solar Two project to several suitable sites within protected FTHL habitat or possibly conduct field research on FTHL onsite during construction and operation. Decisions regarding the salvaged FTHL should be determined by the BLM in cooperation with the FTHL ICC prior to publication of the Staff Assessment/Final Environmental Impact Statement (Steward 2010).

BIOLOGICAL RESOURCES Page C.2-42

A stated goal in the Strategy (2003) is to prevent the net loss of FTHL habitat. In order to achieve this goal, compensation for habitat lost outside of a FTHL Management Area (MA), which would include the 6,063.1-acre project site, including the 1,038.7 of dirt and OHV roads that already exist on site, would be at a 1:1 ratio. The BLM considers the 1,038.7 acres of narrow dirt and OHV roads which traverse the site equivalent habitat to the undeveloped areas as the horned lizards utilize all areas within the 6,063.1 acres site. Even though the applicant would retain some vegetation in rows next to the SunCatchers, BLM and staff consider the entire site impacted and the applicant would be required to compensate for the loss of 6,063.1 acres. The 7.56-mile transmission line outside of the project site is located in the Yuha Desert Flat-tailed Horned Lizard Management Area (MA). As 92.8 acres would be impacted within an MA, the compensation for habitat lost would be increased to a 6:1 ratio (FTHL ICC 2003), thus requiring compensation for 556.8 acres (92.9 acres x 6 = 556.8 acres). The BLM is not calculating the impact acreages along the proposed reclaimed water pipeline route for the FTHL mitigation. Though approximately 1.7 miles of the proposed reclaimed water pipeline west of the Imperial Irrigation District Westside Main Canal is on BLM administered land, the construction activities would occur mainly in the developed/disturbed portions in and along the Evan Hewes Highway. Even though FTHL

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

habitat borders the Evan Hewes Highway, it is anticipated that direct pipeline construction impacts to vegetation and wildlife would be temporary and can be reduced to less than CEQA significant levels with implementation of impact avoidance and minimization measures described in staff-proposed Conditions of Certification BIO-1 through BIO-9. In lieu of the applicant acquiring any of the compensation lands, compensation acreage can be converted to a monetary equivalent (including administrative costs) that is required to replace the acreage or adjusted acreage. The per acre dollar figure for compensation fees would be based on the cost of acquiring lands prioritized for acquisition by the FTHL ICC. The funds would be calculated and paid to BLM under the direction of the FTHL ICC. The primary use of the compensation funds is to acquire, protect, or restore FTHL habitat both within and contiguous with MAs. If there are no more lands available for acquisition, the FTHL ICC can charge fair market value of impacted land and any costs associated with appraising the impacted land. Other uses of funds authorized by the FTHL ICC should acquisition opportunities be exhausted include:

Comment:

The FTHL Management Strategy includes a 5:1 mitigation ratio for impacts with a MA and this was confirmed in an email from Larry LaPre, BLM to URS. Please revise as follow:

A stated goal in the Strategy (2003) is to prevent the net loss of FTHL habitat. In order to achieve this goal, compensation for habitat lost outside of a FTHL Management Area (MA), which would include the 6,063.1-acre project site, including the 1,038.7 of dirt and OHV roads that already exist on site, would be at a 1:1 ratio. The BLM considers the 1,038.7 acres of narrow dirt and OHV roads which traverse the site equivalent habitat to the undeveloped areas as the horned lizards utilize all areas within the 6,063.1 acres site. Even though the applicant would retain some vegetation in rows next to the SunCatchers, BLM and staff consider the entire site impacted and the applicant would be required to compensate for the loss of 6,063.1 acres. The 7.56-mile transmission line outside of the project site is located in the Yuha Desert Flat-tailed Horned Lizard Management Area (MA). As 92.8 acres would be impacted within an MA, the compensation for habitat lost would be increased to a 6-5:1 ratio (FTHL ICC 2003), thus requiring compensation for 556.8 acres (92.9 acres x 6-5 = ~~556.8~~ 464.5 acres). The BLM is not calculating the impact acreages along the proposed reclaimed water pipeline route for the FTHL mitigation. Though approximately 1.7 miles of the proposed reclaimed water pipeline west of the Imperial Irrigation District Westside Main Canal is on BLM administered land, the construction activities would occur mainly in the developed/disturbed portions in and along the Evan Hewes Highway. Even though FTHL habitat borders the Evan Hewes Highway, it is anticipated that direct pipeline construction impacts to vegetation and wildlife would be temporary and can be reduced to less than CEQA significant levels with implementation of impact avoidance and minimization measures described in staff-proposed Conditions of Certification BIO-1 through BIO-9. In lieu of the applicant acquiring any of the compensation lands, compensation acreage can be converted to a monetary equivalent (including administrative costs) that is required to replace the acreage or adjusted acreage. The per acre dollar figure for compensation fees would be based on the cost of acquiring lands prioritized for acquisition by the FTHL ICC. The funds would be calculated and paid to BLM under the direction of the FTHL ICC. The primary use of the compensation

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

funds is to acquire, protect, or restore FTHL habitat both within and contiguous with MAs. If there are no more lands available for acquisition, the FTHL ICC can charge fair market value of impacted land and any costs associated with appraising the impacted land. Other uses of funds authorized by the FTHL ICC should acquisition opportunities be exhausted include:

BIOLOGICAL RESOURCES Page C.2-43

Biological Resources Table 4

Comment:

Change offsite mitigation ratio from 6:1 to 5:1 and recalculate mitigation acreage.

BIOLOGICAL RESOURCES Page C.2-48

To minimize the risks of increased traffic fatality and other hazards associated with roads at the SES Solar Two project site, staff has proposed Condition of Certification BIO-8, Impact Avoidance and Minimization Measures. These measures include confining vehicular traffic to and from the project site to existing routes of travel, prohibiting cross country vehicle and equipment use outside designated work areas, and imposing a speed limit of 15 miles per hour on routes within the project site for the life of the project. In addition, staff's proposed Condition of Certification BIO-9 (Flat-Tailed Horned Lizard Clearance Surveys) would remove FTHLs prior to construction and set up barrier fencing to exclude the FTHL. Similar measures have been applied on past projects and have shown that they reduce impacts from traffic.

Comment:

USFWS typically recommends 20 or 25 MPH for onsite speed limit. Additionally, other conditions of certification within the SA/DEIS state 25 MPH as the onsite speed limit. Please revise as follows:

To minimize the risks of increased traffic fatality and other hazards associated with roads at the SES Solar Two project site, staff has proposed Condition of Certification BIO-8, Impact Avoidance and Minimization Measures. These measures include confining vehicular traffic to and from the project site to existing routes of travel, prohibiting cross country vehicle and equipment use outside designated work areas, and imposing a speed limit of 25 miles per hour on routes within the project site for the life of the project. In addition, staff's proposed Condition of Certification BIO-9 (Flat-Tailed Horned Lizard Clearance Surveys) would remove FTHLs prior to construction and set up barrier fencing to exclude the FTHL. Similar measures have been applied on past projects and have shown that they reduce impacts from traffic.

BIOLOGICAL RESOURCES Page C.2-53

Comment:

Under the Waters of the U.S. and Jurisdictional State Waters heading, permanent impacts to the ephemeral washes are described as resulting from, among other things, the construction of debris/sediment basins. This should be omitted from the list of possible factors resulting in permanent impacts to the ephemeral washes because construction of debris/sediment basins is no longer being planned.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

BIOLOGICAL RESOURCES Page C.2-54

Special Status Mammals

Construction and operation of the power plant would have eliminated denning and foraging habitat for desert kit fox and American badger. The exclusionary fencing of the power plant would also prevent Peninsular bighorn sheep entering the site. Therefore, no impacts are expected from decommissioning/plant closure activities to desert kit fox, badger, and bighorn sheep.

Comment:

Desert kit fox is not a special status mammal. Please revise as follows:

Construction and operation of the power plant would have eliminated denning and foraging habitat for ~~desert kit fox~~ and American badger. The exclusionary fencing of the power plant would also prevent Peninsular bighorn sheep entering the site. Therefore, no impacts are expected from decommissioning/plant closure activities to ~~desert kit fox~~, badger, and bighorn sheep.

BIOLOGICAL RESOURCES Page C.2-56

Lake and Streambed Alteration Agreement: California Fish and Game Code §§1600-1607. Pursuant to these sections, CDFG typically regulates all changes to the natural flow, bed or bank, of any river, stream, or lake that supports fish or wildlife resources. Construction of the SES Solar Two would result in permanent impacts to 840 acres of jurisdictional state waters. Staff is reviewing information supplied by the applicant and is coordinating with CDFG to develop staff's proposed Condition of Certification BIO-17. Implementation of this condition would minimize and offset impacts to jurisdictional state waters, and would assure compliance with CDFG requirements that provide protection to jurisdictional state waters.

Comment:

As noted on page C.2-35, the Project would result in impacts to 312 acres of state jurisdictional waters. Please revise as follows:

Lake and Streambed Alteration Agreement: California Fish and Game Code §§1600-1607. Pursuant to these sections, CDFG typically regulates all changes to the natural flow, bed or bank, of any river, stream, or lake that supports fish or wildlife resources. Construction of the SES Solar Two would result in permanent impacts to ~~840~~ 312 acres of jurisdictional state waters. Staff is reviewing information supplied by the applicant and is coordinating with CDFG to develop staff's proposed Condition of Certification BIO-17. Implementation of this condition would minimize and offset impacts to jurisdictional state waters, and would assure compliance with CDFG requirements that provide protection to jurisdictional state waters.

BIOLOGICAL RESOURCES Page C.2-56

Yuha Desert Flat-tailed Horned Lizard Management Areas (MA): The goal of the establishment of these areas is to secure and/or manage sufficient habitat to maintain self-sustaining FTHL populations. The closest MA is south across Interstate 8 from the SES Solar Two project site. A 7.56-mile segment of the proposed transmission line would be built in an existing utility corridor in the MA.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Comment:

Please revise as follows:

Yuha Desert Flat-tailed Horned Lizard Management Areas (MA): The goal of the establishment of these areas is to secure and/or manage sufficient habitat to maintain self-sustaining FTHL populations. The closest MA is south across Interstate 8 from the SES Solar Two project site. A 7.56-mile segment of the proposed transmission line would be built in an existing utility corridor in the MA. The proposed project and associated BMPs and compensatory mitigation are consistent with the FTHL Management Strategy.

BIOLOGICAL RESOURCES Page C.2-61

Special status plants	<p>Impact: Potential direct or indirect impacts to special status plant species from construction and fragmentation of habitat.</p> <p>Mitigation: Impact avoidance and minimization measures (BIO-8); implement of weed management plan (BIO-18); and conduct pre-construction surveys during spring and fall 2010 and Special Status Plant Protection Plan (BIO-19).</p>
-----------------------	--

Comment:

2010 Spring surveys are underway. The Applicant requests that the agencies determine the need for mitigation measures based on the results of the spring surveys. Fall surveys are not necessary since all species of concern have typical spring blooming periods and would conflict with the planned September start of construction. Please revise as follows:

Special status plants	<p>Impact: Potential direct or indirect impacts to special status plant species from construction and fragmentation of habitat (if detected during 2010 Spring surveys).</p> <p>Mitigation (if necessary): Impact avoidance and minimization measures (BIO-8); implement of weed management plan (BIO-18); and conduct pre-construction surveys during spring and fall 2010 and Special Status Plant Protection Plan (BIO-19).</p>
-----------------------	--

BIOLOGICAL RESOURCES Page C.2-57

Comment:

The discussion regarding a permit under the Eagle Act is speculative at best. Under the Bald and Golden Eagle Protection Act, "take" is defined as "pursue, shoot, shoot at,

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

poison, wound, kill, capture, trap, collect, destroy, molest or disturb.” The new regulations at § 22.26 will cover mostly disturbance. “Disturb” is defined in regulations as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available: (1) injury to an eagle, (2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or (3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.” Given the fact that the regulations do not address habitat loss, except remotely under the “decrease in productivity” criteria and the fact that a limited number of golden eagles are acknowledged as even being likely to be present, no permit is required.

BIOLOGICAL RESOURCES Page C.2-74

Staff states “If a Designated Biologist needs to be replaced, the specified information of the proposed replacement must be submitted to the CPM and BLM’s Authorized Officer at least ten working days prior to the termination or release of the preceding Designated Biologist.”

Comment:

Applicant will need more time than stated in the condition to replace a Designated Biologist should the need arise. Applicant requests that the condition be revised from “ten working days prior to termination or release” to “as soon as possible.”

BIOLOGICAL RESOURCES Page C.2-74

Staff states “The project owner shall ensure that the Designated Biologist performs the following during any site (or related facilities) mobilization, ground disturbance, grading, construction, operation, closure, and restoration activities. The Designated Biologist may be assisted by the approved Biological Monitor(s) but remains the contact for the project owner, BLM’s Authorized Officer, and CPM. The Designated Biologist shall prepare written reports and summaries that document construction activities that have the potential to affect biological resources. The Designated Biologist Duties shall include the following:

- Inspect active construction areas where animals may have become trapped prior to construction commencing each day. At the end of the day, inspect for the installation of structures that prevent entrapment or allow escape during periods of construction inactivity. Periodically inspect areas with high vehicle activity (e.g., parking lots) for animals in harm’s way.”

Comment:

Applicant would like to know if it is possible to train other workers through WEAP for the daily inspection activities in the Active Construction Area. Applicant suggests revising condition to state that other workers trained through WEAP may make the daily inspection activities and report to the Designated Biologist.

BIOLOGICAL RESOURCES Page C.2-75

Staff states “If additional biological monitors are needed during construction, the specified information shall be submitted to BLM’s Authorized Officer and the CPM for approval at least ten days prior to their first day of monitoring activities.”

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Comment:

Applicant would like to revise the condition from submitting information ten days prior to the first day of monitoring activities to five days prior.

BIOLOGICAL RESOURCES Page C.2-77

Staff states "The project owner shall develop and implement SES Solar two specific Worker Environmental Awareness Program (WEAP) and shall secure approval for the WEAP... The WEAP shall be administered to all onsite personnel including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors, and delivery personnel. The WEAP shall be implemented during site mobilization, ground disturbance, grading construction, operation, and closure... At least 60 days prior to the start of any project-related site disturbance activities, the project owner shall provide to BLM's Authorized Officer and the CPM a copy of the draft WEAP all supporting written materials and electronic media..."

Comment:

Applicant requests that verification of the condition be revised from 60 days to 30 days.

BIOLOGICAL RESOURCES Page C.2-78

Staff states "The project owner shall develop a BRMIMP and submit two copies of the proposed BRMIMP... and shall implement the measures identified in the approved BRMIMP. The BRMIMP shall incorporate avoidance and minimization measures described in final versions of the Raven Management Plan, the USFWS Biological Opinion, Burrowing Owl Mitigation and Monitoring Plan, the Noxious Weed Management Plan, and the Closure Plan... The project owner shall submit the BRMIMP to the BLM's Authorized Officer and the CPM at least 60 days prior to start of any project-related site disturbance activities."

Comment:

Applicant requests that verification of the condition be revised from 60 days to 30 days.

BIOLOGICAL RESOURCES Page C.2-78

Staff states "A Frac-Out Contingency Plan approved by CDFG and the CPM prior to commencement of construction of the reclaimed water pipeline for horizontal directional drilling under the waterways."

Comment:

Applicant requests that the submittal date of the condition be revised from 60 days to 30 days.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

BIOLOGICAL RESOURCES Page C.2-78

Staff states "The BRMIMP shall incorporate avoidance and minimization measures described in the final versions of the... USFWS Biological Opinion..."

Comment:

Applicant requests that the submittal date of the condition be revised from 60 days to 30 days.

BIOLOGICAL RESOURCES Page C.2-80

Staff states "The project owner shall undertake the following measures to manage the construction site and related facilities in a manner to avoid or minimize impacts to biological resources during construction and operation:

- To the extent possible, existing roads shall be used for travel and equipment storage. New and existing roads that are planned for construction, widening or other improvements shall not extend beyond the flagged impact area as described above. All vehicles passing or turning around would do so within the planned impact area or in previously disturbed areas. Where new access is required outside of existing roads (e.g. new spur roads associated with both transmission line options) or the construction zone, the route would be clearly marked (i.e., flagged and/or staked) prior to the onset of construction.
- During construction, examine areas of active surface disturbance periodically – at least hourly when surface temperatures exceed 29°C (85°F) for the presence of FTHL."

Comment:

Applicant needs clarification for the second bulleted condition regarding who is allowed to perform hourly inspections. Are workers trained under WEAP allowed to make inspections, or must they be completed by a Biological Monitor?

BIOLOGICAL RESOURCES Page C.2-83

Staff states "Immediately notify in writing if the project owner is not in compliance with any conditions of certification, including but not limited to any actual or anticipated failure to implement mitigation measures within the time periods specified in the conditions of certification.

In the event of a sighting in an active construction area (e.g., with equipment, vehicles, or workers), injury, kill, or relocation of any GTHL, notify BLM's Authorized Officer, the CPM, CDFG, USACE, and SFWS immediately by phone and in no event later than noon on the business day following the event if it occurs outside normal business hours so that agencies can determine what further actions, if any, are required to protect the FTHL.

Include the following information as relevant: 1) If an FTHL is killed by project-related activities during construction, or if an FTHL is otherwise found dead, submit a written report with the same information as the injury report. Written notification shall include, at a minimum, the date, time, location, circumstances of the incident; 2) The BLM's Authorized Officer and the CPM may issue the project owner a written stop work order to

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

suspend any activity related to the construction or operation of the project for an appropriate period determined in consultation with BLM's Authorized Officer and the CPM in order to prevent or remedy a violation of one or more conditions of certification (including but not limited to failure to comply with reporting, monitoring, or habitat acquisition obligations) or to prevent the illegal take of an endangered, threatened, or candidate species. The project owner shall comply with the stop work order immediately upon receipt thereof. In the case of a sighting in an active construction area, the project owner shall, at the same time, submit a map (e.g., using Geographic Information Systems) depicting both the limits of construction and sighting."

Comment:

Applicant requests that the condition be modified to allow a Designated Biological Monitor to be responsible for performing the duties in the condition. Applicant requests that the condition be modified to change the verification of the above from two calendar days to five calendar days.

BIOLOGICAL RESOURCES Page C.2-83

Staff states "Designated Biologist to remain onsite daily while grubbing and grading are taking place to avoid or minimize take of special status species, to check for compliance with all impact avoidance and minimization measures, and to check all FTHL clearance areas to ensure that signs, stakes, and fencing are intact and that human activities are restricted in these protective zones. Conduct compliance inspections at a minimum of once per month after clearing, grubbing, and grading are completed and submit a monthly compliance report to BLM's Authorized Officer and the CPM."

Comment:

Applicant requests a change in the condition that will allow a Designated Bio-Monitor to perform the specified duties as necessary.

BIOLOGICAL RESOURCES Page C.2-93

Staff states "Acquire Off-Site Desert Ephemeral Wash: No less than 90 days prior to acquisition of the parcel(s) containing no less than 312 acres of jurisdictional state waters, the project owner, or a third-party approved by the CPM in consultation with CDFG, shall submit a formal acquisition proposal to the CPM and CDFG describing the parcel(s) intended for purchase."

Comment:

Applicant requests that the submittal time period be revised from 90 days to at the time of CEC decision/BLM ROD.

BIOLOGICAL RESOURCES Page C.2-97

Staff states "Security for Implementation of Mitigation: A security in the form of an irrevocable letter of credit, pledged savings account, or certificate of deposit for the amount of all mitigation measures pursuant to this condition of certification shall be submitted to, and approved by the CPM, in consultation with CDFG, prior to commencing project activities within areas of CDFG jurisdiction."

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Comment:

Applicant requests that the submittal time period be revised from “prior to commencing project activities” to “at the time of CEC decision and BLM ROD.”

BIOLOGICAL RESOURCES Page C.2-97

Staff states “Fall Pre-Construction Floristic Survey. A qualified botanist shall conduct floristic surveys on the SES Solar Two project site and along linear facilities in all areas subject to ground-disturbing activity, including, but not limited to, tower pad preparation and construction areas, pulling and tensioning sites, assembly yards, and areas subject to grading for new access roads. Surveys shall be conducted within 100 feet of all surface disturbing-activities at the appropriate time of year according to guidelines from the BLM (2009), California Department of Fish and Game (CDFG 2009b) and the California Native Plant Society (CNPS 2001).”

Comment:

Applicant requests that this be deleted from the condition.

BIOLOGICAL RESOURCES Page C.2-97

Comment:

Mitigation Measure BIO-19 is excessive in that it appears to require avoidance for all “rare” plants, including CNPS list 1-4 plants. Under NEPA, none of those plants unless they are also listed as BLM “sensitive” would warrant mitigation (only five of the 16 special status plants are so listed). List 3 plants are considered extirpated and therefore are not relevant to a discussion of impacts. Under CEQA, List 4 (“watch list”) plants do not warrant mitigation unless it can be shown that such plants are indeed rare under the CEQA definition. This can also apply to some CNPS List 1 and 2 species. Also, CDFG does not issue “incidental take permits” for listed plants, and in fact, plants are not protected in the same manner as wildlife are under the California Endangered Species Act. The discussion on page C.2-36 is inadequate to establish that the sensitive species of concern, most of which are CNPS List 2 species, are actually “rare” under the *State CEQA Guidelines*, though the approach taken is conservative for legal purposes.

BIOLOGICAL RESOURCES Page C.2-97

Staff states “(Fall 2010) Pre-Construction Floristic Survey.”

Comment:

Applicant does not believe that fall surveys are necessary to determine the presence or absence of rare plants and that spring/summer surveys will provide adequate information to determine the potential for an impact to rare plants occurring and to establish any necessary mitigation measures. Fall surveys could significantly impact Project construction schedule and are unjustified.

BIOLOGICAL RESOURCES Page C.2-97

Staff states “(Fall 2010) Special Status Plant Protection Plan. If special status plant species are detected during pre-construction surveys, a qualified botanist shall prepare a Sensitive Plant Protection Plan.”

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Comment:

Applicant does not believe that fall surveys are necessary to determine the presence or absence of rare plants and that spring/summer surveys will provide adequate information to determine the potential for an impact to rare plants occurring and to establish any necessary mitigation measures. Fall surveys could significantly impact Project construction schedule and are unjustified.

BIOLOGICAL RESOURCES Page C.2-101

American badgers were not detected during the surveys, but potential habitat is present for this species at the project site. Construction activities could also crush or entomb American badger, which are protected under Title 14, California Code of Regulations (sections 670.2 and 670.5). Staff's proposed Condition of Certification BIO-15, which requires pre-construction surveys and avoidance measures to protect badgers and kit fox, would avoid this potential impact. This condition also protects desert kit fox, which are known to occur on the site, and which are protected under the California Code of Regulations Chapter 5 Section 460.

