



DOCKET

08-AFC-5

DATE July 02 2009

RECD. July 02 2009

July 2, 2009

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

Subject: SES Solar Two (08-AFC-5)
Responses to CURE Data Requests 143-178
URS Project No. 27657102.00900

Dear Mr. Meyer:

On behalf of SES Solar Two, LLC, URS Corporation Americas (URS) hereby submits the Applicant's Responses to CURE Data Requests, Set Two (Requests 143-178).

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 the transcript on behalf of SES Solar Two, LLC.

Sincerely,

Angela Leiba
Project Manager

AL:ml

**In Response to CURE Data Requests 143-178
Application for Certification (08-AFC-5)
SES Solar Two, 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:
SES Solar Two, LLC
2920 E. Camelback Road, Suite 150, Phoenix, AZ 85016



With Support From:
URS Corporation

July 2009

SES Solar Two
In Response to CURE Data Requests, Set Two
Data Requests 143-178
08-AFC-5

TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 143: In response to CURE data request 31 regarding the specific techniques that were used to survey the site for rare plants, the applicant stated rare plant surveys were conducted concurrent with FTHL surveys. However, the applicant indicated FTHL surveys consisted of a sample covering 38% of the site. Please clarify whether the applicant considers the results of its rare plant fieldwork a sample (similar to FTHL sampling) or a survey providing 100% coverage of impact areas. If the latter, please discuss the specific efforts (i.e., not associated with incidental movement through the site) that were dedicated to rare plant detection outside of FTHL survey plots.

Response: Rare plant surveys were conducted concurrently with FTHL surveys during 2007. Rare plant surveys were repeated over the entire site and offsite transmission and water lines in 2008 because rainfall conditions were more suitable for detecting annuals in 2008. 2008 rare plant surveys covered the entire site (approximately 75% coverage) with a focus (100% coverage) on areas supporting blooming annuals.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 144: Please indicate whether a reference site was visited as recommended by survey protocols. If so, please provide information on the site visit similar to what is outlined in protocol survey reporting requirements.

Response: Botanists searched for plants from the same genus with similar habitat requirements and blooming periods to determine the likelihood of rare species blooming. Reference sites were not visited because there are no known, accessible blooming sites for the potential species in the immediate project vicinity.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 145: Please justify the applicant's rare plant survey effort (i.e., time per unit area) and discuss why the time per unit area spent surveying is considered appropriate for determining potential Project impacts.

Response: The level of effort was deemed sufficient given the practicality of the size of the survey area, habitat conditions, and species that were the focus of the survey. All areas of the site were visited during the expected peak blooming periods for potential sensitive species to expect detection of focal species. 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.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 146: Plant phenology varies with location and weather conditions. To clarify CURE data request 35, please provide the phenological development of the target species at the time Project surveys were conducted (e.g., were the target species known to be blooming).

Response: The suite of plant species potentially occurring in the project vicinity have documented blooming periods that typically span from March through May. An initial site visit was conducted in mid-February 2008 to assess the early growth of annuals to determine the schedule for the subsequent surveys. URS timed the survey effort based on site conditions observed in February and mid-March 2008. Focal surveys were scheduled to encompass these blooming periods. The second round of surveys were performed in early May 2008 to detect any later blooming season species.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 147: The applicant's response to CURE data request 37 suggests the lack of documented occurrences of rare plants onsite and in the Project vicinity was a factor in the applicant's decision to forgo mitigation. Please discuss past focused survey efforts that the applicant is aware of that were conducted onsite and in the Project vicinity.

Response: Lack of documented occurrences, field observations, and site quality were all factors in determining potential mitigation. The applicant is not aware of any other surveys that have been done onsite or in the project vicinity. A CNDDDB query was performed prior to the commencement of field work to determine any rare species that have been documented in the area prior to the field effort.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 148: Please provide copies of the field notes that were taken during rare plant surveys. Please highlight any field notes associated with the two *Chamaesyce* species documented as occurring on the Project site.

Response: The two *Chamaesyce* species found onsite were keyed out by experienced botanists. Field surveyors were instructed to notify botanists and document any unknown plants with photographs and GPS data points for later identification. Surveyors submitted species lists, GPS points, and photos at the end of the survey period. Those lists were consolidated into one master list presented in the AFC document (Attachment B in Appendix Y of the AFC).

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TECHNICAL AREA: BIOLOGICAL RESOURCES

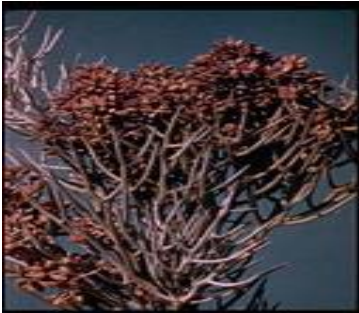
Data Request 149: Please provide a copy of the rare plant guide that was prepared by URS and distributed to the survey team.

Response: The rare plant guide is provided behind this response as attachment BIO-1. Several other reference books were also available in the field to aid with plant species identification.

Potentially Occurring Rare Plants on the Solar II Site



Astragalus insularis var. *harwoodii*
Harwood's milk-vetch
Occurs in sand and gravelly desert dune areas. Annual herb that blooms **January-May**.