Comment:

See previous comments and text changes related to badger and kit fox.

American badgers were not detected during the surveys, but potential habitat is present for this species at the project site. Construction activities could also crush or entomb American badger is a CDFG species of special concern. ~~which are protected under Title 14, California Code of Regulations (sections 670.2 and 670.5).~~ Staff's proposed Condition of Certification BIO-15, which requires pre-construction surveys and avoidance measures to protect badgers and kit fox, would avoid this potential impact. ~~This condition also protects desert kit fox, which are known to occur on the site, and which are protected under the California Code of Regulations Chapter 5 Section 460.~~

BIOLOGICAL RESOURCES Page C.2-102

Special Status Plants: Though no special status plants were observed during surveys, suitable habitat exists on the project site for twelve special status species. Five special status plant species were not included in targeted surveys. Staff and BLM are concerned that special status plant species may have been overlooked due to half the surveys conducted concurrently with FTHL surveys with biologists of varying levels of botanical expertise and the lack of fall surveys after late summer/early fall monsoonal rains. Thus, survey results were not considered adequate to assess presence or absence of a species within the project area. Staff's proposed Conditions of Certification BIO-8 and BIO-18 (Noxious Weed Management Plan) would minimize potentially significant impacts to special status plants. Potential impacts to special status plants would be further mitigated by staff's proposed Condition of Certification BIO-19 (Special Status Plant Surveys and Protection Plan). This condition requires targeted surveys during the appropriate seasons in 2010 and a protection plan for special status species.

Comment:

See previous comments related to rare plants.

Special Status Plants: Though no special status plants were observed during surveys, potentially suitable habitat exists on the project site for twelve special status species.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

~~Five special status plant species were not included in targeted surveys. Because of poor rainfall conditions during the 2007/2008 surveys Staff and BLM are concerned that special status plant species may have been overlooked due to half the surveys conducted concurrently with FTHL surveys with biologists of varying levels of botanical expertise and the lack of fall surveys after late summer/early fall monsoonal rains. Thus, site conditions during the surveys resulted in a high potential for a false negative result.s were not considered adequate to assess presence or absence of a species within the project area. Staff's proposed Conditions of Certification BIO-8 and BIO-18 (Noxious Weed Management Plan) would minimize potentially significant impacts to special status plants. Potential impacts to special status plants would be further mitigated by staff's proposed Condition of Certification BIO-19 (Special Status Plant Surveys and Protection Plan). This condition requires targeted surveys during the appropriate spring seasons in 2010 and, if needed, a protection plan for regionally significant populations of special status species.~~

BIOLOGICAL RESOURCES Page C.2-102

Impacts to Jurisdictional State Waters and Waters of the U.S.: One of the significant biological impacts of the project is the placement of SunCatchers and associated electrical collection system, hydrogen gas pipelines, debris basins, and access roads in ephemeral washes on the plant site, resulting in the permanent impact of approximately 165 acres, the temporary impact of 5 acres, and the indirect impact of 13 acres of Waters of the U.S. and permanent impact to approximately 312 acres of jurisdictional state waters. These washes are characterized by natural processes of soil deposition, channel formation, and development of microtopography and soil crusts, all of which support recruitment of native desert wash vegetation and provide wildlife habitat and a corridor for movement. Placement of the SunCatchers, access roads, road culverts, and debris/sediment basins within the beds of the ephemeral washes would disrupt the hydrological and biological functions and processes. The CDFG is agreeable to mitigation to impacts to the ephemeral washes at a 1:1 compensation ratio of ephemeral wash within acquired Sonoran creosote scrub habitat within acquired FTHL compensation land for one year under the FTHL mitigation requirement. After which, any remaining acreage needed to meet the 312-acre mitigation requirement will need to be acquired independent of the FTHL compensation land. Staff concurs with the CDFG requiring 1:1 compensation ratio for impacts to the ephemeral washes on the project site. With implementation of staff's proposed Condition of Certification BIO-17, staff anticipates that impacts to 312 acres of jurisdictional state waters and loss of the hydrological and biological functions of the project site desert washes would be mitigated to less than CEQA significant levels. However, the USACE would have different mitigation requirements. The mitigation requirements for the federal Clean Water Act (CWA) 404 permit under an Individual Permit subject to CWA Section 404(b)(1) guidelines are currently unresolved, but would

Comment:

Please revise as follows:

Impacts to Jurisdictional State Waters and Waters of the U.S.: One of the significant biological impacts of the project is the placement of SunCatchers and associated electrical collection system, hydrogen gas pipelines, debris basins, and access roads in ephemeral washes on the plant site, resulting in the permanent impact of approximately

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

165 acres, the temporary impact of 5 acres, and the indirect impact of 13 acres of Waters of the U.S. and permanent impact to approximately 312 acres of jurisdictional state waters. These washes are characterized by natural processes of soil deposition, channel formation, and development of microtopography and soil crusts, all of which support recruitment of native desert wash vegetation and provide wildlife habitat and a corridor for movement. Placement of the SunCatchers, access roads, road culverts, and debris/sediment basins within the beds of the ephemeral washes would disrupt the hydrological and biological functions and processes. The CDFG is agreeable to mitigation to impacts to the ephemeral washes at a 1:1 compensation ratio of ephemeral wash within acquired Sonoran creosote scrub habitat within acquired FTHL compensation land for one year under the FTHL mitigation requirement. After which, any remaining acreage needed to meet the 312-acre mitigation requirement will need to be acquired independent of the FTHL compensation land. Mitigation that satisfies CWA 404 requirements can also be applied toward meeting some or all of the 1602 mitigation requirements. Staff concurs with the CDFG requiring 1:1 compensation ratio for impacts to the ephemeral washes on the project site. With implementation of staff's proposed Condition of Certification BIO-17, staff anticipates that impacts to 312 acres of jurisdictional state waters and loss of the hydrological and biological functions of the project site desert washes would be mitigated to less than CEQA significant levels. However, the USACE would have different mitigation requirements. The mitigation requirements for the federal Clean Water Act (CWA) 404 permit under an Individual Permit subject to CWA Section 404(b)(1) guidelines are currently unresolved. The mitigation requirements for the federal Clean Water Act 404 permit for impacts to waters of the United States are under development by the Corps. Pursuant to Corps regulations, the applicant will be required at a minimum to ensure that all unavoidable impacts to waters of the United States are mitigate at a level that will ensure a no net loss of aquatic resource or functions and values of those resources. Staff concludes that implementation of these mitigation measures will be sufficient to reduce impacts to waters of the U.S. to a less than significant level.

Introduction Page A-14

Comment:

Page A-14 paraphrases 40 CFR 1508.27. This should be an exact quote. For example, the paraphrase implies that effects to habitat for listed species is significant when the actual regulation applies only to designated critical habitat. This does not mean that the loss of undesignated habitat would not adversely affect a listed species, only that the loss of critical habitat is automatically a significant adverse effect, whereas the loss of undesignated habitat must be considered in terms of whether or not the action is "likely to jeopardize the continued existence of a listed species." This is important in terms of the amount of required mitigation for listed (or potentially future listed) species under NEPA.

In their definitions section, at Section 1508.27, the CEQ regulations define the word "significantly" as used when the Act refers to "major Federal action significantly affecting the quality of the human environment." Since it is such actions that require preparation of an EIS, the definition of "significantly" indicates how the significance of impacts should be measured in an EA. If the effects aren't significant when measured against the definition, then a Finding of No Significant Impact can be issued and the project proceeds with no further NEPA review, but if the definition is met, then an EIS is needed.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

The definition is framed in terms of "context" and "intensity." Context means the geographic, social, and environmental contexts within which the project may have effects. The regulations refer to:

- Society as a whole, defined as including all human society and the society of the nation
- The affected region
- Affected interests, such as those of a community, Indian tribe, or other group
- The immediate locality

The regulations also say that both short-term and long-term impacts must be considered -- in other words that impacts must also be considered in the context of time. It is important not to think of the various contexts as a hierarchy. An impact on society as a whole is not necessarily more important than an impact on a particular interest or locality. "Intensity" is the severity of the potential impact, considered in context. The regulations direct agencies to consider:

- Both beneficial and adverse impacts
- Impacts on human health and safety
- Impacts on an area's unique characteristics, such as historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, and ecologically critical areas.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

CULTURAL RESOURCES AND NATIVE AMERICAN VALUES

General Comment:

The Applicant is concerned that the SA/DEIS relies on the PA to resolve adverse effects/significant impacts, but it does not consistently show how and when this will occur. The Applicant requests that, given the complexity of the potential cultural resources impacts, staff identify significant, unavoidable cultural resources impacts. The Applicant has provided attachment CUL-1, behind this response, showing suggested edits. The Applicant requests that these edits be evaluated and included in the SSA/FEIS.

Attachment CUL-1

Please see the Applicant's edits below. The Applicant is concerned with the conclusion drawn in the SA/DEIS. The Applicant believes that impacts on cultural resources may not be mitigated to levels less than significant through the implementation of the Programmatic Agreement. Cultural resource investigations and Native American consultation are on-going. As indicated in CUL-1, the PA will provide mitigation measures to address impacts to significant cultural resources. Although the PA is not complete, anticipated mitigation measures include avoidance and data recovery. The PA will include all feasible mitigation measures. Even with feasible mitigation, some potential impacts (e.g., to sites with qualities that cannot be mitigated through data retrieval) may not be reduced below a level of significance. Additionally, page numbers need to be changes to C.3-# to reflect the correct section number.

Cultural Resources Page C.2-1

C.3.1 SUMMARY OF CONCLUSIONS

On the basis of a 25% sample of the cultural resources inventory of the project area of analysis, staff concludes that the Stirling Energy Systems Solar Two Project would have significant impacts/effects on a presently unknown subset of approximately 330 known prehistoric and historical surface archaeological resources and may have significant impacts/effects on an unknown number of buried archaeological deposits, many of which may be determined historically significant (i.e., eligible for the National Register of Historic Places and the California Register of Historical Resources) under the programmatic agreement currently under development as part of the Bureau of Land Management's Section 106 consultation process. The adoption and implementation of Condition of Certification **CUL-1** would reduce the potential impacts of the proposed action on these resources but not to a less than significant under CEQA and NEPA. The Programmatic Agreement would address adverse effects under Section 106 of the National Historic Preservation Act.

Deleted: ,
Deleted: resolve
Deleted: , and would further ensure that the proposed action would be in conformity with all applicable laws, ordinances, regulations, and standards.

Cultural Resources Page C.2-6

Given that the proposed Solar Two Project is located on lands managed by BLM and requires authorization by the BLM, the proposed action is considered an undertaking, and therefore must comply with the NHPA and implementing regulations. NEPA addresses compliance with the NHPA, and the required environmental documentation, whether it is an Environmental Assessment (EA) or an Environmental Impact Statement (EIS), must discuss cultural resources. It is important to recognize, however, that BLM compliance with NEPA does not mean that BLM has complied with the NHPA.

Deleted: project
Deleted: e project is in
Deleted:
Deleted: ance

Cultural Resources Page C.2-6

Identification and National Register of Historic Places Evaluation

36 CFR Part 800.3 discusses the consultation process. Section 800.4 sets out the steps the Jead Federal agency must follow to identify historic properties. 36 CFR Part 800.4(c)(1) outlines the process for National Register of Historic Places (NRHP) eligibility determinations.

Deleted: ACHP
Deleted: ¶

Cultural Resources Page C.2-12

The present analysis seeks to resolve the potentially significant effects of proposed and alternative actions on significant cultural resources (i.e., historical resources/historic properties) through the development of measures that satisfy the common conceptual threads of effects resolution in CEQA, NEPA, and Section 106. Energy Commission staff here proposes that the Energy Commission fulfill its obligation under CEQA to resolve any potentially significant effects that the proposed or alternative actions may have on cultural resources by making the applicant's compliance with the terms of the BLM's programmatic agreement (PA) under Section 106 a condition of certification (**CUL-1**). The BLM here proposes to use the present cultural resources analysis and its consultation efforts under Section 106, which includes the negotiation and drafting of the PA, to evidence its compliance with NEPA. The applicant's implementation of the terms of the PA would ensure compliance with applicable laws, ordinances, regulations, and standards (LORS), in addition to compliance with CEQA, NEPA, and Section 106.

Cultural Resources Page C.2-57 and C.2-58

History of the Investigation

The inventory effort began with the development of a geographic scope of investigation that would capture enough information to support a defensible cultural resources analysis. The scope of investigation for the proposed action includes considerations of both the geographic extent and the intensity of the geographic coverage of each investigation that contributes to the inventory effort. The geographic extent of the inventory investigations includes the different areas in which the proposed action has the potential to directly or indirectly effect cultural resources. The total of such areas is the project area of analysis (see "The Project Area of Analysis and the Area of Potential Effects" subsection, above).

The geographic coverage for primary field research in the project area of analysis presently includes a sample of 25% of the archaeological sites found in that area and a 100% sample of built-environment resources and ethnographic resources. BLM and Energy Commission staff sought early (December 2008) in the discovery phase of the Energy Commission siting case for the proposed action to acquire, among other information, more precise and objective data on the character and the physical contexts of the surface archaeological resources (see Data Requests 111–113 and 115–117, CEC 2008h).

As BLM and Energy Commission staff began to develop a second round of data requests, information became available. A May 8, 2009 preliminary field check by BLM staff and a third-party consultant of the accuracy of the archaeological site descriptions that the applicant had prepared in response to Data Request 117 found enough variation between those descriptions and the actual character of the resources on the ground to warrant concern. Energy Commission and BLM staff agreed that a formal field check of a controlled sample of the archaeological sites that had been found on the original archaeological survey would be a useful way to quantify the accuracy of the March 2009 revisions to the archaeological site descriptions. From May 20 to May 22, 2009, a third-party consultant to the BLM conducted a ground-truthing survey of an approximately 20% sample of the 302 archaeological sites then known for the project area of analysis (LSA 2009a).

The second round of data requests for cultural resources (CEC 2009X) took into account the results of the third-party ground-truthing survey. The primary focus of Data Requests 142–144 was for the applicant to conduct a program to revisit and re-record 100% of the newly found archaeological sites in the project area for the proposed action. The requests provided the

Deleted: the bulk of

Deleted: ¶
The intensity of the geographic coverage for the inventory investigations is different for¶ the background research and the primary field research, and has evolved during the¶ development of the cultural resources inventory. The ideal intensity of the geographic¶ coverage in a project area of analysis would be 100% for all investigations done for or in¶ that area. The development of the cultural resources inventory for the proposed action¶ began with the intent of conducting both the background research and the primary field¶ research to cover 100% of the project area of analysis. The background research does¶ include this level of coverage. The primary field research does not.¶

Deleted: useable

Deleted: The applicant began the primary field research on the archaeology of the project area of¶ analysis with a 100% pedestrian survey to identify and document every archaeological¶ site on the surface of that area (Cultural Resources Table 6) (SES 2008c, SES 2008e).¶ The reported results of that survey were too coarse in descriptive resolution to enable¶ the reliable identification and interpretation of the archaeological resources found.

Deleted: The March 2009 responses of the applicant to the initial round of cultural¶ resources data requests (SES 2009h), while offering useful information on the¶ geomorphology of the project area of analysis as a whole (see respo[... [1])

Deleted: that made the coarse resolution of the original¶ archaeological survey data more objectively apparent.

Deleted: and would allow staff to

Deleted: more securely account for the range of error in the descriptions during the preparation¶ of the analysis

Deleted: The¶ BLM's third-party consultant found that the documentation by the applicant for¶ approximately 43% of the archaeological sites in the project area of analysis was¶ (... [2])

applicant with a field protocol for the re-recording effort and recommended that the applicant more precisely observe and document the geomorphic context of each site. The requests also asked the applicant to revise the March 2009 descriptions of the newly found archaeological sites in the proposed project area to more closely conform to the original guidance in Data Requests 113 and 117. In response to a request from the applicant at the May 7, 2009 second data response workshop in El Centro, staff provided a template to the applicant, as an attachment to the second round data requests, to ease the further revision of the archaeological site descriptions. The data requests and the attachment were published on June 18, 2009.

Deleted: The applicant had begun the archaeological site re-recording effort the previous day having seen the draft second round data requests and having sought further clarification from staff on the re-recording field protocol

Cultural Resources Page C.2-59

Coordination on Programmatic Agreement for Section 106 Compliance

Concurrent with the discovery phase of the Energy Commission siting process, BLM and Energy Commission staff were developing an alternate approach to jointly satisfy agency NEPA, Section 106, and CEQA regulatory obligations. From approximately March 9 through August 12, 2009, Energy Commission staff, in consultation with BLM staff, conducted a series of intra- and interagency discussions about how Energy Commission staff might use the Section 106 consultation process to satisfy Energy Commission obligations to comply with CEQA in relation to cultural resources. More specifically, Energy Commission staff sought to participate in the development and execution of a type of agreement document that BLM staff came to the decision to use to comply with Section 106, which the BLM would use, in turn, to satisfy their obligations under NEPA to consider the effects of the proposed action on cultural resources. The subject type of agreement document is known as a complex undertaking programmatic agreement (PA). The purpose of a complex undertaking PA is to afford a Federal agency a procedural mechanism to provide for the phased identification, evaluation and deferment of final evaluations for projects involving large land areas and corridors, as well as, the consideration and treatment of historically significant cultural resources when the effects of a proposed action on such resources, for different reasons, cannot be fully determined prior to the approval of that action. A complex undertaking PA is one of the approaches that can be used to satisfy Section 106 requirements.

Deleted: a

The regulatory process set out in a complex undertaking PA is the result of negotiations among the lead Federal agency, other involved Federal agencies, the Advisory Council on Historic Preservation, the State Historic Preservation Officer, Native American groups, state and local governments, and the interested public. Such a regulatory process provides for the post-decision completion of steps in the standard Section 106 process that normally occur prior to a decision on a proposed action. On August 12, 2009, Energy Commission staff got internal approval to participate in the Section 106 consultation process for the proposed action under consideration here and to recommend to the Energy Commission the regulatory process that would be negotiated under Section 106 as the means to satisfy agency obligations under its CEQA certified regulatory program.

Deleted: document that sets out a regulatory process which deviates from the standard Section 106 process and which addresses circumstances unique to a particular proposed action.

Cultural Resources Page C.2-106

The Energy Commission and BLM have determined that significant cultural resources would be affected and that mitigation measure CUL-1 will address impacts to these sites. Although the Energy Commission has been able to complete evaluations of the historic built Environment resources, the formal evaluations of some ethnographic resources and all Archaeological resources in the project area of analysis will occur subsequent to BLM and Energy Commission decisions on the proposed action pursuant to terms of a PA. This subsection provides basic

Deleted: The time required for formal evaluations of historical significance for the complete cultural resources inventory exceeds the one-year licensing process.

- Deleted: ¶
- Deleted: ¶
- Deleted: ¶
- Deleted: ¶
- Deleted: rogrammatic Agreement

descriptions of the known ethnographic resources and the 25% inventory sample of archaeological resources, preliminary identifications of the archaeological landscapes and districts to which the archaeological resources may contribute, preliminary identifications of the archaeological site types that may be useful in evaluating the historical significance of whole groups of archaeological sites, and basic descriptions of the individual archaeological sites that do not appear to be elements of any archaeological landscape or district or do not conform to any identified site type. Each archaeological resource discussion will conclude, where appropriate, with a preliminary statement on the potential historical significance of each potential landscape, district, type, or particular resource. Discussions of probable effects to the full range of significant cultural resources will be made in the "Assessment of Impacts and Discussion of Mitigation" subsection below. As noted above, staff is participating in the development of a PA. One of the purposes of the PA is to identify the analytical processes that will be used to determine the significance of cultural resources and ensure appropriate mitigation for any impacts to those resources.

Deleted: ¶

Deleted: ¶

Deleted: ¶

Deleted: rogrammatic Agreement

Deleted: Programmatic Agreement (

Deleted:)

Deleted: ¶

Cultural Resources Page C.2-110 and C.2-111

Yuha Basin Discontiguous District. The Yuha Basin Discontiguous District is a prehistoric archaeological district listed in the NRHP on May 24, 1982. The four discontiguous portions of the district are adjacent to and south of the project area. The district nomination form ascribes the primary contributing elements of the district, surface scatters of chipped stone artifacts set into well-developed desert pavements, to the San Dieguito archaeological culture, a Paleoindian period variant. The associations of particular chipped stone artifact scatters with the San Dieguito culture were apparently made on the basis of the incorporation of a scatter into a well-developed desert pavement and a marked degree of artifact patination. Staff does not believe that these indices are a reliable basis to establish the association of archaeological deposits with the San Dieguito culture particularly or the Paleoindian period in general. Staff therefore does not believe that it would be meaningful to ascribe any of the chipped stone deposits in the project area to this district.

Deleted: Staff does not recognize the district as being in the project area.

Cultural Resources Page C.2-132

The Juan Bautista de Anza National Historic Trail is a cultural resource of national significance for its association with important events in our history and its associations with important persons in our early history, as well as for its information potential. Staff believes that the associative values of the resource require Federal and State agencies to more broadly consider the degree of integrity the resource must have in order to convey its significance. This means that, in addition to considering how the proposed action would affect the physical integrity of the spatial relationships among any material remains of the use of the trail, the agencies need to consider whether and how the action would visually degrade the integrity of the setting, feeling, and association of the resource, formal aspects of integrity under both the NRHP and CRHR programs. The National Park Service (NPS), the administrators of the Anza Trail, share this perspective. In a recent letter (NPS 2009a), NPS expresses the belief that the installation of project SunCatchers™ and ancillary facilities would significantly alter the visual landscape around the project area, particularly the views from the Anza Trail corridor and from the nearby accompanying recreational trail. NPS concludes that the proposed action therefore has the potential to degrade the integrity of the historic character of the trail and its related resources in the vicinity of the proposed action. As a consequence, the proposed action has the potential to diminish the ability of the public to experience and understand the historic expedition and the cultural landscape of that period.

The proposed PA could provide for a number of measures to verify the presence of any material remains of the trail, and to address potential degradation to any such remains found and to the visual integrity of the resource. As the proposed action may affect presently unfound or unrecognized material remnants of the use of the trail corridor, the PA could propose measures such as further close-quarter pedestrian survey to ensure that no material remains of the use of the trail are in the project area. The PA could also provide for the analysis of the project area isolate data to see whether any potential Spanish Colonial era materials have been found. While there would not appear to be any way to completely negate the potential loss of integrity to the historic viewshed of the trail, the PA could propose a number of different off-site measures that would resolve adverse effects under Section 106 and reduce impacts under CEQA and NEPA. However, there would still be a significant impact to the Anza Trail corridor. The consulting parties to the PA would derive the off-site measures in consultation with one another and refer to the “Juan Bautista de Anza National Historic Trail Comprehensive Management and Use Plan” for guidance.

Deleted: mitigate that loss to a less than significant level

Deleted: ¶

Deleted: ¶

Cultural Resources Page C.2-132 and C.2-133

Archaeological resources that are found to be significant on the basis of values other than or in addition to their information value will be subject to treatment measures that more appropriately reflect the character of those other values. One resource type in the project area of analysis that falls into this category is Native American cremations (see “Southwest Lake Cahuilla Shoreline Archaeological District” subsection, above). The cremations are likely to be found eligible for the NRHP both their information and associative values. Additionally, discovery and treatment of Native American remains is subject to compliance with the requirements of the Native American Graves Protection and Repatriation Act (NAGPRA). Although only one cremation is presently known to occur in the project area and would potentially be subject to direct physical disturbance, the balance of the known cremations just to the east of the present project area boundary would be subject to the direct visual intrusion of project SunCatchersTM. The visual intrusion of the project on the actual cremations and on the lands among them, which the Quechan appear to conceive of together as the cultural resource type, would critically degrade the ability of that resource type to convey its significance. This visual intrusion may, therefore, be a significant effect that requires resolution.

Deleted: Stakeholders in¶ the PA process will discuss a requirement that the known cremation zone be resurveyed to more firmly establish a zone boundary, to reach stakeholder consensus on the width of a visual buffer for the zone, and to set aside the area that encompasses the zone and the buffer as a no-build zone, perhaps as a part of a formal BLM special¶ designation area that would continue to the north and south of the project area along¶ the lateral contact between the Fan Aprons and Beach Zone landforms. The actual¶ resolution of effects to resources in this category will be determined in consultation

Deleted: The applicant shall be bound to abide, in total, to the terms of the¶ programmatic agreement that the BLM is to execute under 36 CFR¶ § 800.14(b)(3) for the proposed action. If for any reason, any party to the¶ programmatic agreement were to terminate that document and it were to¶ have no further force or effect for the purpose of compliance with Section 106¶ of the National Historic Preservation Act, the applicant would continue to be¶ bound to the terms of that original agreement for the purpose of compliance¶ with CEQA until such time as a successor agreement had been negotiated¶ and executed with the participation and approval of Energy Commission staff.

Deleted: programmatic agreement

Cultural Resources Page C.2-145

C.3.12 PROPOSED CONDITION OF CERTIFICATION

CUL-1

BLM will consult with SHPO, ACHP, and invited and concurring parties to execute a PA under 36 CFR 800.14(b)(3) prior to the ROD. The PA will specify that the applicant will prepare a Historic Properties Treatment Plan (HPTP) subject to BLM and CEC review and approval. Minimally, the HPTP will include (1) additional cultural resources inventory and evaluation procedures, (2) procedure to avoid or reduce impacts to significant archaeological, historical, and ethnographic sites, (3) measures to treat sites where impacts cannot be avoided, and (4) an unanticipated discoveries plan. If, at its option, BLM proceeds with another approach to Section 106 requirements, the HPTP will remain a required mitigation measure.

Verification: Under the terms of the PA, the applicant shall submit all documentation required by the agreement to the Compliance Project Manager (CPM) and BLM for review and approval.

C.3.13 CONCLUSIONS AND RECOMMENDATIONS

This cultural resources analysis concludes, on the basis of a 25% sample of the cultural resources inventory of the project area of analysis, that the SES Solar Two project would have significant effects on a presently unknown subset of approximately 328 known prehistoric and historical surface archaeological resources and may have significant effects on an unknown number of buried archaeological deposits, many of which may be determined historically significant under the provisions of a proposed programmatic agreement currently under development as part of the BLM's Section 106 consultation process. The adoption and implementation of Condition of Certification **CUL-1** would reduce the potential impacts of the proposed action on these resources, ~~but not to a level less than significant under CEQA and NEPA. Resolution of adverse effects~~ under Section 106 of the NHPA, ~~would be addressed under the PA.~~

- Deleted: to
- Deleted: and would resolve effects
- Deleted: and would further ensure that the proposed action would be in conformity with all
- Deleted: applicable LORS.

Please revise the Executive Summary Table 4 as denoted below:

Executive Summary Table 4 Summary of Potential Short-Term, Long-Term, and Cumulative Adverse Im

Environmental Parameter	Complies with Applicable LORS	Short and Long Term Adverse Impacts	Cumulative Adverse Impacts	Mitigation and Conditions of Certification	CEQ Sign After
Air Quality	Yes	No significant short term or long term adverse impacts with mitigation/ Conditions of Certification incorporated	No cumulative adverse impacts	AQ-1 through AQ-31 and AQ-SC1 through AQ-SC7	Less signif
Biological Resources	Yes	No significant short term or long term adverse impacts with mitigation/ Conditions of Certification incorporated	No cumulative adverse impacts	BIO-1 through -17	Unkn
Cultural Resources	Yes	To Be Provided	No e Cumulative adverse impacts	CUL-1	Less Signif
Facility Design	Yes	No significant short term or long term adverse impacts with mitigation/ Conditions of Certification	Not applicable	General Conditions	Less signif

The March 2009 responses of the applicant to the initial round of cultural resources data requests (SES 2009h), while offering useful information on the geomorphology of the project area of analysis as a whole (see responses to Data Requests 111 and 112, SES 2009h), did not adequately identify and articulate the physical context of each surface archaeological site, or describe and interpret the contents of and the spatial patterns that structure the material culture deposits that make up each site, notwithstanding additional fieldwork that the applicant had done. As a consequence, the information on the surface archaeological sites remained insufficient to support defensible assessments of the potential effects that the implementation of the proposed action may have on historically significant sites.

The

BLM's third-party consultant found that the documentation by the applicant for approximately 43% of the archaeological sites in the project area of analysis was probably inadequate and would require additional fieldwork to correct. The consultant also concluded that the applicant may not have found approximately 8% of the archaeological sites in the project area of analysis and that approximately 5% of the archaeological sites that the applicant has found may not actually be archaeological sites. The consultant concluded that the extant documentation for the archaeological sites in the project area of analysis was inadequate for assessing either the historical significance of the resources or the effects that the proposed action would have on them (LSA 2009, p. 27).

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

GEOLOGY AND PALEONTOLOGY

Geology, Soils, and Paleontological and Mineral Resources Page C.4-10

The text in question is quoted below:

“The Yuha Wells fault is a zone of reticulated strands between the Laguna Salada fault southeast of the site and the Elsinore fault northwest of the site. The fault passes through the western portions of the site. Age, magnitude, and recurrence intervals of movement along the Yuha Wells fault are not well constrained but there is evidence of Quaternary movement and possible left-lateral offset of Holocene stream channels within the fault zone.” (Paragraph 2)

“Since there are no known faults of any age through the site, the potential for actual seismic ground surface rupture is negligible.” (Paragraph 5).

Comment:

We generally agree with the assessment of the Yuha Wells fault Paragraph 2, however, Paragraph 5 states there are “no known faults of any age through the site” which appears to contradict text in Paragraph 2 that says there is a fault on the site.

The Applicant included a mitigation measure (GEO-1) to conduct additional fault and geologic hazard studies as part of final design for the Project. The studies would include excavating fault trenches at habitable structures to verify the absence of active faults and across identified strands of the Yuha Wells fault to try and access the fault activity of the faults mapped on the site. The Applicant believes it is prudent to perform fault hazard studies as part of the final design for the Project and will do so. Once the studies have been performed the Applicant will submit them to the CEC and BLM and requests that results of the studies be included into the SSA/FEIS.

Geology and Paleontology Page C.4-10 para 4.

The description of shaking hazards in the SA-DEIS includes estimates of ground motions (0.74g for 2% probability of exceedence in 50 years)

Comment:

The Descriptions provided are higher than those provided by the Probabilistic Seismic Hazards Analysis performed by URS (0.55g for the 2 percent probability of exceedence in 50 years). The seismic design for the project should be based on the site specific analysis performed.

Geology and Paleontology Page C.4-25, paragraph 4 and 8.

Condition PAL-2 references the phasing of each power plant for the ISEGS Project.

Comment:

Please remove reference to ISEGS and replace with Solar Two. Additionally, while the Project will be built in two phases, each phase is only a portion of the power plant as a whole and should not be referred to individual power plants.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Geology and Paleontology Page C.4-27

Condition PAL-4, as written, does not have verification.

Comment:

The Applicant requests that the following language, currently inserted into condition PAL-4, be used as the verification:

- (1) At least 30 days prior to ground disturbance, the project owner shall submit the proposed WEAP, including the brochure, with the set of reporting procedures for workers to follow.
- (2) At least 30 days prior to ground disturbance, the project owner shall submit the script and final video to BLM's Authorized Officer and the CPM for approval if the project owner is planning to use a video for interim training.
- (3) If the owner requests an alternate paleontological trainer, the resume and qualifications of the trainer shall be submitted to BLM's Authorized Officer and the CPM for review and approval prior to installation of an alternate trainer. Alternate trainers shall not conduct training prior to BLM's Authorized Officer and CPM authorization.
- (4) In the monthly compliance report (MCR, the project owner shall provide copies of the WEAP certification of completion forms with the names of those trained and the trainer or type of training (in-person or video) offered that month. The MCR shall also include a running total of all persons who have completed the training to date.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

HAZARDOUS MATERIALS MANAGEMENT

HAZARDOUS MATERIALS MANAGEMENT Page C.5-9

Staff states "Containerized hazardous materials including sulfuric acid, and cleaning chemicals would be transported by the facility via truck. While many types of hazardous materials would be transported to the site, previous modeling of spill involving much larger quantities of more toxic materials, (aqueous ammonia and 93% sulfuric acid) – two hazardous materials that would be used, stored, and transported at the proposed power plant – has demonstrated that minimal airborne concentrations would occur at short distances from the spill."

Comment:

Sulfuric acid and aqueous ammonia will not be transported to or used at the facility. The applicant requests that Staff rewrite the sentence to remove the transport and use of sulfuric acid and aqueous ammonia.

HAZARDOUS MATERIALS MANAGEMENT Page C.5-20

Staff states "Site-specific Construction Site Security Plan for the construction phase shall be prepared and made available to BLM's authorized officer and the CPM for review and approval."

Comment:

The Applicant would like to verify that construction may commence before establishing a perimeter fence for security. Applicant would like to revise the condition to state that construction may begin before establishing a perimeter for security. Site will be secure due to presence of construction activity.

HAZARDOUS MATERIALS MANAGEMENT Page C.5-21

Condition HAZ-5 requires, "A statement (refer to sample, attachment "A") signed by the project owner certifying that background investigations have been conducted on all project personnel. Background investigations shall be restricted to ascertain the accuracy of employee identity and employment history, and shall be conducted in accordance with state and federal law regarding security and privacy"

Comment:

Applicant believes that this requirement may be unduly onerous, especially during peak construction periods where Project personnel could number as much as over 700 people, and requests that background investigations shall be conducted on any Project personnel who comes into contact with hydrogen or hazardous materials and planned operations personnel. This will be adequate to ensure that the necessary safety measures are in place.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

PUBLIC HEALTH AND SAFETY

General Comment:

The discussion and conclusions seem appropriate for the Solar Two Project, with one exception described below.

CEC Staff conducted the HRA modeling with general grid and worker receptors within the Solar Two site. As the public does not have access to the Solar Two site, public health impacts should not be predicted on-site.

The OEHHA Air Toxics Hot Spot Program Risk Assessment Guidelines provides guidance on receptor siting and it states "Note, however, some situations may require that on-site receptor (worker or residential) locations be evaluated. Some examples where the health impacts of on-site receptors may be appropriate could be military base housing, prisons, universities, or locations where the public may have regular access for the appropriate exposure period (e.g., a lunch time café or museum for acute exposures)." None of these situations apply at the Solar Two project; therefore receptors should not be included on-site. The Applicant requests that staff consider the appropriateness of conducting the HRA modeling as they did in the SA/DEIS.

PUBLIC HEALTH AND SAFETY Page C.6-12

In the discussion of the operational sources, it states "electric or hybrid vehicles instead of diesel or gasoline vehicles for mirror washing and other maintenance purposing".

Comment:

The Applicant is proposing to use gasoline vehicles for mirror washing and other maintenance purposes and hybrid vehicles for security.

PUBLIC HEALTH AND SAFETY Page C.6-13

Staff conducted the HRA modeling to determine the on-site point of maximum impact to the on-site worker.

Comment:

As the public does not have access to the Solar Two site, public health impacts should not be predicted on-site. The health of the workers on-site is protected by worker safety measures outlined in the worker safety section and by the standards set forward under OSHA and calOHSA. We strongly disagree with the use of on-site receptors to determine public health exposure and would like to see the HRA revised to remove these receptors.

PUBLIC HEALTH AND SAFETY Page C.6-13

Staff conducted the HRA modeling to determine the on-site point of maximum impact to the on-site worker.

Comment:

The annual emission rate from the diesel generator used in the staff's assessment was 0.14 lb/year, although in the responses to the data requests the annual emission rate was determined to be 0.58 lb/year. This increased emission rate would cause the

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

predicted health impacts to increase, although these impacts would remain less than significant.

PUBLIC HEALTH AND SAFETY Page C.6-14

PUBLIC HEALTH Table 3 includes impacts predicted at on-site receptors for the PMI and MEIW.

Comment:

Please remove the on-site receptors and revise the impact analysis to predict health risks to the public, not Solar Two employees.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

**HYDROLOGY, WATER USE, AND WATER QUALITY
(Soil and Water Resources)**

General Comment:

The Staff Assessment/Draft Environmental Impact Statement (SA/DEIS) states that the hydrology modeling is insufficient to make decisions about whether sedimentation and stream morphology impacts would be less than significant. Need to ensure that the two latest reports by RMT and Dr. Chang are referenced and that the modeling approaches and results in those documents are identified in the SA/DEIS. The latest study by Dr. Howard Chang is not included in the list of references.

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-12**

The SA/DEIS contains language regarding the planned development of the Project site. Please see corrections below.

Comment:

Under Project Features in the SA/DEIS, it is stated a 12-foot-wide unpaved access road would run along the centerline of each row, with a 15-foot unpaved maintenance road extending 60 feet to each side of the maintenance road at each SunCatcher pair. Instead, this section should read that the unpaved access road along the centerline of each row would be 10 feet wide; and the reference to unpaved maintenance roads extending to each side of the maintenance road at each SunCatcher pair should be deleted, as this is no longer being planned. The SA/DEIS also states that a row 1000 feet long would be serviced by approximately 28,200 square feet of unpaved roadway. Instead of 28,200 square feet, this should read "10,000" square feet, because it is 10' wide and 1000' long.

In the next paragraph, the SA/DEIS also states that the SunCatchers would typically be mounted on a foundation consisting of a metal fin-pipe. Instead, the word "fin" should be removed.

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-13**

The SA/DEIS contains language regarding the planned development of the Project site. Please see corrections below.

Comment:

Continuing in the section of Project Features in the SA/DEIS, it is stated that the Arizona Crossings would be at-grade and protected from erosion upstream and downstream by at-grade riprap blankets. Instead, the section should read the Arizona Crossings would be at-grade and protected from erosion downstream by at-grade riprap blankets and concrete cut-off walls. The SA/DEIS also states that low-flow culverts would be 8 to 24-inch diameter circular pipes. This is incorrect, because the low-flow culverts would be concrete arched pipes.

In the next paragraph, the SA/DEIS states that maintenance after flood events would consist of sediment removal from roadway surfaces and removal of sediment from

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

around stem pipe risers upstream of low-flow culverts. This is incorrect, and should instead read that maintenance after flood events would consist of sediment removal from roadway surfaces and removal of sediment from culverts. Additionally, the SA/DEIS states that sediment (desilting) basins are proposed upstream of 100 low flow crossings and at other areas within the project and at project boundaries for collection of sediment. This reference should be removed. Continuing, the SA/DEIS states that sediment basins are intended as best management practice for water quality and to minimize roadway maintenance (sediment clearing) after minor runoff events. This reference should also be removed. The SA/DEIS goes on to say that sediment periodically removed from these basins would be distributed on site at undetermined locations as deemed necessary by the project owner. This reference should be removed. Further, the SA/DEIS states that basin sizes would range from 200 cubic yards to 600 cubic yards, with several larger basins to be sized at the time of final design. This reference should be removed. Finally, the SA/DEIS states that sizing is intended to collect estimated annual sediment production for two years using a regional procedure developed for the Mojave Desert (USGS, 2006). This reference should also be removed.

Further down the page, the SA/DEIS states that access would be provided by approximately 27 miles of paved arterial roads. The reference to paved arterial roads should be changed to read treated arterial roads, as they will not be paved. The SA/DEIS goes on to say that arterial roads would be 24 feet in width, unpaved perimeter roads would be 12 feet in width. This is incorrect, and should read 10 feet in width rather than 12 feet.

HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-14

The SA/DEIS contains language regarding the planned development of the Project site. Please see corrections below.

Comment:

Table 2 in the SA/DEIS requires correction to reflect the design road widths. In the Perimeter row under the Road Width, in Feet column, the SA/DEIS states that it is 12. Instead, it should read 10. In the SunCatcher Access row under the Road Width, in Feet column, the SA/DEIS states that it is 12. Instead, it should read 10. In the Perimeter row under the Road Area, in Acres column, the SA/DEIS states that it is 3.3. Instead, it should be changed to read 2.8. In the SunCatcher Access row under the Road Area, in Acres column, the SA/DEIS states that it is 37.5. Instead, this should be changed to read 31.2. In the Total Unpaved Roads row under the Road Area, in Acres column, the SA/DEIS states that it is 147.3. Instead, this should read 34.0. In the Total row under the Road Area, in Acres column, the SA/DEIS states that it is 164.4. Instead, this should be revised to read 51.1. The SA/DEIS also contains the SunCatcher Maintenance row. However, this has been eliminated, so this row should be deleted as well.

HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-15

The SA/DEIS contains language regarding the planned development of the Project site. Please see corrections below.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Comment:

In the SA/DEIS under the heading Water Supply and Use, it states that water for construction and operation of the SES Solar Two would be supplied by the SWWTP in Seeley, California, approximately 13 miles east of the project site. Instead, it should read that it is approximately 12 miles east of the project site. Further, the SA/DEIS states that the SWWTP currently processes approximately 150,000 gallons per day (gpd) of municipal wastewater, with capacity for 200,000 gpd. Instead, the capacity for the Seeley plant is 250,000 gpd.

The SA/DEIS states in the next paragraph that SES Solar Two has agreed to finance upgrades to the existing SWWTP to enable the plant to produce up to 250,000 gpd Meeting California Code of Regulations Title 22 requirements regarding the quality of treated wastewater. It goes on to state that the agreement entitles SES to acquire at least 150,000 gallons and up to 200,000 gallons of recycled water per day for project uses. However, there will be no capacity upgrade, so this reference should be deleted. The Seeley Waste Water Treatment Facility is currently permitted for up to 250,000 gallons per day (gpd) per Regional Water Quality Control Board (RWQCB) Permit Order No. R7-2007-0036, NPDES No. CA0105023 (which superseded RWQCB Order No. R7-2002-0126).

The SA/DEIS later states that the water treatment system would consist of a reverse-osmosis water treatment complex, a hydrogen complex, two 175,000-gallon raw water storage tanks, a 140,000 fire flow tank, two 17,500-gallon demineralized water tanks, a 5,500 gallon potable water tank (potable water would be trucked in), and two 1-acre concrete lined evaporation ponds. Instead, this section should read the water treatment system would consist of a reverse-osmosis water treatment complex, a hydrogen complex, one 228,000-gallon raw water and fire flow tanks, two 17,500-gallon demineralized water tanks, a 5,500-gallon potable water tank (potable water would be trucked in), and two 1-acre concrete lined evaporation ponds.

HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-23

The SA/DEIS contains language regarding the planned development of the Project site. Please see corrections below.

Comment:

The SA/DEIS states under the Comments column in the Site boundary fence line row that there would be 12-foot width construction access. This should be changed to 10-foot width. In the unpaved perimeter roadways row under the Comments column, the SA/DEIS states that it will be 12 feet wide. Instead, this should be changed to read 10 feet wide. In the Transmission access road row under the Comments column, the SA/DEIS states that it is 12 feet wide. Instead, this should be changed to read 10 feet wide.

HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-27

The SA/DEIS contains language regarding the planned development of the Project site. Please see corrections below.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Comment:

The SA/DEIS states that the sediment basins would be located in the bed of stream channels and are expected to prevent excess sediment from normal site flows from being transported downstream to the detriment of downstream areas such as Dunaway Road and adjacent property. However, this paragraph should be removed entirely because BLM has requested that the basins be eliminated, as found in Dr. Chang's report.

HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-27, C.7-35

Comment:

Information in the SA/DEIS should be clarified based upon the latest hydrology reports related to the sediment basins that would be placed upstream and downstream of the access roads, as well as the road crossings and SunCatcher units, in relation to impacts to sediment transport. In the Dr. Chang hydrology report, sediment transfer on three washes was analyzed. For each wash, the at-grade road crossings and the placement of Suncatchers in the wash did not significantly alter sediment movement through the project area. The sediment basins would not have long-term impacts on sediment delivery within the wash and sediment delivery off the site.

HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-28, C.7-30

Comment:

The SWWTF Mitigated Negative Declaration (MND) was incorporated into the SA/DEIS as a reference, including mitigation measures (HYD-1 and HYD-2) provided in the MND. The MND was not certified and an EIR is currently being prepared. Additionally, an independent review is concurrently being conducted by CEC Staff. If specific mitigation measures need to be carried out for the Solar Two project they should be clearly identified in the Soil and Water conditions of certification.

HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-29

Comment:

Recommend considering the following language under Storm Water:

..."The site construction would require a Stormwater Pollution Prevention Plan which would specify Best Management Practices (BMPs) that would ~~prevent~~ minimize construction pollutants including erosion products from contacting stormwater..."

HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-40

Comment:

Under the Project Water Supply heading, the SA/DEIS states that the project owner would finance an upgrade to the SWWTF to allow it to meet Title 22 regulations and to treat up to 250,000 gpd, with up to 200,000 gpd made available to the SES Solar Two

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

project. There will be no capacity upgrade, and the plant is already able to treat up to 250,000 gpd. Therefore, this reference should be deleted.

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-43**

Comment:

Under Table 7 in the SA/DEIS, there are several revised numbers that will need to be changed. In the Perimeter row under the Road Width, in Feet column, the SA/DEIS states that it is 12. Instead, this should be revised to read 10. Also in the Perimeter row but under the Road Area, in Acres column, the SA/DEIS states that it is 0.5 acres. This should be revised to read 0.4. In the SunCatcher Access row under the Road Width, in Feet column, the SA/DEIS states that it is 12. Instead, this should be revised to read 10. Also in the SunCatcher Access row but under the Road Area, in Acres column, the SA/DEIS states that it is 16.1 acres. This should be revised to read 13.4. In the Total Unpaved Roads row under the Road Area, in Acres column, the SA/DEIS states that it is 62.2 acres. This should be revised to read 13.8. In the Total row under the Road Area, in Acres column, the SA/DEIS states that it is 20.6 acres. Instead, this should be changed to read 20.6. The SA/DEIS also contains a row called SunCatcher Maintenance. This row should be deleted as it has been eliminated.

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-49**

Comment:

Under Table 8 in the SA/DEIS, there are several revised numbers that will need to be changed. In the Perimeter row under the Road Width, in Feet column, the SA/DEIS states that it is 12. Instead, this should be revised to read 10. Also in the Perimeter row but under the Road Area, in Acres column, the SA/DEIS states that it is 0.8 acres. This should be revised to read 0.7. In the SunCatcher Access row under the Road Width, in Feet column, the SA/DEIS states that it is 12. Instead, this should be revised to read 10. Also in the SunCatcher Access row but under the Road Area, in Acres column, the SA/DEIS states that it is 11.2 acres. This should be revised to read 9.3. In the Total Unpaved Roads row under the Road Area, in Acres column, the SA/DEIS states that it is 44.4 acres. This should be revised to read 10.0. In the Total row under the Road Area, in Acres column, the SA/DEIS states that it is 49.3 acres. Instead, this should be changed to read 14.9. The SA/DEIS also contains a row called SunCatcher Maintenance. This row should be deleted as it has been eliminated.

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Section C.7.4.3, C.7-41 and Section C.7.13, pages C.7-64, 65**

Comment:

Conclusion section C.7.13, page C.7-41 indicates that:

"...Where these potential impacts have been identified, staff has proposed mitigation measures to reduce identified impacts to levels that are less than significant"

However, several evaluated items (erosion/sedimentation/stream morphology) under the conclusion (Items 4 and 5 in particular) are listed as potentially significant even after

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

implementation of CEC conditions of certification due to uncertainties in the current analyses. The Applicant believes that with the inclusion of mitigation measures, impacts would be less than significant. The report prepared by Howard Chang support this assertion and the Applicant requests that the report and its findings are included in the SSA/FEIS.

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Section C.7.12, Page C.7.-56**

Comment:

Request to revise submission of the final DESCP from 90 days to 60 days prior to start of construction.

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-59**

Staff states "Prior to the use of recycled wastewater for operation of the SES Solar Two Project, the project owner shall install and maintain metering devices as part of the water supply and distribution system to monitor and record in gallons per day the volume of water supplied to the SES Solar Two Project. The metering devices shall be operational for the life of the project.

Verification: At least 60 days prior to the use of any water source for SES Solar Two Project operation, the project owner shall submit to the AO and CPM evidence that metering devices have been installed and are operational on all water pipelines serving the project."

Comment:

Applicant requests that the verification of installed and operational meters be modified from 60 days prior to use of any water source to the time when the water system would be used.

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-59**

Staff states "Prior to the use of recycled wastewater for operation of the SES Solar Two Project, the project owner shall install and maintain metering devices as part of the water supply and distribution system to monitor and record in gallons per day the volume of water supplied to the SES Solar Two Project. The metering devices shall be operational for the life of the project.

Verification: At least 60 days prior to the use of any water source for SES Solar Two Project operation, the project owner shall submit to the AO and CPM evidence that metering devices have been installed and are operational on all water pipelines serving the project."

Comment:

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Applicant requests that the verification of installed and operational meters be modified from 60 days prior to use of any water source to the time when the water system would be used.

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page C.7-61**

Staff says "Monitor and inspect periodically, before first season and after every storm event."

Comment:

Applicant recommends monitoring after 5 year storm events.

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Section C.7.12, Page C.7.-61**

Comment:

Can the requested drainage plan in Soil and Water 7 be submitted with the DESCP?

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Section C.7.12, Page C.7.-61**

Comment:

Some areas of the site may have been subject to historic flows prior to construction of the I-8 roadway embankment and culverts. Some of these areas may not have experienced significant flows since that time.

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Section C.7.12, Page C.7.-61**

Comment:

Is the intent of the scour analysis to provide scour estimates on a reach by reach basis or for each individual SunCatcher unit?

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Section C.7.12, Page C.7.-61**

Comment:

Not clear on the statement: "an assessment shall be made to determine if foundation widths should be increased to account for debris production"?

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Section C.7.12, Page C.7.-63**

Comment:

Request to revise submission of the Stormwater Damage Monitoring and Response Plan from 90 days to 60 days prior to start of construction.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Section C.7.12, Page C.7-63**

Comment:

Division of water rights is administered through the State Water Resources Control Board (not the Regional board)

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Section C.7.12, Page C.7-63**

Comment:

SES is only requesting 200,000 gpd (not 250,000 gpd). 250,000 gpd is the treatment capacity of SWWTF.

**HYDROLOGY, WATER USE, AND WATER QUALITY (Soil and Water Resources)
Page FIG. 2**

Comment:

In the SA/DEIS, Figure 2 shows two retention basins in green; 1 small and 1 large, in the center of the figure. The large retention basin should be removed from the Figure.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

LAND USE, RECREATION AND WILDERNESS

General Comment:

The Applicant is concerned with Staff's assertion that impacts to recreation will be mitigated to a level less than significant with the adoption of Condition of Certification LAND-1. However, LAND-1 refers to compliance with the Subdivision Map Act and not mitigating impacts to recreation. While the Applicant, as discussed below, does not believe the Project would result in adverse impacts to recreation, a clear understanding of the proposed condition is necessary. The Applicant requests that staff clarify what condition of certification they were proposing.

Additionally, the Applicant is concerned by the lack of analysis dedicated to those properties that would be surrounded by the Project. While access will be granted to those property owners, the Applicant believes a thorough analysis of potential impacts to their property values, use, and enjoyment of their property. The Applicant is preparing and will submit a report into the record and requests that staff include the analysis in the SSA/FEIS.

LAND USE, RECREATION AND WILDERNESS Page C.8-1

"Implementation of the proposed SES Solar Two Project (SES Solar Two or "proposed project") would not result in any adverse impacts to the aforementioned resources and LORS, except for the following: 1) the conversion of approximately 6,500 acres of land to support the proposed project's components and activities would directly disrupt current recreational activities in established federal, state, and local recreation areas and would result in adverse effects on recreational users of these lands; 2) with implementation of staff's proposed Condition of Certification/Mitigation Measure LAND-1, the proposed project would be consistent with the applicable LORS pertaining to the Subdivision Map Act; and 3) the proposed project would not be consistent with Imperial County's S-2 zone as required by the Land Use Ordinance."

Comment:

The proposed project would not directly affect any established federal, state, and local recreation areas. The project site does not contain any developed public recreational areas or facilities on federal lands (there are no BLM-designated campsites or points of interest located on the project site), and therefore no developed recreational areas would be directly affected by development of the proposed project.

Established recreational areas adjacent to the project site, including the Yuha ACEC on the south and the Plaster City Open Area on the north, would not significantly be affected by the proposed project, as described below.

According to the 1985 Yuha Desert Management Plan, the Yuha ACEC was nominated for wildlife and cultural resource values. The management plan states that due to the area's limited scenic quality, most sightseeing within the ACEC and project site is associated with specific points of interest (e.g. Yuha Well, Yuha Shell Beds, Crucifixion Thorn Natural Area). The proposed project will not affect the recreational use of the ACEC for recreational site specific sightseeing values within the ACEC. Six campsites

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

and four points of interest are located within the Yuha ACEC; the proposed project would not disrupt usage of these existing developed recreational areas.¹

The proposed project would not disrupt the highly intensive existing recreational uses within the Plaster City Open Area.

The BLM's CDCA Plan designates BLM lands within the project site as Multiple Use Class L (Limited), which allows for low to moderate intensity recreational activities. Permitted recreational activities that would no longer be allowed on the proposed project site include: backpacking, primitive, unimproved site camping, hiking, horseback riding, rock hounding, nature study and observation, photography and painting, rock climbing, spelunking, hunting, land sailing on dry lakes, and non-competitive vehicle touring and events only on "approved" routes of travel. Therefore, the proposed project would preclude dispersed, undeveloped recreational activities associated with off-highway vehicle travel on designated routes occurring on federal lands. Due to the abundance of recreational opportunities in the immediate area of the project and the regional area the adverse impact of eliminating recreational opportunities from 6,140 acres of public lands within the boundary of the project site would be considered insignificant.

We recommend the existing paragraph on Page C.8-1 be revised as follows:

"Implementation of the proposed SES Solar Two Project (SES Solar Two or "proposed project") would not result in any adverse impacts to the aforementioned resources and LORS, except for the following: the conversion of approximately 6,500 acres of land to support the proposed project's components and activities would directly disrupt current recreational activities that occur on public lands within the project site (primarily OHV use on designated routes), however the project would not affect a variety of recreational opportunities (such as camping, off-road OHV use, sightseeing, etc.) in adjacent established federal, state, and local recreation areas and would not result in adverse effects on recreational users of any adjacent these lands; 2) with implementation of staff's proposed Condition of Certification/Mitigation Measure LAND-1, the proposed project would be consistent with the applicable LORS pertaining to the Subdivision Map Act; and 3) the proposed project would not be consistent with Imperial County's S-2 zone as required by the Land Use Ordinance."

LAND USE, RECREATION AND WILDERNESS Page C.8-1

However, the proposed project would result in two significant and unavoidable impacts associated with the disruption of recreation lands and non-compliance with the Imperial County Land Use Ordinance for portions of the site zoned S-2.

Comment:

As discussed above, the project would not directly or indirectly disrupt activities in established federal, state, or local recreation areas and/or wilderness areas or substantially reduce the scenic, biological, cultural, geologic, or other important factors that contribute to the value of federal, state, local, or private recreational facilities or wilderness areas.

Upon commencement of construction, the public would not have access to the project site. However, the public would continue to have access to the numerous recreational

¹ USDI BLM EI Centro Office. 2006. WECO Route of Travel Map.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

areas in the regional area of the project listed in Land Use Table 1. Hence, construction of the proposed project would result in less-than-significant impacts related to recreational facilities and recreational opportunities.

The project site is not a designated location for specific recreational uses but provides a limited amount of dispersed, undeveloped recreational opportunities. Although the proposed project would preclude existing recreational opportunities from the project site, the impact would be less than significant because the proposed project would comply with the CDCA Plan listing establishment of a solar facility as an allowable use within the project site.

Operation of the project would limit access to the project site for continued recreational use within the project site since the project site would be fenced off and developed for solar use. Public recreationalists would continue to have access to the surrounding area along to the north and south of the project site, to other regional parks and to other recreational areas. Current use of the Yuha ACEC and Plaster City OHV area by the public for recreational activities would continue. Although operation of the proposed project would impact dispersed recreational opportunities by prohibiting public access to the project site, it would not be significant since the community would still have access to the surrounding open space areas listed in Table 1. Therefore, the proposed project would result in less-than significant impacts related to recreational facilities.

LAND USE, RECREATION AND WILDERNESS Page C.8-4

“The SES Solar Two site currently consists of undeveloped desert land and recreation sites. Two private parcels of land, one owned by a recreational vehicle club and one by a private landowner, are surrounded by the proposed project. These parcels are not a part of the project. Access to these parcels of land would be provided via the arterial roadway system within the proposed project site (SES 2008a). The western boundary of the project site is within the Imperial County Ocotillo/Nomirage Planning Area.”

Comment:

No designated recreation sites exist within the SES Solar Two site. The BLM lands within and surrounding the proposed project are used by the public for opportunities such as hunting, off-road vehicle use on approved routes of travel, rock and mineral collecting, and sight seeing (associated with historic, geologic, archaeological and botanical resources). These parcels do not contain any established recreational facilities by the county, state, or BLM.

The NAP private lands surrounded by the project area are designated by Imperial County as S-2 Open Space/Preservation. The primary intent for the S-2 designation is to preserve the cultural, biological, and open space areas that are rich and natural as well as cultural resources. In addition to preservation uses, S-2 lands can be used for accessory structures, directional signs, but not including commercial advertising, Grazing, Gun clubs, harvesting of any wild crop, hotels and motels, residence (one per legal parcel), apiaries, keeping of poultry, or similar small animals, limited pasturing or grazing, public buildings, residence, one per legal parcel, and storage of products used for premises. The proposed project would not conflict with the allowable use of the NAP parcels.

We recommend the existing paragraph on Page C.8-4 be revised as follows:

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

“The SES Solar Two site currently consists of undeveloped desert land designated for low to moderate forms of recreation ~~and recreation sites~~. Two private parcels of land, one owned by a recreational vehicle club and one by a private landowner, are surrounded by the proposed project. These parcels are not a part of the project. Access to these parcels of land would be provided via the arterial roadway system within the proposed project site (SES 2008a). The western boundary of the project site is within the Imperial County Ocotillo/Nomirage Planning Area.”

LAND USE, RECREATION AND WILDERNESS Page C.8-6

“The wilderness areas closest to the proposed project site are the Yuha ACEC which is adjacent to the southern boundary of the project site, the Jacumba Wilderness located approximately 4 miles southeast of the project site, and the Coyote Mountains Wilderness located approximately 7 miles northeast of the project site. The Yuha ACEC contains several unique attractions including the Juan Bautista de Anza National Historic Trail (Anza Trail), which runs through the ACEC, the proposed project area, and north on to San Sebastian Marsh; geoglyphs created by Native Americans; an area of rare crucifixion thorns; oyster shell beds; and the Yuha Well (BLM 2009b). Please refer to the Cultural Resources and Visual Resources sections for detailed discussions regarding the setting and impacts associated with the Anza Trail. The Jacumba Mountains Wilderness is 31,237 acres and is generally bounded by I-8 to the north and the California- Mexico border to the south. This wilderness area is notable for private lands and recreational activities including camping and hunting. The Coyote Mountains Wilderness is 18,622 acres and offers recreational activities, such as hiking, camping, and sightseeing (BLM 2009c, BLM 2010b).”

Comment:

The Yuha ACEC is not a congressionally designated wilderness area, nor is it a wilderness study area with wilderness characteristics; please remove it from this discussion on wilderness areas.

LAND USE, RECREATION AND WILDERNESS Page C.8-7

“Approximately half of the proposed project is within the Yuha Desert Recreation Lands, and the proposed project site has been intensely used for OHV and camping. The CDCA plan designated this area as Limited, meaning that vehicle traffic is limited to designated routes. According to the Current Conditions report submitted by the applicant, there is evidence of human activity throughout the project site due to networks of BLM authorized roads as well as unauthorized trails and roads. Geographic Information System (GIS) data found that 1,038 acres within the project boundary have been disturbed by OHV vehicles (PBS&J 2009). In addition, a private parcel used for recreational activities is surrounded by the proposed project.”

Comment:

Please provide a citation for the land use plan designation of the “Yuha Desert Recreation Lands” mentioned in the paragraph. It is unclear whether this is an official designation or a common name for the regional area in which the project is located (the project is surrounded by several BLM special management areas that are utilized for recreation).

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

The federal lands within the project site are designated as Multiple Use Class L (Limited), which allows for *low to moderate* intensity recreational activities. Permitted recreational activities that are allowed on the project site include: backpacking, primitive, unimproved site camping, hiking, horseback riding, rock hounding, nature study and observation, photography and painting, rock climbing, spelunking, hunting, land sailing on dry lakes, and non-competitive vehicle touring and events only on “approved” routes of travel.

Although GIS data indicates that the project area has been highly disturbed by OHV vehicles, the usage of OHVs is not permitted or authorized outside of designated routes. According to the 2003 WECO Route of Travel Map, BLM is in the process of physically removing closed routes and restoring the areas that were damaged by illegal off route travel. This work includes physically raking out the tracks. Furthermore, a goal outlined in the 1995 Yuha Desert Management Plan is to reverse proliferation of casual ORV use and the resultant resource degradation. A specific action identified was to “direct all “vehicle play” activity away from the Yuha Desert study area (which encompasses the project site and the Yuha ACEC) and toward the Plaster City Open Area because indiscriminate play activity is incompatible with the low to moderate intensity use philosophy outlined in for the project site in the CDCA 1980 plan. Such activity is considered compatible with the allowable uses of the Plaster City Open Area, which is located just north of the project site.²

This and the following paragraph need to clarify the difference between BLM route designations (in which individual routes can be open, limited, or closed) and BLM motorized vehicle use area designations (areas open to cross-country travel, areas limited to roads and trails, and areas closed to motorized vehicle use). Within Limited Use *areas* (such as the project site), travel is only allowed on designated routes; no off-route travel is allowed in limited use areas. *Routes* designated “Open”, such as those in the project site; allow all types of vehicles; however the routes may not be maintained for or passable by many types of vehicles. Limited Use *routes* have restrictions (e.g. Limited Use routes south of I-8 are restricted to street legal vehicles only, seasonal closures, or no camping next to routes).

LAND USE, RECREATION AND WILDERNESS Page C.8-8

Land Use Table 1 Open Space and Recreation Areas

Comment:

Recreational Vehicle Club Entry: Please change the Jurisdiction/Administration entry to say “private lands under the jurisdiction of Imperial County” since private lands are not available for public usage.

Yuha Desert Recreation Lands Entry: Please provide a citation for the designated area “Yuha Desert Recreation Lands” or just change the entry to say “Yuha Desert” if this area has not be specifically designated in a BLM land use plan or amendment. Change the Jurisdiction/Administration” entry to say “Limited – BLM” (remove ACEC – the project site is not located within the Yuha ACEC). Change the “Approximate Distance from the Proposed Project Site entry to say “Project site is within the Yuha Desert”. Allowed uses

² USDI BLM California Desert District. 1985. Yuha Desert Management Plan. Page 36.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

for Multiple Use Class L lands include much more than just OHV and Camping (See above responses).

Add a separate table row for the Yuha ACEC.

LAND USE, RECREATION AND WILDERNESS Page C.8-15

“Approval of the proposed project would directly remove approximately 6,500 acres from potential use for recreational opportunities such as OHV use and camping. As noted in the “Setting and Existing Conditions” subsection, ten (10) “open” recreational routes designated by the WECO are within the project site and construction laydown site, two (2) “open” routes are in the vicinity of the proposed site and construction laydown site, and Land Use Table 1 describes the numerous recreation areas with OHV and camping as permitted uses. In addition, the area adjacent to the southern boundary of the project site is the Yuha ACEC, while the eastern boundary of the project site borders agricultural land. As a result, these existing land uses either limit or prohibit OHV activity. However, the areas north and west of the project site are available for recreational activities, and construction of the proposed project would disrupt a highly active recreational area. This is supported by the applicant’s Current Conditions report, which states that there is evidence of human activity throughout the project site due to networks of BLM authorized roads as well as unauthorized trails and roads, and GIS data that found 1,038 acres within the project boundary have been disturbed by OHV vehicles (PBS&J 2009). In addition, according to the Recreation Element of the CDCA Plan, “...lands managed by the Bureau are especially significant to recreationists (BLM 1980). The conversion of 6,500 acres of land to support the proposed project’s components and activities would directly disrupt current recreational activities in established federal, state, and local recreation areas and would result in adverse effects on recreational users of these lands.”

Comment:

The proposed project would not directly affect any established federal, state, and local recreation areas or facilities. The project site does not contain any developed public recreational areas or facilities on federal lands (there are no BLM-designated campsites or points of interest located on the project site) and no developed state or county recreational areas; therefore, no designated recreational areas would be directly or significantly affected by development of the proposed project.

The BLM’s CDCA Plan designates BLM lands within the project site as Multiple Use Class L (Limited), which allows for low to moderate intensity recreational activities. Permitted recreational activities for Multiple Use Class L lands that would no longer be allowed on the project site include: backpacking, primitive, unimproved site camping, hiking, horseback riding, rock hounding, nature study and observation, photography and painting, rock climbing, spelunking, hunting, land sailing on dry lakes, and non-competitive vehicle touring and events only on “approved” routes of travel. In particular, the project would preclude recreational activities associated with off-highway vehicle travel on designated routes within the project area; however, the amount of routes proposed for closure are a small percentage of the total routes currently open to OHV usage within the EL Centro Field Office (1116 miles).³ Due to the abundance of

³ USDI BLM. 2003. Decision Record for Western Colorado (WECO) OHV Routes of Travel Designation.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

recreational opportunities in the immediate area of the project (provided by the Plaster City Open Area and Yuha ACEC) and the regional area (recreational areas listed on Land Use Table 1 the adverse impact of eliminating recreational opportunities from 6,140 acres of public lands within the boundary of the project site would be considered insignificant.

Non-competitive recreation uses south of the proposed project site (within the Yuha Desert ACEC) including hunting, off-road vehicle use on approved routes of travel, rock and mineral collecting, and sight seeing (associated with historic, geologic, archaeological and botanical resources) would not be affected by the project.

The proposed project doesn't involve components that would create a need for more open space or significantly impact recreational usage at designated recreational areas outside of the project site. The proposed project would not include residential development, and therefore would not result in an indirect demand for open space and recreational facilities that would be triggered by an increased residential population to the community. Construction of the proposed project would involve site preparation activities including demolition, grading and excavation, as well as construction and removal of temporary facilities and construction of permanent facilities. Construction activities would not restrict parking for, or access to recreational facilities adjacent to the proposed site, nor would staging of construction equipment or activities occur within any parkland or recreational facility. Construction crews working on the proposed project would not use the adjacent recreational areas (Yuha Desert ACEC or Plaster City Open Area) in such a manner that any physical deterioration of facilities would occur. As a result, the construction of the proposed project would not impact existing federal, state, and local parks or established recreation areas.

LAND USE, RECREATION AND WILDERNESS Page C.8-15

In regard to potential wilderness impacts, the project would not be constructed on wilderness lands. However, the Yuha ACEC and Jacumba Mountains Wilderness near the project site attract visitors based on their scenic, biological, cultural, and recreational amenities. The proposed project would indirectly impact the recreational and wilderness values of these areas by changing the natural and undisturbed landscape at the proposed project site from open space to an intensive utility. The recreationists of the Yuha ACEC and Jacumba Wilderness may experience diminished quality of the surrounding wilderness mostly from areas where the proposed project would be visible. The Visual Resources section provides analysis of the proposed project's impacts on surrounding lands. Proposed project construction and operation activities would have the potential to degrade the qualities of solitude and unconfined wilderness and recreation in the remote southwestern portion of Imperial County. However, due to the abundance of wilderness and recreation sites throughout the county, the proposed project would impact a small fraction of these lands.

Comment:

The Yuha ACEC is not a designated wilderness area.

According to the 1985 Yuha Desert Management Plan, the Yuha ACEC was nominated for wildlife and cultural resource values. The management plan states that due to the area's *limited scenic quality*, most sightseeing within the ACEC and project site is associated with specific points of interest (e.g. Yuha Well, Yuha Shell Beds, Crucifixion

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Thorn Natural Area). The proposed project will not affect the recreational use of the ACEC for recreational site-specific sightseeing within the ACEC. Six campsites and four points of interest are located within the Yuha ACEC; the proposed project would not disrupt usage of these existing developed recreational areas.⁴ For these reasons impacts to the Yuha ACEC would be less than significant.

Project construction and operation activities are not expected to degrade the qualities of solitude and unconfined wilderness and recreation in any designated wilderness area because the closest point of any wilderness area (Jacumba Mountains Wilderness) is approximately 4 miles from the project site.

LAND USE, RECREATION AND WILDERNESS Page C.8-24

“Description of Applicable LORS: Objective 5.1 Require all major transmission lines to be located in designated federal and IID corridors or other energy facility corridors such as those owned by investor owned utilities and merchant power companies.

Basis for Consistency: The Project would connect to the SDG&E Imperial Valley Substation via an approximate 10.3-mile, double-circuit, 230-kV transmission line. The 230-kV transmission line would parallel the Southwest Powerlink transmission line within the designated ROW.”

Comment:

The Applicant recommends adding that a majority of the proposed project's transmission line features would be located within Utility Corridor “N”, an energy corridor designated by the 1980 CDCA Plan as a basis for consistency.

LAND USE, RECREATION AND WILDERNESS Page C.8-29

“Based on staff’s independent review of applicable LORS documents, the proposed project would not be consistent with applicable Imperial County land use LORS (i.e., the S-2 Zone designation) adopted for the purpose of avoiding or mitigating environmental effects. Thus, impacts would be significant and unavoidable.”

Comment:

The Imperial County Planning Commission has adopted a resolution allowing solar power in the S-2 Zone designation pursuant to a CUP, under a similarity of use. In discussions with County planning officials it has been affirmed that solar thermal development would be consistent with this resolution and a similarity of use could be allowed for the project. Once received, the Applicant will submit written confirmation by the County that the Project would be consistent with Imperial County land use LORS.

⁴ USDI BLM EI Centro Office. 2006. WECO Route of Travel Map.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

NOISE AND VIBRATION

General Comment:

The Applicant has reviewed the testimony of California Energy Commission (CEC) staff member Erin Bright and proposes modification to the proposed Condition of Certification NOISE-4 and NOISE-6 as described below.

NOISE AND VIBRATION Page C.9-21

The SA/DEIS proposed a 25-hour community noise study described in Condition of Certification NOISE-4, which includes a monitoring location at 1510 Painted Gorge Road.

Comment:

The applicant is unsure that a Project-only operation noise level of 45 dBA Leq or less can be accurately or reliably measured there. Because the daytime ambient pre-Project noise level is 49 dBA Leq, as shown in Noise Table 4, and therefore 4 dBA higher than this threshold for noise produced only by Project operation, it may be impossible to quantitatively distinguish Project operation noise from that of other sound generators that comprise the ambient noise environment at the Painted Gorge Road sensitive receiver or other locations.

For this reason, the applicant proposes that two sentences (see underlined text) be added to NOISE-4 as appearing below, which in summary provides an alternative method for evaluating Project-only noise and appears consistent with what the applicant has found in staff assessments of conventional power plant projects (e.g., gas turbine peaker plants):

Within 30 days of the project first achieving a sustained output of 80% or greater of rated capacity, the project owner shall conduct a 25-hour community noise survey, utilizing the same monitoring sites employed in the pre-project ambient noise survey as a minimum. The survey shall also include the octave band pressure levels to ensure that no new pure-tone noise components have been introduced. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints. If the results from the survey indicate that the project noise levels are in excess of 45 dBA Leq at the residence located at 1510 Painted Gorge Road, additional mitigation measures shall be implemented to reduce noise to a level of compliance with this limit. The measurement of power plant noise for the purposes of demonstrating compliance with this Condition of Certification may alternatively be made at a location, acceptable to the CPM, closer to the plant (e.g., 400 feet from the plant boundary) and this measured level then mathematically extrapolated to determine the plant noise contribution at the potentially affected residence. This extrapolation will include the affects of sound propagation with distance, acoustical absorption due to air (e.g., temperature and relative humidity) and ground conditions, and the presence of terrain features per applicable methods as detailed in the International Organization of Standardization (ISO) 9613-2:1996(E) "Acoustics – Attenuation of sound during propagation outdoors – Part 2: general method of calculation."

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

Although the Applicant understands that its Project relates to a type of alternative energy production, rather than conventional, the applicant believes the above "extrapolation" technique involving measurements made closer to the Project is suitable for the same reasons it has been offered for the evaluation of conventional power plant operation noise (i.e., when the aggregate sound from other sources measured at a sensitive receiver may be higher than that of the newly operating power plant).

NOISE AND VIBRATION Page C.9-21

Staff states "Heavy equipment operation and noisy construction work relating to any project features shall be restricted to the times of day delineated below:

- Mondays through Fridays: 7:00 a.m. to 7:00 p.m.
- Saturdays: 9:00 a.m. to 5:00 p.m.
- Sundays and Holidays: No Construction Allowed"

Comment:

Applicant requests that the condition be changed to allow construction for 24 hours, 7 days a week. A variance may be issued from Imperial County to allow construction outside of the outlined times in the SA/DEIS. Typically, this would be handled through a condition of the CUP that would allow for variance beyond the normal construction period with prior approval of the Imperial County planning department. Given the site location, the Applicant believes that a restriction on construction time periods is not necessary to avoid potentially significant impacts.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE

SOCIOECONOMICS AND ENVIRONMENTAL JUSTICE Page C.10-6

The SA/DEIS states, "Therefore, staff in 11 technical areas identified in the Executive Summary has considered environmental justice in their environmental impact analyses."

Comment:

The Applicant requests that the statement above be deleted and replaced with, "According to the 2000 Census, within the greater area of Imperial County, the minority population exceeds 75 percent. Therefore, based upon CEQ guidelines regarding the definition of minority populations, no disproportional numbers of minorities occur in the project area compared to the greater county population as a whole."

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

TRANSPORTATION AND TRAFFIC

General Comment:

The Applicant generally agrees with staff's conclusions and the proposed Conditions of Certification (COCs) TRANS-1 to TRANS-4. Some suggested editorial modifications and clarifications are included in the review presented below.

TRANSPORTATION AND TRAFFIC Page C.11-8 and C.11-9

"All study roadway segments and intersections are expected to operate at LOS C or better conditions with the SES Solar Two – related traffic as shown in Traffic and Transportation Table 4."

Comment:

The proposed to modification is a minor edit to include Table 3 is not reference elsewhere in the discussion. The updated discussion is shown below:

"All study roadway segments and intersections are expected to operate at LOS C or better conditions with the SES Solar Two – related traffic as shown in Traffic and Transportation Tables 4 and 3."

TRANSPORTATION AND TRAFFIC Page C.11-14

Staff's concluded that the proposed project "lacks any concentrated rejection source, so there would not be any corresponding turbulence impacts to low flying aircraft."

Comment:

The Applicant would like Staff to verify that the issue of thermal plume is included in the above breadth and spirit of the aforementioned discussion, and as such, can be concluded as not applicable for the proposed project.

TRANSPORTATION AND TRAFFIC Page C.11-20

Under C.11.11 NOTEWORTHY PUBLIC BENEFITS, staff had concluded that, "the proposed project would result in transportation impacts related to project construction. These impacts are not found to be significant, but they are considered to be adverse, and not desirable conditions."

Comment:

Applicant and its consultant agree with staff's conclusions that the "impacts are not found to be significant", however, the Applicant and its consultant proposes to modify the following discussion in C.11.11 NOTEWORTHY PUBLIC BENEFITS:

From: "would result in transportation impacts"

To: "may result in potential transportation impacts"

From: "These impacts are not found to be significant, but they are considered to be adverse and not desirable conditions."

To: "These potential impacts are not found to be significant, but they may result in less than ideal conditions during some months during the construction period."

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

TRANSPORTATION AND TRAFFIC Page C.11-21

The Verification to Condition of Certification TRANS-3 states, "At least 3 months prior to the start of site mobilization, the project owner shall submit a review of existing roadway pavement conditions to Imperial County for review and comment and the CPM for review and approval. This review will include photographs and the analysis of pavement and sub-surface conditions.

Comment:

Applicant requests that the analysis of sub-surface conditions be deleted. Using photographic and/or video-graphic documentation, the Applicant would be able to ensure complete documentation of existing roadway conditions.

TRANSPORTATION AND TRAFFIC Page C.11-22

Text states, "Before the commercial operation of either of the SES Solar Two power plants"

Comment:

The Applicant requests that the text be revised to only refer to one plant. While the Solar Two Project will be constructed in two phases, each phase is only a portion of a single power plant.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

TRANSMISSION LINE SAFETY AND NUISANCE

The Applicant has no comments regarding Transmission Line Safety and Nuisance at this time.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

VISUAL RESOURCES

General Comment:

The impacts to area visual resources arising from Project development are a direct result of the size of Project features, the contrast of the industrial Project with the surrounding landscape, and the scale of the overall development. The applicant agrees that impacts to visual resources are significant impacts due to these causes. These impacts are unavoidable due to the nature of the project which seeks to generate 750 MW of renewable energy and requires large scale visually dominant equipment to be placed across a vast area of land. These effects should not and cannot be mitigated for by minimal alterations in the placement of SunCatchers without substantially diminishing the benefit of the project. Neither VIS-4 nor VIS-6 would accomplish the goal of reducing impacts related to visual dominance. The project is nearly 10 square miles and will remain visually dominant with the inclusion of VIS-4 and visual dominance could actually be increased by some components of VIS-6.

Additionally, the Applicant is providing attachment VIS-1 inclusive of a letter report and findings for both a Visual Resources Inventory and contrast ratings for each of the KOPS presented in the SA/DEIS section. The Applicant requests that this analysis be incorporated into the SSA/FEIS in order to comply with BLM's visual regulations.

VISUAL RESOURCES Page C.13-19

Comment:

The Staff assessment of visual impacts caused by the Solar Two Project assumes a potential for glint/glare effects to roadway travelers caused by the proximity of SunCatchers to I-8. Staff assumes that the current setback distance of 360 feet is inadequate to address potential glare effects without supporting data, and arbitrarily assigns a setback distance of 500 feet and the use of a 20 foot high slatted fence to adequately diminish glare effects in Conditions VIS-4 and VIS-6. The Staff Assessment claims that "In the absence of data to the contrary, these vertical mirrors can be expected to be sources of distracting nuisance brightness in the early mornings or late afternoons."

The applicant does not agree that there is any evidence that the Project will cause distracting or nuisance levels of brightness to passing motorists. On the contrary, the evidence and data provided in the glint/glare study included in Response to Cure Data Requests Set One, Attachment VIS-2, overwhelmingly supports the conclusion that the current design adequately addresses any potential for glare impacts and that none are likely to occur to I-8 motorists. Response to Cure Data Requests Set One, Attachment VIS-2, is excerpted below.

The SunCatcher is designed to efficiently capture and use the sunlight that is incident upon it. During operation, very little light reflected from the mirrors escapes the system. It is not possible to see the image of the sun reflected in the mirrors while it is generating power. SunCatchers are covered with mirrors that concentrate light on a single point 22 ft from the dish surface. Beyond the focal point, at the PCU, the concentrated light quickly returns to ambient level at approximately 50 ft from the vertex of the parabolic dish. The reflected light at this point is no brighter than the sun light as it strikes the earth.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

In a worst case scenario where the azimuth or elevation drive fails and the dish is unable to move, the dish will still focus at the vertex approximately 100 feet from the mirror. The focused light dissipates from the vertex and within 200 ft. the concentration will return to a normal level. Beyond 200 feet the light will continue to diffuse. The shoulder of I-8 and the Evan Hewes Highway is at least 360 feet from the nearest dish. At this distance, any glint/glare will be dissipated to a fraction of the intensity of the sun.

The intensity of light at the plant boundary and nearest roadways was calculated using first the nominal focal length of the dish to describe the glint during offset tracking and second using a wind stow or slew case where the focal distance has grown to 100 ft. The results of these calculations are provided in the table below:

Distance from Dish (ft)	Irradiance of Reflected Light Assuming Nominal Focal Distance (kW/m ²)	Irradiance of Reflected Light Assuming a Worst case Focal Distance of 100 ft (kW/m ²)
Boundary of Plant (250 ft)	0.009	0.444
Nearest Shoulder of Roadway (360 ft)	0.004	0.147

Note: For comparison, the sun on a bright day typically has an irradiance of 1.000 kW/m².

According to the data provided, it is shown that the potential for glint/glare effects is minimal. However, it is acknowledged that the majority of impacts to visual resources caused by the project are related to the size and scale of the Project and its visual dominance within the viewshed. Staff has determined that this is a significant and unavoidable impact of Project development. Therefore, it is not prudent to increase the source of this impact by introducing more large man-built features to the viewshed to address a potential for glint/glare that is largely conjecture and unsupported by the data.

VISUAL RESOURCES Page C.13-42

Staff states "The project owner shall treat all non-mirror surfaces of all project structures and buildings visible to the public such that a) their colors minimize visual intrusion and contrast by blending with the existing tan and brown color of the surrounding landscape; b) their colors and finishes do not create excessive glare; and c) their colors and finishes are consistent with local policies and ordinances. The transmission line conductors shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive. This measure shall include coloring of security fencing with vinyl or other non-reflective coating; or with slats or similar semi-opaque, non-reflective material, to blend to the greatest feasible extent with the background soil. The project owner shall submit for CPM and BLM Authorized Officer review and approval, a specific Surface Treatment Plan that will satisfy these requirements."

Comment:

While the Applicant is currently investigating the feasibility of painting the backs of the mirror facets a color that would minimize the visual intrusion, there are many surfaces on the SunCatchers that cannot be painted due to the temperatures they would reach in the production of energy. The Applicant requests that this condition be deleted as it may be

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

infeasible to comply. Additionally, the Applicant does not believe that this would be necessary to mitigate any potentially significant visual impacts.

VISUAL RESOURCES Page C.13-44

Re-Alignment of Proposed Transmission Line Interconnection

VIS-3: To reduce the prominence of the proposed new segment of transmission line paralleling Highway I-8, the applicant shall set back the transmission line at least 1/2 mile from Highway I-8 within the project site. This measure applies only to that portion of the proposed transmission line paralleling Highway I-8 within the project site boundaries.

Comment:

Per the Project Map docketed on October 28, 2009, the transmission line interconnection no longer parallels I-8 within the project boundary.

VISUAL RESOURCES Page C.13-45

SETBACK OF SUNCATCHERS FROM HIGHWAY I-8

VIS-4: To reduce the visual dominance and glare effects of the SunCatchers to motorists on Highway I-8, the applicant shall employ a combination of measures as necessary, including set-backs of the nearest SunCatcher units to a distance of 500 feet from the adjoining roadway or as necessary to avoid excessive glare and reduce visual height and dominance of SunCatchers, slatted fencing as described under Condition of Certification VIS-6, and setbacks of SunCatcher units from project fencing.

Comment:

VIS-4 proposes to setback all SunCatcher units to a distance of 500 feet from I-8 to reduce both visual dominance and glare impacts. VIS-4 does not accomplish a significant reduction in the size and scale of the project that would diminish its overall visual dominance in the viewshed by applying minimal increase in the setback. VIS-4 suggests a setback distance that is not based on any verifiable potential of the project to cause glint/glare effects. Furthermore the reasoning as to why a 500 foot setback is the appropriate threshold for diminishing glint/glare effects is arbitrary and unsupported by the assessment. However this arbitrarily assigned and ineffective setback will diminish the overall value and benefit of the project.

The current setback is 360 feet. It is impossible to diminish impacts arising from visual dominance of the project by minimally reducing the Project's footprint from 360 to 500 feet, since the characteristics of the project (i.e. large industrial equipment and scale of development) that cause impacts to visual resources would still be present. This is evident in the Staff assessment which states that impacts of even the 300 Megawatt Alternative would remain significant and unavoidable under CEQA.

The Project will be so nearly as visually dominant to motorists on I-8 with a 500 foot setback, as it will be with the current minimum 360 foot setback shown in current project design that this mitigation measure is rendered ineffective. The project proposes to

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

completely alter the viewshed for 10 square miles, fronting the I-8 for approximately 6.5 miles. An extra 140 feet of setback is not likely to noticeably reduce the visual dominance of a project of this size, involving this type of large scale equipment, to a degree immediately discernable to passing motorists. Motorists traveling on I-8 will generally be focused on the roadway or immediate surroundings. Passenger views to the surrounding landscape are going to be dominated by the Project features for a total distance approaching 20 miles when traveling through this area. When passing the Project there will be little variance in landscape features in the intervening distance between the side of the road and the SunCatchers. The angle of view to the tops of the SunCatchers will only decrease by approximately 1.6 degrees with the additional 140 feet of setback distance. This cannot mitigate the extent of visual change to the existing environment proposed by the Project, nor will it substantially diminish the visual dominance of the project.

The applicant does not agree that the increased setback would result in substantial change in viewers' perceptions of the Project's visual dominance, nor is it likely to change viewers' reactions to the proposed changes. VIS-4 may minimally reduce the apparent height of SunCatchers when viewed directly from the south. It would not affect horizon line views to the west or east. Neither does Staff conclude that VIS-4 would reduce impacts derived from the visual dominance of the project to a less than significant level. However VIS-4 would significantly reduce the number of Suncatchers that could be placed within the project boundary, thereby reducing the benefits of the project significantly.

The applicant does not agree that significant visual impacts are related to any potential for glint/glare. It is the conclusion of the Glint/Glare Study, submitted to the CEC in Response to Cure Data Requests Set One, VIS-2, that the project is not anticipated to cause glint/glare impacts to motorists on the highway due to the design of the Suncatchers which focuses reflective light within the unit and the current setback distance of 360 feet. Regardless of this information, it is the conclusion of CEC staff that in the "absence of photometric data" on the intensity of diffuse light reflection from the Suncatchers that there does exist at least the potential to cause glint/glare impacts to motorists. All conclusions relating to the potential for glare effects are derived from a purported lack of available data and are therefore unsupported conjecture. The glint/glare study provided in response to Cure Data Requests Set One, includes data that shows that any reflected light will be reduced to ambient levels at a "worst case" distance of 200 feet. Shimmer effects of greater intensity are highly unlikely according to the findings of this study based on the parabolic shape of the mirrors which focuses light at a vertex 100 feet from the mirror. The angle of the SunCatchers relative to the line of sight of a motorist traveling along I-8 would change as the motorist moves from east to west or west to east from the edge of the project to the center of the project. A motorist could experience a similar line of sight to Suncatchers at 500 feet as at 360 feet, and the potential for glint/glare impacts remains similarly nil in either case.

Since this condition does not reduce the visual dominance of the project, and does not include a reasonable explanation for the application of the additional 140 foot of buffer for assumed potential glare effects, it is suggested that it be removed.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

VISUAL RESOURCES Page C.13-45

Staff states "To reduce the visual dominance and glare effects of the SunCatchers to motorists on Highway I-8, the applicant shall employ a combination of measures as necessary, including set-backs of the nearest SunCatcher units to a distance of 500 feet from the adjoining roadway or as necessary to avoid excessive glare and reduce visual height and dominance of SunCatchers, slatted fencing as described under Condition of Certification VIS-6, and setbacks of SunCatcher units from project fencing.

Comment:

Applicant requests that the setback of 500 feet be revised to keep the existing setbacks.

VISUAL RESOURCES Page C.13-45

Staff says "The project owner shall coordinate closely with the BLM and NPS and contribute funds to mitigate for visual impacts to recreational users of the Anza Trail. The funds will be used by the agencies to improve the recreational experience for the Anza Trail visitors... The project owner shall provide funds to the two agencies as approved by the CPM within 180 days of the start of construction."

Comment:

Applicant requests that the timeline for providing funds be revised from 180 days to 30 days.

VISUAL RESOURCES Page C.13-46

Staff says "The project owner shall develop a glare mitigation plan... At least 90 days prior to start of construction, the project owner shall present to the AO and CPM a glare mitigation plan describing a proposed set of measures to reduce the most intensive potential glare events to motorists."

Comment:

Applicant requests that the presentation of the glare mitigation plan be revised from 90 days to 30 days.

VISUAL RESOURCES Page C.13-46

Staff says "The project owner shall provide a revised site plan for staging that includes a set-back of at least 1/4 –mile or more from the highway, and a description of measures to identify and address biological and cultural issues potentially connected to the plan. In addition, the project owner shall provide a re-vegetation plan describing how the staging site will be restored following construction... At least 90 days prior to start of construction, the project owner shall present to BLM's Authorized officer and the CPM a revised staging area site plan."

Comment:

Applicant requests that the presentation of the staging area site plan be revised from 90 days to 30 days.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

VISUAL RESOURCES Page C.13-46

Staff states "The project owner shall develop and implement a glare mitigation plan that minimizes visibility of the SunCatcher mirrors to both east and west-bound traffic on Highway I-8 utilizing one or more measures, which may include but is not limited to 20-foot tall slatted fencing, particularly at the eastern and western boundaries near the highway; earth berms, and/or an increase in the setbacks of the SunCatcher units from the roadway; and must include a SunCatcher Mirror Positioning Plan (MPP) describing how the outermost rows of SunCatchers could be positioned in order to minimize the most intensive potential glare incidents on motorists as called for under Condition of Certification TRANS-4. The plan shall include a glare complaint resolution form to be distributed to the CPM, BLM, NPS, and Imperial County as a means to identify glare issues."

Comment:

Applicant contests this requirement.

VISUAL RESOURCES Page C.13-46

Reflective Glare Mitigation

VIS-6: The project owner shall develop and implement a glare mitigation plan that minimizes visibility of the SunCatcher mirrors to both east-and west-bound traffic on Highway I-8 utilizing one or more measures, which may include but is not limited to 20-foot tall slatted fencing, particularly at the eastern and western boundaries near the highway; earth berms, and/or an increase in the setbacks of the SunCatcher units from the roadway; and must include a SunCatcher Mirror Positioning Plan (MPP) describing how the outermost rows of SunCatchers could be positioned in order to avoid or minimize the most intensive potential glare incidents on motorists as called for under Condition of Certification TRANS-4. The plan shall include a glare complaint resolution form to be distributed to the CPM, BLM, NPS, and Imperial County as a means to identify glare issues.

Comment:

The Staff Assessment assumes that significant impacts arising from two different sources - the spatial dominance of the project and glint/glare effects - can be mitigated similarly. In actuality, each of these impacts arises from a much different cause and it should not be assumed that a measure that addresses one effect could address the other. The most apparent conflict between mitigation for visual dominance, and glare effects, is illustrated in VIS-6 which seeks to use slatted fences and berms to mitigate for both visual dominance effects and glare effects.

It is unclear how the addition of large scale features such as a 20 foot fence and earth berms would in any way mitigate for visual dominance. Visual dominance is related to the size and scale of the Project features, the degree of change to the existing setting proposed by the Project, and the contrast between Project features and the surrounding landscape. It is evident that a 20 foot fence and earth berms introduce additional elements to the project that will increase its size and scale, degree of change proposed to the existing setting, and contrast with the surrounding landscape. This will serve to increase the visual dominance of the project, not decrease it.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

It is the applicants' position that the visual dominance of the project cannot be reduced without significantly decreasing the size of the project and thereby diminishing the value and benefit. The inclusion of slatted fencing was discussed with BLM field staff John Johnson and NPS staff Steven Ross, during the assessment of project impacts to the Anza National Historic Trail, and it was agreed that a slatted fence would not diminish the visual dominance of the project and was more likely to contribute to, rather than diminish the overall visual dominance of the project. A fence of this type alone would be cause of as much of a contrast to the existing visual setting as any of the project features. It would have an additive effect with proposed project features, adding to, rather than subtracting from visual change. It is also probable that a fence may cause an increased distraction by causing motorists to strain to see what is beyond the fencing. This would be a potential indirect visual impact of fencing. Finally, the slatted fencing would be a constant maintenance issue and could become an eyesore.

In the matter of glint/glare effects, measures that do address glint/glare, such as the Mirror Positioning Plan and glare complaint resolution forms, do not increase visual size and scale and overall visual dominance in the attempt to reduce an unverifiable glare effect. These measures are focused and may effectively reduce the unverifiable potential for a glint/glare impact without increasing the actual potential cause of increased spatial dominance. Furthermore, fencing is redundant if a Mirror Positioning Plan is included in the conditions. The MPP and glare complaint resolution forms should be adequate to address the perceived potential for glare effects until photometric data can be obtained to make a better decision on the need for additional measures. Meanwhile it is not prudent to include measures that would directly increase effects related to visual dominance such as the fence and berms suggested in VIS-6.

However, the Applicant is preparing a Glint and Glare study using the pilot facility, Maricopa Solar, in Arizona. The Applicant will submit the results as soon as they are available and requests that the findings and analysis be incorporated into the SSA/FEIS.

**SES Solar Two
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5
Attachment VIS-1**

VISUAL RESOURCES

General Comment:

The Visual Resources Section of the SA/DEIS includes some of the BLM Visual Resources Management (VRM) methodology, but does not include a complete VRM analysis. The Applicant believes that the SA/DEIS document would be more complete from a NEPA perspective if it built upon the BLM VRM methodology already present in the report by more clearly establishing the interim VRM Class III for the BLM lands within the Project area and utilizing the Visual Contrast Rating system for determining impacts.

In support of a clear adherence to BLM VRM guidance, URS is providing the following information:

- The complete BLM 8400 series forms from the Visual Resources Inventory (VRI) completed for the Project area (Attachment A) during the AFC analysis and Visual Impact Assessment (VIA) for the San Juan Bautista De Anza National Historic Trail;
- Justification in support of designating interim VRM Class III for the Project area; and,
- A VRM Classification Map which spatially represents the results of the VRI (Attachment B).

Attached BLM 8400 series forms include: Scenic Quality Field Inventories (form 8400-1); Scenic Quality Rating Summaries (8400-5); Sensitivity Level Rating Sheets (8400-6); and Visual Contrast Rating Worksheets (form 8400-4).

Alternatively, the VRI and VRM classes established for the Project area in the Sunrise Powerlink Project analysis could be clearly adopted for the Imperial Valley Solar Project to support the BLM VRM methodology in the SA/DEIS. The SA/DEIS does reference the interim VRM class established for the Sunrise Powerlink Project and adopts VRM Class III for the Project area on Page B.2-13. However, this classification is not mentioned in the analysis, Section C.13. The Applicant believes that VRM Class III is the appropriate VRM class for the Project area and that the classification has been appropriately used as the baseline for completing the Visual Contrast Ratings and VRM analysis of impacts in the AFC. The Visual Resources section of the SA/DEIS should complete this process using BLM VRM methodology in the SA/DEIS analysis. Most of this analysis has been completed as part of the AFC analysis and it can be referenced in the SA/DEIS.

The Project area was divided into Scenic Quality Rating Units (SCRU) and distance zones in the SA/DEIS. The area may also be divided into Sensitivity Level Rating Units (SLRU), according to BLM VRM methodology used during the AFC analysis, in order to clearly establish an interim VRM Class for the Project area and complete the Scenic Contrast Ratings. A Visual Contrast Rating should be completed for each of the key observation points (KOP) established in the SA/DEIS to justify impact significance levels.

**SES Solar Two
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5
Attachment VIS-1**

Visual Contrast Ratings were completed for all of the KOPs done in support of the AFC and are included with this comment.

Previously Completed Visual Resource Inventory

All of the BLM VRM 8400 series forms and delineations were completed as part of the background for the visual resources analysis completed for the AFC and the subsequent Visual Analysis of the Anza Trail. Although these forms were completed as part of the AFC analyses, a Project-specific interim VRM Class was not adopted. During the analysis for the AFC, the existing VRM classes from the Yuha Desert Management Plan were used, per BLM concurrence. The area has not changed significantly between the completion of the Yuha Desert Management Plan and the present. The VRM classes that were indicated in the background analysis for the AFC were the same as the previously established VRM Classes adopted for the Yuha Desert Management Plan and the Sunrise Powerlink Project within the same area. It was not deemed necessary to establish new Project-specific interim VRM classes when existing classes could be used. The Applicant suggests that the Visual Resources section reference all the field evaluation forms and Scenic Contrast Ratings completed in the AFC analysis and complete the Scenic Contrast Rating system for the SA/DEIS.

The results of the VRI completed for the Imperial Valley Solar Project is discussed and tabulated below. Please reference the attached forms (Attachment A) and figure (Attachment B) in support of this discussion. The recommended interim VRM class for the Project site, based on the forms completed during the Imperial Valley Solar VRI, is VRM Class III. The recommended VRM Class III is aligned with the classes assigned in the Yuha Desert Management Plan, which designates the upper Yuha Desert as VRM Class III. The Project site has a scenic quality rating of C, therefore VRM Class rating could be as low as Class IV; however, areas to the north and south are classified as VRM Class III. The landscape of the Project area is similar to the Class III areas but is more disturbed than areas of the Yuha ACEC. VRM Class III objectives were used to evaluate the significance of effects resulting from the Project in the AFC and are recommended for adoption in the SA/DEIS.

The VRM Classification Map (Attachment B) includes distance zones, SQRUs, and SLRUs and visually establishes VRM Classes for the Project Area. Additionally, the KOPs from the two visual impacts analyses completed in support of the Project are shown in Attachment A. The KOPs shown on the map (Attachment B) are numbered 1-10. KOPs 1-7 were included in the AFC analysis and Response to Cure Data Requests, Set 1. KOPs 8, 9, and 10 correspond to KOPs 1, 2, and 3 in the Anza Trail VIA. The KOPs are numbered 1-7, and 1-3 respectively on the original 8400 series forms included in Attachment A.

RECOMMENDED INTERIM VRM CLASSIFICATION

Project-specific, interim VRM classes can be determined in a spatial context by combining overlays for scenic quality, sensitivity levels, and distance zones, or by using a tabular matrix. This analysis was completed for the Sunrise Powerlink project which

SES Solar Two
**Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement**
08-AFC-5
Attachment VIS-1

determined that the Project area was VRM Class III. The Yuha Desert Management Plan also indicates that the area has a VRM Class III assignment. While the interim VRM class for the Project area had been established, the 8400 series forms were completed for the Imperial Valley Solar Project.

URS' visual resource assessment to support this interim classification followed methods described in the BLM's VRM program, and included the following components:

- Implementation of a VRI, including designation of Scenic Quality Rating Units (SQRU), each with several inventory locations.
- Classification of distance zones.
- Identification of Sensitivity Level Rating Units (SLRU) and implementation of Sensitivity Level Analysis.
- Completion of Scenic Quality Level Classification.

The interim VRM classification would be made using an overlay of the aforementioned components. URS conducted a visual resource assessment in the area of the Yuha Desert, Plaster City Open Area, and areas surrounding the proposed Project site, as depicted in Attachment B.

The Project area is comprised of expansive open desert adjacent to Interstate 8 (I-8) near El Centro, located on the eastern edge of the Peninsular Mountains. The Project is located east of the community of Ocotillo Wells and west of Seeley. The areas to the north and south of the Project area were identified to be "recreational" through field visits and consultations with BLM. The Project site is not readily accessible by road, and currently has development from major transmission lines crossing the site. These transmission lines are located in a utility corridor designated by the BLM's West Mojave Resource Management Plan.

URS' visual assessment included more than one VRI.¹ Additional resources included pertinent BLM planning documents and local publications (see References under Section 7) describing the geography, history, culture, and land use of the area. This section provides background of the BLM's VRM process and presents the results of the interim visual assessment of the Project area.

SCENIC QUALITY

Scenic quality is defined as "a measure of the visual appeal of a tract of land"(BLM, 1986). The highest scenic quality ratings are assigned to landscapes that have the most variety and most harmonious composition in relation to the natural landscape. Scenic quality can be used to describe the existing conditions, the standard for management, or the desired future conditions. As discussed above, this analysis is intended to support an interim VRM classification for the Project area.

¹ United States Department of the Interior (USDI) Bureau of Land Management, 1986. Visual Resource Inventory - BLM Manual 8410-1. 17 January. Bureau of Land Management. Washington, DC.

SES Solar Two
**Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement**
08-AFC-5
Attachment VIS-1

The scenic quality assessment in the SA/DEIS followed BLM VRM methodology and included the delineation of SQRUs; however, the scenic quality rating of these units was not referenced in the report. Slightly different SQRUs and inventory locations were identified by the URS Interdisciplinary Team (IDT) during their analysis, with assistance from BLM representatives. Only three rating units were delineated based on physiographic characteristics, similar or unique visual patterns, development, user types and amounts, and variety of features. In order to document the scenery in each SQRU, photographs were taken at each inventory location. The visual quality of landforms/water, vegetation, and structure at each SQRU was then assessed in terms of texture, color, form, and line. Each SQRU was then ranked using seven factors, including: landform, vegetation, water, color, adjacent scenery, scarcity, and cultural modification.

Factors were ranked by evaluating the intrinsic quality and rarity of each feature within the physiographic region and were quantitatively scored and recorded on BLM Form 8400-1. A final score was then calculated for each SQRU using BLM Form 8400-5, and numeric values were assigned to each of the seven factors listed above. Scenic quality ratings are intended to provide a standardized method of developing the intrinsic quality of existing visual resources. Based on these results, each SQRU was assigned a scenic quality rating of A, B, or C, as defined below.

- Class A: Areas have outstanding diversity or interest; characteristic features of landform, water, and vegetation are distinctive or unique in relation to the surrounding region. These areas contain considerable variety in form, line, color, and texture.
- Class B: Areas have above-average diversity or interest, providing some variety in form, line, color, and texture. The natural features are not considered rare in the surrounding region but provide adequate visual diversity to be considered valuable.
- Class C: Areas have minimal diversity or interest; representative natural features have limited variation in form, line, color, or texture in the context of the surrounding region. Discordant cultural modifications (e.g., substations, transmission lines, and other cultural modifications) can be highly noticeable, which can reduce the inherent value of the natural setting.

The Project area was classified by URS into three scenic quality rating units based primarily on changes in landform, vegetation, and level of development. These SQRU's may be adapted or compared with those presented in the SA/DEIS. Several commonalities exist between the SQRUs established in the SA/DEIS and those presented here, most notably the presence of washes, basins, and elements of desert vegetation. The roadways into the Project site are primarily dirt roads with varying degrees of maintenance. Two highways are located adjacent to the Project site: Evan Hewes Highway (S-80) to the north and I-8 to the south. Vegetation throughout the Project area is dominated by Mojave creosote bush scrub and is relatively uniform across the area.

**SES Solar Two
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5
Attachment VIS-1**

SQRUs identified by URS on the 8400-1 Forms are as follows (see Attachment B):

SQRU 1: Areas north and east of the Project Site with views to the project site. Critical views are foreground and middle-ground from this SQRU.

SQRU 2: The Project site and areas just adjacent to the I-8 to the south with similar characteristics are part of this SQRU. All views are foreground.

SQRU 3: Areas to the south of the Project site with more topographical relief and cultural sites increasing value as a visual resource. This SQRU includes the Yuha Basin area and Yuha ACEC. This SQRU includes foreground, middle-ground and some background views.

Several photos were taken at each SQRU and include views in all directions. These photos are available for reference in the Project AFC and the Anza Trail VIA. The results of the original 8400-1 Forms are tabulated as follows to be presented here.

SCENIC QUALITY RATINGS

The scenic quality of BLM lands within SQRU 1 is ranked as a C (average score = 9.5). The components of this ranking are discussed below and summarized in Table 1.

**Table 1
Scenic Quality Rating at SQRU 1**

Surveyor	Landform	Vegetation	Water	Color	Adjacent Scenery	Scarcity	Cultural Modification	Total Score	Scenic Quality Rating
SH	1	1	0	2	3	3	0	10	C
AG	1	1	0	1	2	3	0	9	C
Average Score								9.5	C

The scenic quality of BLM lands within SQRU 002 is ranked as a C (score = 8.5). The components of this ranking are provided below and in Table 2.

**SES Solar Two
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5
Attachment VIS-1**

**Table 2
Scenic Quality Rating at SQRU 2**

Surveyor	Landform	Vegetation	Water	Color	Adjacent Scenery	Scarcity	Cultural Modification	Total Score	Scenic Quality Rating
SH	1	1	0	2	2	2	-1	7.0	C
AG	1	1	0	2	2	3	-1	8.0	C
Average Score								8.5	C

The scenic quality of BLM lands within SQRU 3 is ranked as a B (score = 12.5). The components of this ranking are provided below and in Table 3.

**Table 3
Scenic Quality Rating at SQRU 004**

Surveyor	Landform	Vegetation	Water	Color	Adjacent Scenery	Scarcity	Cultural Modification	Total Score	Scenic Quality Rating
SH	2	1	0	2	3	3	1	12.0	B
AG	3	1	0	2	3	3	1	13.0	B
Average Score								12.5	B

DISTANCE ZONES

Distance zones are established based on the extent of the viewshed seen from travel routes or observation points. Distance zones include: foreground/midground, background, and seldom seen areas. The foreground/midground zone includes areas that can be seen within a distance of three to five miles. The background zone includes areas beyond the foreground/midground zone, but less than 15 miles away.

Distance zones for the Project area were determined by evaluating viewsheds from nearby travel routes and vistas, including but not limited to:

- San Juan Bautista De Anza National Historic Trail, traveling northbound and southbound.
- I-8, traveling eastbound and westbound.

**SES Solar Two
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5
Attachment VIS-1**

- S-80, traveling eastbound and westbound.
- Dunaway Road, traveling northbound and southbound

The viewshed of these locations was mapped using Geographic Information System (GIS) and field verified during one or more site visits.

SQRU 1

The distance zone for SQRU 1 is recorded as foreground and middleground. Foreground views to the unit from surrounding travel routes and vistas are, in most instances, not obstructed by any topographic features surrounding the unit. The generally flat topography offers unobstructed views from the Plaster City Open Area stretching north to the Superstition Mountains area. Areas further north would have background views however foreground and middleground views are considered more likely and more vivid. Thus, it was determined to be more appropriate to establish a foreground/middleground zone for the unit, as the large majority of viewers would experience foreground views.

SQRU 2

The distance zone for SQRU 2 is recorded as foreground. Foreground views to the unit from surrounding travel routes I-8 and S-80, and viewpoints are unobstructed. Only small washes lay between some areas of the unit and viewing areas (highways, roadways, and residences).

SQRU 3

A foreground/middleground distance zone is established for SQRU 3. The unit is visible in the foreground/middleground to the Project site and sphere of influence. Because the unit has one of the highest topographic points in the area, the project is clearly visible to SQRU 3. As the distance from the Project increases, the amount of obstruction also increases and views are reduced. Due to the lower elevation of the Yuha Basin, the Project site is not viewable from this area.

SENSITIVITY LEVEL RATINGS

Sensitivity level is a measure of public sensitivity toward the scenic value of an area. Sensitivity level within the Project area was determined following methods described in BLM Manual H-8410-1². Following this methodology, SLRUs are assigned to the Project area. Sensitivity levels are intended to provide a standardized method to evaluate the public's concern towards the scenic value of an area. Within each SLRU, the following factors were evaluated and given a ranking of high to low:

² USDI Bureau of Land Management, 1986. Visual Resource Inventory - BLM Manual 8410-1. 17 January. Section 2 – Scenic Quality Evaluation.

**SES Solar Two
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5
Attachment VIS-1**

- Type of User: Visual sensitivity will vary with the type of users. Recreational sightseers may be highly sensitive to any changes in visual quality, whereas workers who pass through the area on a regular basis may not be as sensitive to change.
- Amount of Use: Areas seen by and used by large numbers of people are potentially more sensitive. Protection of visual values usually becomes more important as the number of viewers increases.
- Public Interest: The visual quality of an area may be of concern to local, State, or National groups. Indicators of this concern are usually expressed in public meetings, letters, newspaper, or magazine articles, newsletters, land-use plans, etc. Public controversy created in response to proposed activities that would change the landscape character should also be considered.
- Adjacent Land Use: The interrelationship with land uses in adjacent lands can affect the visual sensitivity of an area. For example, an area within the viewshed of a residential area may be very sensitive whereas an area surrounded by commercially developed lands may not be visually sensitive.
- Special Management Areas: Management objectives for special areas such as Natural Areas, Wilderness Areas or Wilderness Study Areas, Wild and Scenic Rivers, Scenic Roads or Trails, and ACECs, frequently require special consideration for the protection of visual values. This does not necessarily mean that these areas are scenic, but rather that one of the management objectives may be to preserve the natural landscape setting. The management objectives for these areas may be used as a basis for assigning sensitivity levels.

To evaluate each SLRU as a whole, the rankings of the factors presented above were averaged together to create a sensitivity level of high, medium, low or a combination thereof. The results of this exercise are presented below.

RESULTS

After review of the type of users, amount of use, public interest, adjacent land use, and special management areas, the analysis determined that the established SQRUs matched where the SLRUs would be placed. The sensitivity level within each SLRU varied from low to high. Rationale for each ranking is described below.

SLRU 1

SLRU 1 is located primarily within BLM-administered public land, some of which is designated as the Plaster City Open Area, and contains a portion of the San Juan Bautista De Anza National Historic Trail. The primary user groups in SLRU 1 are there for recreation with uses including off-highway vehicle (OHV) use, hiking and camping. The amount of use is anticipated to be high, and the sensitivity level of the type of user is classified as high due to the type of recreation (OHV use) that is present in SLRU 1.

**SES Solar Two
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5
Attachment VIS-1**

Adjacent uses are labeled low due to the lack of surrounding development or facilities. Also public interest is considered moderate since it appeals specifically to a type of recreational use and has little draw in terms of cultural or scenic appeal.

Based on the rationale presented above, all components of the sensitivity level rating are ranked as medium or high (Table 4).

SLRU 2

The primary user group within SLRU 2 includes limited numbers of OHV recreation visitors. While use counts are not available for this SLRU, it is anticipated that the amount of use would be low. Although the unit is easy to access, travel within this SLRU is limited to designated routes and OHV recreationists are more likely drawn to the adjacent Plaster City Open Area to the north. Public interest is anticipated to be low due to the existing levels of cultural modification and low scenic quality rating. However, adjacent uses, such as hiking and camping, in other units and travelers along S-80 are anticipated to have medium levels of sensitivity as potential development to this unit may affect their uses.

Based on the rationale presented above, the overall sensitivity level in SLRU 2 is ranked as medium (Table 4).

SLRU 3

SLRU 3 is located primarily within the Yuha Desert ACEC, and contains clearly marked portions of the San Juan Bautista De Anza National Historic Trail. The primary user groups in SLRU 3 are there for recreation with uses including OHV use on designated routes, hiking and camping. Although the amount of use is anticipated to be low in comparison to the other SQRUs, the sensitivity level of the type of user is classified as high due to the type of recreation (hiking and camping) that is present in SLRU 3. Adjacent uses are considered low due to the prevalent agriculture in the area and lack of other recreational opportunities or facilities. Public interest is considered moderate due to the cultural sites present in this SLRU, including the Anza Monument and Geoglyphs, and Yuha Well.

Based on the rationale presented above, the majority of components of the sensitivity level rating are ranked as medium (Table 4).

SENSITIVITY LEVEL RATINGS

As demonstrated in Table 4, sensitivity levels range from medium/low to high/medium. For the purposes of determining VRM classifications, the higher overall rating of sensitivity level is used to calculate the appropriate classification. This method would allow a more conservative estimate of sensitivity levels and account for variations among viewers.

**SES Solar Two
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5
Attachment VIS-1**

**Table 4
Sensitivity Level Rating Units and Their Ratings**

Sensitivity Level Rating Unit	Type of User	Amount of Use	Public Interest	Adjacent Land Uses	Special Areas	Overall Rating
SLRU 1	H	H	M	L	M	H/M
SLRU 2	H	L	L	L	M	M/L
SLRU 3	H	L	M	L	H	M

INTERIM VRM CLASSIFICATION OVERLAYS

The purpose of establishing VRI classes for the planning area is three-fold: (1) to provide an inventory tool that describes the relative value of the visual resources, (2) to develop a management tool that portrays the visual management objectives, and (3) to create a baseline with which to analyze potential visual impacts from the Project. The inventory is a summation of the comprehensive inventories of scenic quality, distance zones, and public sensitivity in relation to landscape characteristics. Based on the results of this analysis, visual resources are classified as Class I – IV, as defined below, depending on the overall significance of the resource, juxtaposition in the landscape, and the sensitivity of key users. They do not establish management direction, and should not be used as a basis for constraining or limiting surface disturbing activities.

- Class I: The objective of this class is to preserve the existing character of the landscape. Changes to the landscape character should not be evident.
- Class II: The objective of this class is to retain the existing character of the landscape. Changes to the landscape character may attract slight attention but should be subordinate to the visual setting.
- Class III: The objective of this class is to partially retain the existing character of the landscape. Changes to the landscape character may begin to attract attention but should not dominate the visual setting.
- Class IV: The objective of this class is to allow for activities that modify the existing character of the landscape. Changes to the landscape character may attract attention and dominate the visual setting. However, these activities should minimize changes to the landscape where possible.

VRI classes can be determined in a spatial context by combining overlays for scenic quality, sensitivity levels, and distance zones (Attachment B), or by using a tabular matrix (presented below as Table 6).

**SES Solar Two
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5
Attachment VIS-1**

**Table 6
Matrix Used to Determine Visual Resource Inventory Classes**

		High			Medium			Low
Special Areas		I	I	I	I	I	I	I
Scenic Quality	A	II	II	II	II	II	II	II
	B	II	III	III/IV	III	IV	IV	IV
	C	III	IV	IV	IV	IV	IV	IV
		F/M	B	S/S	F/M	B	S/S	S/S

Note: F/M (foreground/midleground), B (background), S/S (seldom seen)

CONCLUSIONS

The recommended interim VRM Classification was determined using the tabular matrix presented in Table 7. In addition, visual representation of results was created using spatial analysis (Attachment B). The results of this analysis indicated that all SQRUs are classified as either Class III (SQRU 1 and SQRU 3) or Class IV (SQRU 2).

**Table 7
Granite Wind Project Interim Visual Resources Management Classification**

SQRU Number	Scenic Quality Rating	Distance Zone	Sensitivity Rating	VRM Classification
SQRU 1	C	F/M	High/Medium	Class III
SQRU 2	C	F/M	Medium	Class IV
SQRU 3	B	F/M	Medium	Class III

Note: F/M (foreground/midleground), B (background), S/S (seldom seen)

Based upon the determination presented in Table 7, the Project area is classified as either Class III or Class IV. SQRU 1 is determined to have a C scenic quality rating, foreground and middle ground distance zone, and a high/medium sensitivity level. Thus, it is labeled as Class III. SQRU 2 is determined to have a C scenic quality rating, a foreground to middle-ground distance zone, and a medium sensitivity level. Thus, it is labeled as Class IV. SQRU 3 is determined to have a B scenic quality rating, a foreground to middle-ground seen distance zone, and a medium sensitivity level. Thus, it is labeled as Class III.

As previously discussed, these classifications are in support of previously established interim VRM Classes for the Yuha Desert Management Plan and the Sunrise Powerlink Project. The analysis presented, especially the resulting classifications, were discussed with BLM personnel and compared with already established interim VRM Classes in the

**SES Solar Two
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5
Attachment VIS-1**

Yuha Desert Management Plan. It was decided that overall a VRM Class III designation would be used as the baseline with which to identify and quantify potential impacts to visual resources from the Project in the AFC analysis.

An interim VRM Classification should be determined in the text of the Visual Resources section of the SA/DEIS so that BLM VRM guidelines are observed. There have been at least three VRIs performed for the Project area. Each of these efforts has supported a general assignment of interim VRM Class III for the Project area. The Applicant believes that, based on the analysis presented here, the VRI done for the Sunrise Powerlink Project, and the VRM Classes established in the Yuha Desert Management Plan, the appropriate interim VRM Class is Class III. This classification should provide the baseline for completion of the Scenic Contrast Ratings in the SA/DEIS and subsequent determination of impacts to visual resources.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SCENIC QUALITY FIELD INVENTORY

Date March 3, 2008
 District CDCA
 Resource Area Upper Yuina
 Scenic quality rating unit
N of Evan Hewes - SQRU-1

1. Evaluators (names)

2. LANDSCAPE CHARACTER (Feature)

	a. LANDFORM/WATER	b. VEGETATION	c. STRUCTURE (General)
FORM	Flat Desert w/ washes, rilled distant mtns	Scrub, creosote	to south Plaster City PC railroad
LINE	horizontal flat broken rocky mtns on horizon some man made	low intermittent	Angular lines of Plaster City Evan Hewes linear T-lines
COLOR	Tan, grey, brown, white	Green, brown, tan	white, grey roads, metallic T-lines
TEXTURE	Medium Sand/gravel	Medium	Medium

3. Narrative

The area north of Evan Hewes Highway from the project site is flat and barren desert utilized for OHV use. Severely disturbed by OHV use + camping. Mountains can be seen in distance to east while man-made features such as Plaster City and 1-8 are visible to the south. Overall the landscape is rocky and sandy w/ sparse vegetation and lack of diversity of color and/or topographic relief.

4. SCORE (Circle Appropriate Level)*

	HIGH	MEDIUM	LOW	EXPLANATION OR RATIONALE
a. Landform	5	3	(1)	
b. Vegetation	5	3	(1)	
c. Water	5	3	(0)	
d. Color	5	3	(1)	
e. Adjacent Scenery	5	(3)	0	
f. Scarcity	5+	(3)	1	
g. Cultural Modification	2	(0)	-4	
TOTALS		+ + =		

SCENIC QUALITY CLASSIFICATION

- A 19 or more
 B 12-18
 C 11 or less

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SCENIC QUALITY FIELD INVENTORY

Date March 3, 2008
District COCA
Resource Area Upper Yuba
Scenic quality rating unit
Project Site - SQRU-2

1. Evaluators (names)

2. LANDSCAPE CHARACTER (Feature)

	a. LANDFORM/WATER	b. VEGETATION	c. STRUCTURE (General)
FORM	Flat Desert w/ washes rutted tracks	Scarce	Near Plaster City + 1-8, T-lines.
LINE	horizontal broken lines snaking washes horizon is mtn peaks	low, intermittent	roads, t-lines.
COLOR	Tan, grey, brown, white	green, brown, tan	white, grey, tan, metallic
TEXTURE	Medium, sand/gravel	Medium	Medium

3. Narrative

The Project site is disturbed desert scrubland. It is relatively flat sloping down to west. S-80 and 1-8 are clearly visible as is Plaster City and T-lines. Vegetation is scarce and lines are generally flat ground level and snaking washes. Views to distant mountains to west.

4. SCORE (Circle Appropriate Level)*

	HIGH	MEDIUM	LOW	EXPLANATION OR RATIONALE
a. Landform	5	3	①	
b. Vegetation	5	3	①	
c. Water	5	3	①	
d. Color	5	3	①	
e. Adjacent Scenery	5	③	0	
f. Scarcity	5+	③	1	
g. Cultural Modification	2	①	-4	
TOTALS		+	+	=

SCENIC QUALITY CLASSIFICATION

- A 19 or more
 B 12-18
 C 11 or less

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SCENIC QUALITY FIELD INVENTORY

Date March 3, 2008
District CDCA
Resource Area Upper Yuba
Scenic quality rating unit
South of Evan Hewes: SQR03

1. Evaluators (names)

2. LANDSCAPE CHARACTER (Feature)

	a. LANDFORM/WATER	b. VEGETATION	c. STRUCTURE (General)
FORM	Mostly Flat desert w/ Yuba Basin / Yuba wells area somewhat	Scarce desert scrub	None / Rocks + signs
LINE	horizontal broken, some rolling snaking lines @ Yuba Basin Area	low intermittent	Few distant features I-S-T-lines
COLOR	Tan, Grey, Brown	Green, brown, tan	N/A Signage
TEXTURE	Coarse / Medium sand gravel w/ rock outcrops	Medium	Low

3. Narrative

The Yuba Desert is more scenic than areas to the north. Cultural sites such as the geoglyphs, Yuba well and Anza Monument exist in this area and enhance the viewer experience. There is more topographical relief and diversity in the landscape.

4. SCORE (Circle Appropriate Level)*

	HIGH	MEDIUM	LOW	EXPLANATION OR RATIONALE
a. Landform	5	(3)	1	
b. Vegetation	5	3	(1)	
c. Water	5	3	(1)	
d. Color	5	3	(1)	
e. Adjacent Scenery	5	(3)	0	
f. Scarcity	5+	(3)	1	
g. Cultural Modification	(2)	0	-4	
TOTALS		+	+	=

SCENIC QUALITY CLASSIFICATION

- A - 19 or more
 B - 12-18
 C - 11 or less

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date March 3 2008
 District California Desert / E) Centro
 Resource Area Yuba Desert
 Activity (program) Solar Energy

SECTION A. PROJECT INFORMATION

1. Project Name <u>Solar Two</u>	4. Location Township _____ Range _____ Section _____	5. Location Sketch <u>KOP #1</u>
2. Key Observation Point <u>#1</u>		
3. VRM Class <u>III</u>		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat w/ washes and sandy mounds	Patchwork of scrub, rocks + barren	Even Hedges, T-lines, signage Plaster City
LINE	horizontal	<input checked="" type="checkbox"/> weak. Broken	Even Hedges, 1-8 - horizontal Plaster City - Geometric
COLOR	tans, browns, greys.	light green, brown	Grey, tan, white and grey metallic.
TEXTURE	Medium. sand + rock	Patchy. Medium	Solitary / Coarse w/ nothing in intervening distances.

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat	Removed.	Geometric, Disc, Angular
LINE	horizontal	will create obvious edge line	Vertical relief, Angular + geometric
COLOR	tans + greys obscured by structures	tans, greys, 	reflective, metallic, painted
TEXTURE	medium.	Patchy / None	Coarse

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

I. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side)	3. Additional mitigating measures recommended <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)						
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None			
Form		X			X				X					Evaluator's Names <u>Amy Gramlich</u> <u>Seth Hopkins</u>	Date
Line		X				X				X					
Color		X				X				X					
Texture		X			X				X						

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date March 3 2008
District CDCA / EI Centro
Resource Area Seeley / EI Centro
Activity (program) Solar Energy

SECTION A. PROJECT INFORMATION

1. Project Name <u>Solar Two</u>	4. Location Township _____ Range _____ Section _____	5. Location Sketch <u>KOP # 2</u> <u>580</u> <u>Residence</u>
2. Key Observation Point <u># 2</u>		
3. VRM Class <u>III</u>		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	<u>Flat & rutted desert</u>	<u>Patchy scrub, brush, etc. at times barren</u>	<u>T-lines, Evan Hewes, Residential bldgs. Commercial Agriculture facilities, Plaster City</u>
LINE	<u>horizontal to peaking horizon line mtns.</u>	<u>weak, broken, intermittent</u>	<u>T-lines, canals, roadways.</u>
COLOR	<u>tan, brown, grey</u>	<u>light green, tan / brown</u>	<u>white, brown, tan, brick.</u>
TEXTURE	<u>Medium sand/rock.</u>	<u>Patchy. medium-low</u>	<u>Solitary surrounded by expansive desert to west - Ag fields to east.</u>

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	<u>Flat</u>	<u>removed</u>	<u>Geometric, Disc, Angular large scale</u>
LINE	<u>horizontal / horizon obscured</u>	<u>Edge effect obvious.</u>	<u>Vertical relief Angular/geometric Edge effect in stark contrast.</u>
COLOR	<u>tan, grey, brown / orange</u>	<u>None or tan / green at fringe.</u>	<u>reflective, metallic, painted.</u>
TEXTURE	<u>medium</u>	<u>Patchy or None</u>	<u>Coarse</u>

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

1. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side)
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)
ELEMENTS	Form	X			X				X				
	Line	X				X				X			
	Color	X				X			X				
	Texture	X			X				X				
Evaluator's Names												Date	
<u>Amy Gramlich</u>													
<u>Seth Hopkins</u>													

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date March 3, 2008
 District CDCA / El Centro
 Resource Area Yuba
 Activity (program) Solar Energy

SECTION A. PROJECT INFORMATION

1. Project Name <u>Solar 2</u>	4. Location Township _____ Range _____ Section _____	5. Location Sketch <u>Map #3</u>
2. Key Observation Point <u>#3</u>		
3. VRM Class <u>III</u>		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	<u>Open Fields Ag lands. Flat w/ heaves + Canals.</u>	<u>Ag fields/crops + Trees.</u>	<u>T-lines, Canals/bridges, homes Ag equipment. Roads.</u>
LINE	<u>horizontal + blocks of Ag.</u>	<u>Varying - horizontal w/ edge effects.</u>	<u>Roads / Canals, grid patterns T-lines.</u>
COLOR	<u>Green, light green, tan, brown</u>	<u>Green, yellow, tan</u>	<u>Green, brown, tan, Grey white.</u>
TEXTURE	<u>Fine / crops / Medium.</u>	<u>Fine</u>	<u>Solitary homes. Intermittent line features i.e. T-Lines + Roads</u>

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	<u>Open Ag fields Flat w/ heaves + Canals</u>	<u>Ag fields/crops + Trees</u>	<u>T-lines, Canals, bridges, homes roads</u>
LINE	<u>horizontal / Flat Ag fields blocks.</u>	<u>horizontal w/ edges varies</u>	<u>roads canals, grid patterns T-lines</u>
COLOR	<u>Green, tan / brown</u>	<u>Green, yellow, tan</u>	<u>white, tan, brown, brick</u>
TEXTURE	<u>Fine - medium</u>	<u>Fine</u>	<u>Solitary Ag related homes</u>

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

I. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)				
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side)			
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None					
ELEMENTS	Form			X	X			X					X				
	Line				X			X					X				
	Color				X			X					X				
	Texture				X			X					X				

Evaluator's Names Amy Gramlich
Seth Hopkins
Date _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Date March 3, 2008
District _____
Resource Area _____
Activity (program) _____

VISUAL CONTRAST RATING WORKSHEET

SECTION A. PROJECT INFORMATION

1. Project Name <u>Solar Two</u>	4. Location Township _____ Range _____ Section _____	5. Location Sketch <u>KOP #4</u>
2. Key Observation Point <u># 4</u>		
3. VRM Class <u>III</u>		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Hills to Flat transition.	Sparse scrub desert	1-8 over/under pass ramps, Gas station, Ocotillo wells, plaster city
LINE	horizontal to horizon east mountainous to west.	broken intermittent	Angular homes + Ag structures, businesses, linear T-lines/roads
COLOR	Tan / brown	tan / light green.	Gray, white, tan, metallic.
TEXTURE	Medium-sand/rock	Patchy, Fine-medium	Coarse intermittent space desert. Medium

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Hills to Flat transition	Removed	large Solar Discs, Angular geometric
LINE	hills to west - Peaks desert to east - Flat	obvious edge effect	edge effect.
COLOR	tans / brown	metallic / reflective No Veg.	metallic / reflective Painted
TEXTURE	Medium	Coarse	Coarse

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

I. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side)	3. Additional mitigating measures recommended <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None		
Form	X					X			X				Evaluator's Names <u>Amy Gramlich</u> <u>Seth Hopkins</u>	Date
Line	X					X			X					
Color		X				X				X				
Texture	X				X				X					

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date March 3, 2008
 District CDCA / Yuma Desert / ~~CDCA~~
 Resource Area El Centro
 Activity (program) Solar Energy

SECTION A. PROJECT INFORMATION

1. Project Name <u>Solar Two</u>	4. Location Township _____ Range _____ Section _____	5. Location Sketch <u>KOP #5</u>
2. Key Observation Point <u>#5</u>		
3. VRM Class <u>III</u>		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat desert to horizon mtns.	Patchwork, cleared roadside, some scrub	Dunaway rd overpass, 1-8 plaster City. various forms and residence
LINE	horizontal to peaky	linears of roadway vs horizonline desert lines	T-lines, Roads,
COLOR	tans, browns, greys.	light green, tan, brown.	Grey, black, white metallic.
TEXTURE	Fine - Medium - Sand/Rock	Patchy sparse. Fine	coarse. Varying

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat desert to horizon mtns	Patchwork, cleared Removed to North.	Geometric, Disc, Angular
LINE	horizontal to peaky	obvious edge effect.	vertical relief, Angular geometric
COLOR	tans, browns, greys obscured by project.	Removed	reflective, metallic, painted
TEXTURE	Fine-Medium-Sand/Rock	Patchy/None	Coarse

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

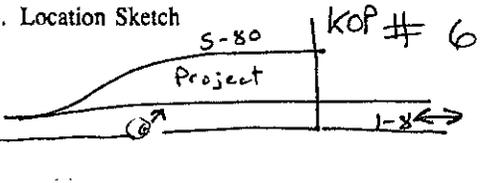
1. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side)
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)
ELEMENTS	Form	X			X			X					
	Line	X			X				X				
	Color	X			X				X				
	Texture	X			X				X				
Evaluator's Names _____												Date _____	

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date April 6, 2009
 District El Centro
 Resource Area CDCA
 Activity (program) Solar Energy

SECTION A. PROJECT INFORMATION

1. Project Name <u>Solar Two</u>	4. Location Township _____ Range _____ Section _____	5. Location Sketch 
2. Key Observation Point <u># 6</u>		
3. VRM Class <u>III</u>		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	<u>Flat Desert</u>	<u>Patchwork scrub</u>	<u>Dunaway rd overpass 1-8 - Plaster City - Some bldgs.</u>
LINE	<u>horizontal horizon + horizontal line mtus</u>	<u>broken, intermittent low line</u>	<u>T-lines, Roads</u>
COLOR	<u>Tans, browns, greys</u>	<u>green, tan, brown</u>	<u>Grey, black, white, metallic</u>
TEXTURE	<u>Fine-medium</u>	<u>Patchy medium</u>	<u>Coarse Varies.</u>

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	<u>Flat desert</u>	<u>removed/sparse</u>	<u>Geometric, Disc, Angular Solar Dish</u>
LINE	<u>horizontal + horizon</u>	<u>obvious edge effect</u>	<u>Vertical Relief,</u>
COLOR	<u>tan, grey, brown</u>	<u>None</u>	<u>reflective, metallic, painted</u>
TEXTURE	<u>medium sand/rock</u>	<u>Medium</u>	<u>Coarse</u>

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

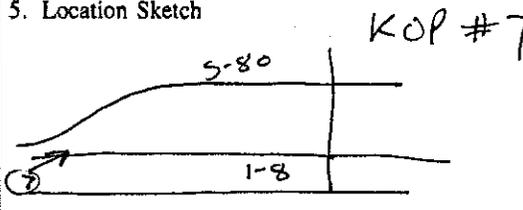
I. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side)	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					3. Additional mitigating measures recommended <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None		
Form		X				X			X				Evaluator's Names <u>AMY GRAMLICH</u> <u>SETH HOPKINS</u>	
Line		X				X				X				Date
Color	X					X				X				
Texture	X					X			X					

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date April 6, 2009
District EI Centro
Resource Area COCA
Activity (program) Solar Energy

SECTION A. PROJECT INFORMATION

1. Project Name <u>Solar Two</u>	4. Location Township _____ Range _____ Section _____	5. Location Sketch 
2. Key Observation Point <u># 7</u>		
3. VRM Class <u>III</u>		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	<u>Flat Desert, Ruttled washes</u>	<u>Patchy scrub / None</u>	<u>Plaster City, 1-8, T-poles</u>
LINE	<u>horizontal</u>	<u>broken / intermittent low line</u>	<u>T-lines, Roads</u>
COLOR	<u>tan, greys, browns</u>	<u>green, tan, brown</u>	<u>Grey, Black, metallic, white</u>
TEXTURE	<u>medium gravel/sand.</u>	<u>Patchy Medium</u>	<u>Coarse varies.</u>

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	<u>Flat Desert</u>	<u>Removed / sparse</u>	<u>Geometric, Disc, Angular Solar Dishes.</u>
LINE	<u>horizontal to horizon</u>	<u>obvious edge effect</u>	<u>vertical Relief.</u>
COLOR	<u>tan, grey, brown</u>	<u>None</u>	<u>reflective, metallic, Painted</u>
TEXTURE	<u>medium / $\frac{1}{8}$</u>	<u>medium / NA</u>	<u>Coarse.</u>

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)	3. Additional mitigating measures recommended <input type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side)			
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)								
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None					
ELEMENTS	Form																
Line																	
Color																	
Texture																	

Evaluator's Names _____

Date _____

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SENSITIVITY LEVEL RATING SHEET

Date March 15/2008

District COCA - El Centro

Resource Area Yuha Desert

1. Evaluators (names)

SENSITIVITY LEVEL RATING UNIT (1)	Type of Use (2)	Amount of Use (3)	Public Interest (4)	Adjacent Land Uses (5)	Special Areas (6)	Other Factors (7)	Overall Rating (8)	EXPLANATION (9)
1	H	H	M	L	M	M	M	(H/M) OHV Area
2	H	L	L	L	M	M	M	(M) Some rec use / low exposure.
3	H	L	M	L	H	H	M	(H/M-M) Yuha ACEC - Some rec use De Anza Trail.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

March 15/2008

Date CDCA
District EI Centro
Resource Area Yuha Desert

SCENIC QUALITY RATING SUMMARY

1. Evaluators (names)

SCENIC QUALITY RATING UNITS (1)	Landform (2)	Vegetation (3)	Water (4)	Color (5)	Adjacent Scenery (6)	Society (7)	Cultural Modifications (8)	Total Score (9)	Scenic Quality Rating (10)	EXPLANATION (11)
1	1	1	0	2	3	3	0	10	C	Plaster City Open Area Disturbed OHV Area
2	1	1	0	2	2	2	-1	7	C	Project site - bounded by I-8 and S-80 highways. Plaster City adjacent.
3	2	1	0	2	3	3	1	12	B	Yuha ACEC - Yuha Wells Geoglyphs

INSTRUCTIONS

Form is used in conjunction with the Scenic Quality Inventory and Evaluation Chart.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SENSITIVITY LEVEL RATING SHEET

Date 3/15/08
District CDCA - El Centro
Resource Area Yuma Desert

1. Evaluators (names)

SENSITIVITY LEVEL RATING UNIT (1)	Type of User (2)	Amount of Use (3)	Public Impact (4)	Adjacent Land Uses (5)	Special Areas (6)	Other Factors (7)	Overall Rating (8)	EXPLANATION (9)
1	H	M	M	L	M	M	M	Moderate OHV
2	H	L	L	L	M	M	M	Moderate Recreational use Low exposure
3	H	L	M	L	H	M	M	Moderate Yuma ACEC - De Anza Trail Recreational use

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Date 3/15/08
District CDCA - El Centro
Resource Area Yuma Desert

SCENIC QUALITY RATING SUMMARY

1. Evaluators (names)

SCENIC QUALITY RATING UNITS (1)	Landform (2)	Vegetation (3)	Water (4)	Color (5)	Adjacent Scenery (6)	Scarcity (7)	Cultural Modification (8)	Total Score (9)	Scenic Quality Rating (10)	EXPLANATION (11)
1	1	1	0	2	2	3	0	9	C	Plaster City OHV
2	1	1	0	2	2	3	-1	8	C	Project site - 7/8, S-80, Plaster City adjacent
3	3	1	0	2	3	3	1	13	B	Yuma ACEC

INSTRUCTIONS

Form is used in conjunction with the Scenic Quality Inventory and Evaluation Chart.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SENSITIVITY LEVEL RATING SHEET

Date 3/15/08
District Imperial County
Resource Area Visual Resources

I. Evaluators (names)

KOPs

SENSITIVITY LEVEL RATING UNIT (1)	Type of Use (2)	Amount of Use (3)	Public Interest (4)	Adjacent Land Uses (5)	Special Areas (6)	Other Factors (7)	Overall Rating (8)	EXPLANATION (9)
1	H	M	M	M	H	M	M	(H/M) OHV area
2	M	M	M	H	M	H	H	(H/M) can see residence to east of site
3	L	M	M	L	L	L	L	(L) from residence site is barely visible
4	M	M	H	M	M	M	M	(M) 1-8 is visible
5	H	M	H	M	H	H	H	(H) can see 1-8 west

(Instructions on reverse)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Date 3/15/2008

District Imperial County

Resource Area Visual Resources

SCENIC QUALITY RATING SUMMARY

1. Evaluators (names)

KOPS

SCENIC QUALITY RATING UNITS (1)	Landform (2)	Vegetation (3)	Water (4)	Color (5)	Adjacent Scenery (6)	Scarcity (7)	Cultural Modification (8)	Total Score (9)	Scenic Quality Rating (10)	EXPLANATION (11)
1	1	1	1	1	2	3	1	10	C	
2	1	1	1	1	2	3	0	9	C	
3	1	1	1	1	2	3	0	9	C	
4	1	1	1	1	1	3	-2	6	C	
5	1	1	1	1	1	3	-2	6	C	

INSTRUCTIONS

Form is used in conjunction with the Scenic Quality Inventory and Evaluation Chart.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

SENSITIVITY LEVEL RATING SHEET

Date 3/15/08

District Imperial County

Resource Area V.R. 0

1. Evaluators (names)

KOP

SENSITIVITY LEVEL RATING UNIT (1)	Type of User (2)	Amount of Use (3)	Public Interest (4)	Adjacent Land Uses (5)	Special Areas (6)	Other Factors (7)	Overall Rating (8)	EXPLANATION (9)
1	H	H	H	M	M	L	M	OHV Area
2	H	H	M	M	M	M	M	Residence to east.
3	M	L	L	L	M	L	L	Residence → hard to see
4	L	H	M	M	L	M	M	1-8 East - highly visible
5	L	H	M	M	L	M	M	1-8 West

UNITED STATES
 DEPARTMENT OF THE INTERIOR
 BUREAU OF LAND MANAGEMENT

Date 3/15/08
 District Imperial County
 Resource Area Visual Resources

SCENIC QUALITY RATING SUMMARY

I. Evaluators (names)

KOPs

SCENIC QUALITY RATING UNITS (1)	Landform (2)	Vegetation (3)	Water (4)	Color (5)	Adjacent Scenery (6)	Scenery (7)	Cultural Modification (8)	Total Score (9)	Scenic Quality Rating (10)	EXPLANATION (11)
1	1	3	1	1	3	4	1	12	B	
2	1	1	1	1	3	3	0	10	C	
3	1	1	1	1	3	2	0	9	C	
4	1	1	1	1	1	3	-2	8	C	
5	1	1	1	1	1	3	-2	10	C	

INSTRUCTIONS

Form is used in conjunction with the Scenic Quality Inventory and Evaluation Chart.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Date 3/15/2008
District Imperial County
Resource Area Visual Resources

SCENIC QUALITY RATING SUMMARY

1. Evaluators (names)

KOPs

SCENIC QUALITY RATING UNITS (1)	Landform (2)	Vegetation (3)	Water (4)	Color (5)	Adjoined Scenery (6)	Scarcity (7)	Culture Modification (8)	Total Score (9)	Scenic Quality Rating (10)	EXPLANATION (11)
1	1	1	1	1	1	2	1	8	C	
2	1	1	1	1	1	3	0	8	C	
3	1	1	1	1	1	4	0	9	C	
4	1	1	1	1	1	1	-2	4	C	
5	1	1	1	1	1	3	-2	6	C	

INSTRUCTIONS

Form is used in conjunction with the Scenic Quality Inventory and Evaluation Chart.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Date 3/15/08
District Imperial County
Resource Area Visual Resources

SENSITIVITY LEVEL RATING SHEET

I. Evaluators (names)

KOPs

SENSITIVITY LEVEL RATING UNIT (1)	Type of User (2)	Amount of Use (3)	Public Interest (4)	Adjacent Land Uses (5)	Special Areas (6)	Other Factors (7)	Overall Rating (8)	EXPLANATION (9)
1	M	H	H	M	H	M	(H/M)	OTW users - USS sensitivity b/c fast moving
2	H	M	H	H	M	M	(H/M)	Residence to the east of the site
3	M	L	L	L	L	L	(L)	Site barely visible from residence
4	M	H	M	M	L	M	(M)	highly visible eastbound - interstate (highly trafficked)
5	M	H	M H	H	H	M	(H)	highly visible westbound - directly adjacent to project site

(Instructions on reverse)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Date April 6, 2009
District CACA
Resource Area _____

SCENIC QUALITY RATING SUMMARY

I. Evaluators (names)

KOPs SCENIC QUALITY RATING UNITS (1)	Landform (2)	Vegetation (3)	Water (4)	Color (5)	Adjacent Scenery (6)	Scarcity (7)	Cultural Modification (8)	Total Score (9)	Scenic Quality Rating (10)	EXPLANATION (11)
6	1	1	1	1	1	3	-2	6	C	No water features or remarkable landforms. Highways + Gypsum Plant detract from natural setting.
7	1	1	1	1	1	3	-2	6	C	

INSTRUCTIONS

Form is used in conjunction with the Scenic Quality Inventory and Evaluation Chart.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

Date April 6, 2009
District CACA
Resource Area

SENSITIVITY LEVEL RATING SHEET

I. Evaluators (names)

KOPs

SENSITIVITY LEVEL RATING UNIT	Type of User	Amount of Use	Public Interest	Adjacent Land Uses	Special Areas	Other Factors	Overall Rating	EXPLANATION
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
6	M	M	H	M	M	M	M	(M) 1-8 view from road. Suncatchers in immediate foreground
7	M	M	H	M	M	M	M	(M) 1-8 view direct north. Suncatchers in immediate foreground.

(Instructions on reverse)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date January 5, 2010
District California Desert / El Centro
Resource Area Yuha Desert / Anza Trail
Activity (program) Solar Energy

SECTION A. PROJECT INFORMATION

1. Project Name <u>Solar Two</u>	4. Location Township <u>16S</u> Range <u>11E</u> Section <u>27</u>	5. Location Sketch <u>Evam Hoves</u> See Photo KOP #1
2. Key Observation Point <u>#1</u>		
3. VRM Class <u>III</u>		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat w/ rutted wash areas	Simple scrub patterns. Patchy.	line form: 1-8 Block form: Plaster City
LINE	horizontal	weak. intermittent	horizontal: 1-8 Geometric: Plaster City
COLOR	desert tans, browns and greys	light green and Tan	Grey and black Metallic
TEXTURE	Medium. Sand + Rock	Patchy. medium.	Sparse and Coarse

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat	None	Geometric, Disc, Angular
LINE	horizontal	Edge effect created by Project.	Vertical, horizontal + Angular
COLOR	desert tans, obscured by structures	Tans	Sky color (reflective), metallic or painted tans
TEXTURE	Coarse	Patchy / None	Coarse

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

1. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side)
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side) <u>See Analysis</u>
	X				X				X				
	X				X				X				
	X			X				X					
X				X				X					
ELEMENTS	Form	X				X			X				Evaluator's Names <u>Amy Gramlich</u> <u>Seth Hopkins</u> Date <u>1/05/10</u>
	Line	X				X			X				
	Color		X			X			X				
	Texture	X				X			X				

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date January 5, 2010
 District CDCA
 Resource Area Yocha Desert/Anza Trail
 Activity (program) Solar Energy

SECTION A. PROJECT INFORMATION

1. Project Name <u>Solar Two</u>	4. Location Township <u>16.55</u> Range <u>10 E</u> Section <u>2</u>	5. Location Sketch <u>See Figure #1 for location.</u> <u>See KOP #2 Photo.</u>
2. Key Observation Point <u># 2</u>		
3. VRM Class <u>III</u>		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat to rolling Basin and wash areas	Simple patchy scrub patterns	lines: 1-8 ^{Anza Monument} Geometric/blocky: <u>Plaster City</u>
LINE	horizontal	weak intermittent	horizontal lines and Geometric
COLOR	desert tertiary tan greys, browns	light green / Tan	Grey, metallic
TEXTURE	Medium	Patchy	Sparse + Coarse

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	Flat	None	Geometric, Disc, Angular
LINE	horizontal	edge effect created by clearing/Project	Vertical, horizontal Angular
COLOR	desert colors observed by structures	Tans	reflective, metallic Painted desert colors
TEXTURE	Coarse	Patchy / None	Coarse

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

I. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side)	
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)					3. Additional mitigating measures recommended <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side) <u>See Analysis.</u>
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None		
Form	X					X				X				
Line		X				X				X				
Color			X			X					X			
Texture		X				X				X				
EVALUATOR'S NAMES												DATE		
<u>Amy Granlich</u>												<u>1/5/2010</u>		
<u>Seth Hopkins</u>														

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

VISUAL CONTRAST RATING WORKSHEET

Date January 5, 2010
 District CDCA
 Resource Area Yuha Desert/Anza Trail
 Activity (program) Solar Energy

SECTION A. PROJECT INFORMATION

1. Project Name <u>Solar Two</u>	4. Location Township <u>16S</u> Range <u>11E</u> Section <u>5</u>	5. Location Sketch <u>See Figure # 1</u> <u>and ROP # 3 photo</u>
2. Key Observation Point <u># 3</u>		
3. VRM Class <u>III</u>		

SECTION B. CHARACTERISTIC LANDSCAPE DESCRIPTION

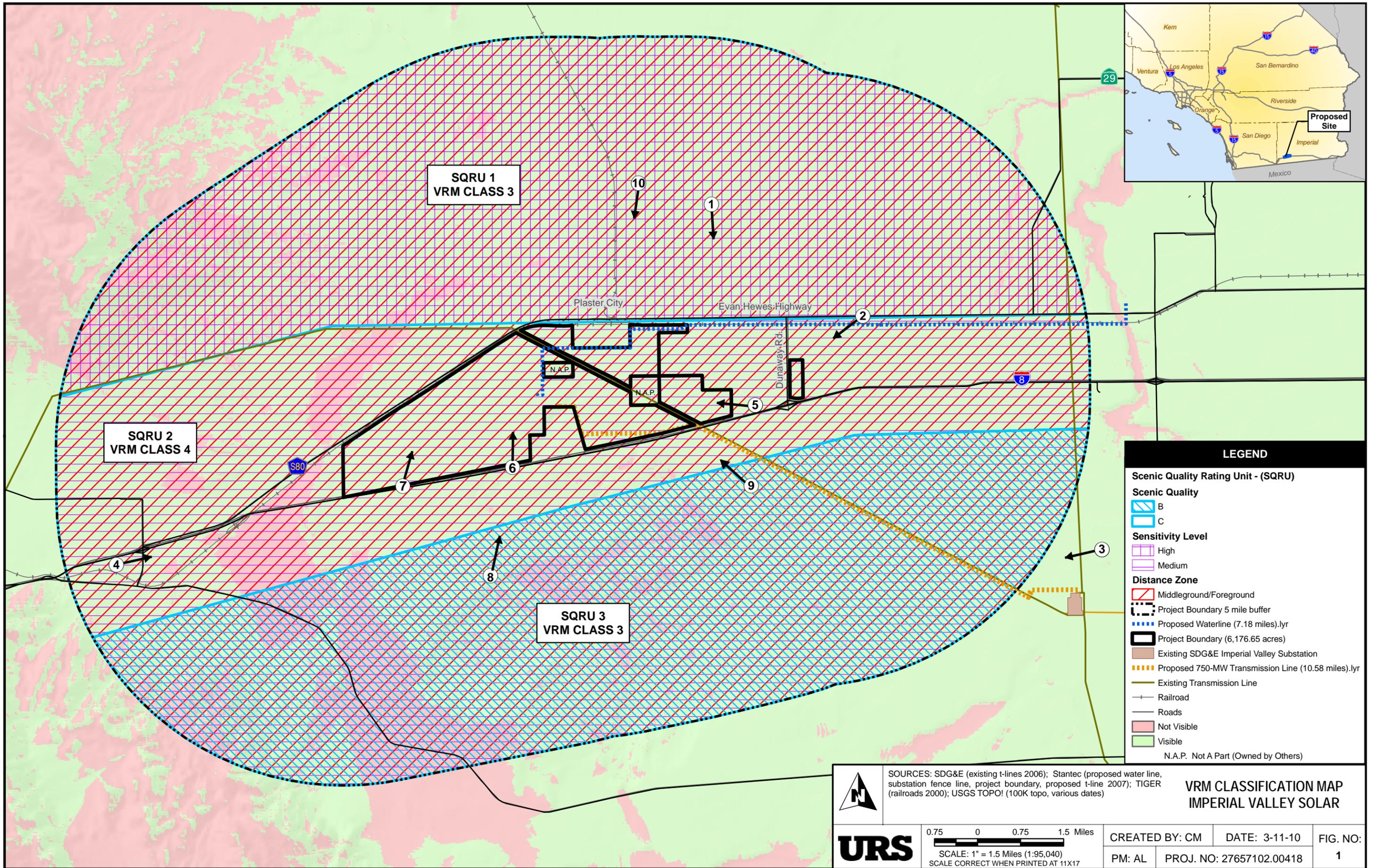
	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	<u>Flat</u>	<u>Scrub patterns</u>	<u>lines: Even Hedges Highway Geometric / blocky</u>
LINE	<u>horizontal</u>	<u>intermittent pattern</u>	<u>horizontal lines + geometric blocky</u>
COLOR	<u>desert tertiary</u>	<u>light green, brown, tan</u>	<u>Grey, metallic</u>
TEXTURE	<u>Medium</u>	<u>Patchy</u>	<u>Sparse, coarse, edge</u>

SECTION C. PROPOSED ACTIVITY DESCRIPTION

	1. LAND/WATER	2. VEGETATION	3. STRUCTURES
FORM	<u>Flat</u>	<u>None</u>	<u>Geometric, Disc, Angular</u>
LINE	<u>horizontal</u>	<u>edge effect created</u>	<u>vertical, horizontal, Angular</u>
COLOR	<u>desert colors obscured by project</u>	<u>Tans</u>	<u>reflective, metallic, Painted desert tones</u>
TEXTURE	<u>Coarse</u>	<u>Patch / None</u>	<u>Coarse</u>

SECTION D. CONTRAST RATING SHORT TERM LONG TERM

1. DEGREE OF CONTRAST	FEATURES												2. Does project design meet visual resource management objectives? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (Explain on reverse side)
	LAND/WATER BODY (1)				VEGETATION (2)				STRUCTURES (3)				
	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	Strong	Moderate	Weak	None	3. Additional mitigating measures recommended <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No (Explain on reverse side) <u>See Analysis</u>
		X			X				X				
		X				X				X			
	X				X				X				
	X			X				X					
ELEMENTS	Form											Evaluator's Names <u>Amy Gramlich</u> <u>Seth Hopkins</u>	
	Line											Date <u>1/05/10</u>	
	Color												
	Texture												



LEGEND	
Scenic Quality Rating Unit - (SQRU)	
Scenic Quality	
	B
	C
Sensitivity Level	
	High
	Medium
Distance Zone	
	Midleground/Foreground
	Project Boundary 5 mile buffer
	Proposed Waterline (7.18 miles).lyr
	Project Boundary (6,176.65 acres)
	Existing SDG&E Imperial Valley Substation
	Proposed 750-MW Transmission Line (10.58 miles).lyr
	Existing Transmission Line
	Railroad
	Roads
	Not Visible
	Visible
N.A.P. Not A Part (Owned by Others)	

SOURCES: SDG&E (existing t-lines 2006); Stantec (proposed water line, substation fence line, project boundary, proposed t-line 2007); TIGER (railroads 2000); USGS TOPO! (100K topo, various dates)

VRM CLASSIFICATION MAP
IMPERIAL VALLEY SOLAR

		CREATED BY: CM	DATE: 3-11-10	FIG. NO:
	<small>SCALE: 1" = 1.5 Miles (1:95,040) SCALE CORRECT WHEN PRINTED AT 11X17</small>	PM: AL	PROJ. NO: 27657102.00418	1

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

WASTE MANAGEMENT

WASTE MANAGEMENT Page C.14-16

The SA/DEIS states, "The hazardous wastes would be temporarily stored on site, transported off site by licensed hazardous waste haulers, and recycled or disposed of at authorized disposal facilities in accordance with established standards applicable to generators of hazardous waste."

Comment:

The Applicant requests that the language be changed from temporarily store hazardous waste onsite to accumulate waste onsite.

WASTE MANAGEMENT Page C.14-25

Staff says "The project owner shall provide a reuse/recycling plan for at least 50% of construction and demolition materials prior to any building or demolition, including closure/decommissioning. At least 60 days prior to the start of any construction or demolition activities, the project owner shall submit a reuse/recycling plan to the CPM and AO for review and approval."

Comment:

Applicant requests that the submittal timeline for the reuse/recycling plan be revised from 60 days to 30 days.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

WORKER SAFETY AND FIRE PROTECTION

The Applicant has no comments regarding Worker Safety and Fire Protection at this time.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

FACILITY DESIGN

FACILITY DESIGN Page D.1-7

In Table 2 in the SA/DEIS, there are several items in the Equipment/Description column that need to be revised.

Comment:

The SA/DEIS has a row that states Solar Dish Stirling Unit (CT) Foundation and Connections. Instead, this row should read Solar Dish Stirling Unit (CT) Foundation and Connections (Pedestal FDN). Further down in Table 2, the SA/DEIS shows a Sewage Holding Tank Structure, Foundation and Connections row. Instead, this should read Septic Tank Structure, Foundation and Connections. Below that row, the SA/DEIS has a row that shows Diesel Fire Pump Foundation and Connections. Instead, this row should be revised to read Electric Fire Pump Foundation and Connections.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

GEOLOGIC STABILITY

The Applicant has no comments regarding Geologic Stability, other than those discussed in the Geology and Paleontology section of this document, at this time.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

POWER PLANT EFFICIENCY

The Applicant has no comments regarding Power Plant Efficiency at this time.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

POWER PLANT RELIABILITY

POWER PLANT RELIABILITY Page D.4-4

Under the heading Water Supply Reliability, the SA/DEIS states that the Project would use water from Imperial Irrigation District's (IID's) Westside Main Canal for mirror washing, for potable and fire protection water, and in an electrolysis process to produce hydrogen gas.

Comment:

However, this is not true, as the project will use the Seeley Waste Water Treatment Facility as the water source. Therefore, this reference should be changed to reflect the correct water source.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

TRANSMISSION SYSTEM ENGINEERING

The Applicant has no comments regarding Power Plant Efficiency at this time.

**Imperial Valley Solar
Applicant's Comments on Staff Assessment/
Draft Environmental Impact Statement
08-AFC-5**

GENERAL CONDITIONS

GENERAL CONDITIONS Page E-8

The SA/DEIS references multiple "power plants".

Comment:

Remove reference to "power plants" (plural); remove reference to pre-construction.



**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
IMPERIAL VALLEY SOLAR PROJECT
(formerly known as SES Solar Two Project)
IMPERIAL VALLEY SOLAR, LLC***

**Docket No. 08-AFC-5
PROOF OF SERVICE
(Revised 3/9/10)**

APPLICANT

Richard Knox
Project Manager
SES Solar Two, LLC
4800 N Scottsdale Road.,
Suite 5500
Scottsdale, AZ 85251
richard.knox@tesseractosolar.com

CONSULTANT

Angela Leiba, Sr. Project
Manager URS Corporation
1615 Murray Canyon Rd.,
Suite. 1000
San Diego, CA 92108
Angela_Leiba@urscorp.com

APPLICANT'S COUNSEL

Allan J. Thompson
Attorney at Law
21 C Orinda Way #314
Orinda, CA 94563
allanori@comcast.net

Ella Foley Gannon, Partner
Bingham McCutchen, LLP
Three Embarcadero Center
San Francisco, CA 94111
ella.gannon@bingham.com

INTERESTED AGENCIES

California ISO
e-recipient@caiso.com

Daniel Steward, Project Lead
BLM – El Centro Office
1661 S. 4th Street
El Centro, CA 92243
daniel_steward@ca.blm.gov

Jim Stobaugh,
Project Manager &
National Project Manager
Bureau of Land Management
BLM Nevada State Office
P.O. Box 12000
Reno, NV 89520-0006
jim_stobaugh@blm.gov

INTERVENORS

California Unions for Reliable
Energy (CURE)
c/o Tanya A. Gulesserian
Loulena Miles, Marc D. Joseph
Adams Broadwell Joseph &
Cardozo
601 Gateway Blvd., Ste. 1000
South San Francisco, CA 94080
tgulesserian@adamsbroadwell.com
lmiles@adamsbroadwell.com

ENERGY COMMISSION

JEFFREY D. BYRON
Commissioner and Presiding
Member
jbyron@energy.state.ca.us

ANTHONY EGGERT
Commissioner and Associate
Member
aeggert@energy.state.ca.us

Raoul Renaud
Hearing Officer
rrenaud@energy.state.ca.us

Kristy Chew, Adviser to
Commissioner Byron
kchew@energy.state.ca.us

Caryn Holmes, Staff Counsel
Christine Hammond,
Co-Staff Counsel
cholmes@energy.state.ca.us
chammond@energy.state.ca.us

Christopher Meyer
Project Manager
cmeyer@energy.state.ca.us

Jennifer Jennings
Public Adviser
publicadviser@energy.state.ca.us

DECLARATION OF SERVICE

I, Corinne Lytle, declare that on March 12, 2010, I served and filed copies of the attached, Applicant's Comments on the Imperial Valley Solar Project SA/DEIS, dated, March 12, 2010.

The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:

[\[http://www.energy.ca.gov/sitingcases/solartwo/index.html\]](http://www.energy.ca.gov/sitingcases/solartwo/index.html).

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

sent electronically to all email addresses on the Proof of Service list;

by personal delivery;

by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses NOT marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (*preferred method*);

OR

depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 08-AFC-5

1516 Ninth Street, MS-4

Sacramento, CA 95814-5512

docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Original Signed By: _____
CORINNE LYTLE