Castela emor
Crucifixion thorn
Occurs in Sonoran desert scrub, playas, and on gravelly soils; 90-670 m. Deciduous shrub that blooms **April-July**



Chamaesyce platysperma
Flat-seeded spurge
Occurs in desert dunes and Sonoran Desert scrub with sandy soil. Annual herb that blooms **February-September**



Eucnide rupestris
Annual rock nettle
Occurs in Sonoran desert scrub; 500-600 m. Annual herb that blooms **December-April**

Potentially Occurring Rare Plants on the Solar II Site



Ipomopsis effusa

Baja California Ipomopsis

Occurs in chaparral, Sonoran desert scrub (alluvial fan) in sandy substrate between 0-100 m. Annual herb that blooms **April-June**.



Ipomopsis tenuifolia

Slender-leaved Ipomopsis

Occurs in chaparral, pinyon and juniper woodlands, and Sonoran desert scrub on rocky or gravelly soil between 100 – 1200 m. Perennial herb that blooms **March-May**.



Lupinus excubitus var. *medius*

Mountain Springs bush lupine

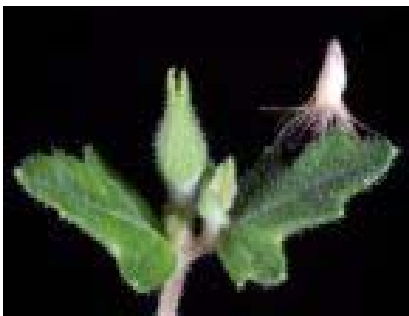
Occurs in pinyon and juniper woodland and Sonoran desert scrub between 425–1,370 m. Shrub that blooms **March-May**

No Photo available

Malperia tenuis

Brown turbans

Occurs in Sonoran Desert scrub with sandy soil. Annual herb that blooms **March-April**.



Mentzelia hirsutissima

Hairy stickleaf

Occurs in rocky Sonoran desert scrub between 0-700 m. Annual herb that blooms **March-May**

Potentially Occurring Rare Plants on the Solar II Site

No photo available

Nemacaulis denudata var. *gracilis*

Slender woolly-heads

Occurs in coastal dunes, desert dunes, Sonoran desert scrub between 50-400m. Annual herb that blooms

March-May.



Xylorhiza orcuttii

Orcutt's woody-aster

Occurs in Sonoran desert scrub between 20-365 m.

Perennial herb that blooms March-May

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Data Request 150: Please discuss the botanical training that was conducted (as indicated in response to CURE data request 31), including the number of hours devoted to training before surveys were initiated, the trainer(s), individuals that were trained, and any tests that were applied to determine surveyors possessed the minimum qualifications necessary to provide accurate survey information.

Response: All field biologist participants have natural resource degrees and were familiar with the flora of the project vicinity. The lead botanists each have over eight years of relevant experience conducting rare plant surveys in southern California. Each surveyor was provided with field identification information specific to the focal species that were of interest. Junior surveyors were teamed with more experienced field personnel to aid in the identification of less common species detected onsite. Botanist Michelle Balk was onsite from 3/17 to 3/21/08. Ms. Balk and Mr. Ken McDonald provided daily tutorials on rare plant identification and keyed out unknown species detected onsite.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 151: Please indicate the individuals that constituted each survey team and provide their plant survey hours (i.e., total number of hours that were specifically dedicated to locating rare plants (as opposed to lizards or other wildlife) for each day of surveys.

Response: Teams varied throughout the survey effort and changed frequently to ensure junior surveyors were paired with senior botanists. Lists of each survey team are not available. Surveys conducted between 3/19/07 and 3/23/07, 5/1/07 and 5/3/07, and 5/5/08 and 5/7/08 were conducted concurrently with other surveys. Surveys conducted on 2/13/08, between 3/11/08 and 3/21/08, and on 5/8/08 were focused on rare plants. The 2008 rare plant survey effort is estimated at 960 field hours.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 152: Please provide copies of timesheets that substantiate surveyors were present on the Solar Two site.

Response: This request is not appropriate. The Applicant is not in the practice of disclosing employee's personal information. Surveyors worked approximately 10 hours per day.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 153: Please discuss the evidence that was used to conclude potential burrows were inactive and most likely made by coyotes or kit fox.

Response: The applicant's consultant concluded that the potential burrows encountered were inactive because they were washed out, eroded, covered with soil or spider webs, and contained coyote or kit fox scat. No distinctive badger burrows, typical sign of digging for prey, tracks or scat indicative of badger occupation were detected onsite.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 154: Please clarify whether the Project will maintain wildlife corridors through the Project area that enable uninhibited FTHL and bighorn sheep movement between the Project's northern and southern boundaries.

Response: The project's west, north, and south boundaries are already bounded by Evan Hewes Highway, railroad tracks, and I-8. Currently, the only potential wildlife access routes onto the site consist of culverts and bridges associated with washes. It is assumed that these culverts and bridges will remain to allow for occasional flood flows and would also be utilized by wildlife. An area east of the proposed project limits will be available for wildlife movement past the project.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 155: The map provided by the applicant depicts three wildlife corridors, all of which pass through proposed project areas. Please clarify whether these proposed project areas will be fenced and how movement corridors will be maintained.

Response: The corridors depicted on the provided map occur in areas that are currently undeveloped and will not be fenced in association with the Solar 2 project.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 156: Please discuss the types of analyses that were used to map wildlife corridors (i.e., the corridors depicted on Figure BIO-1).

Response: Areas of open space with natural habitat outside of the Solar 2 development footprint were used to map potential wildlife corridors. Much of the landscape surrounding the project area is undeveloped and wildlife movement in these areas is not constricted by major roads or development. Major flood-flow drainages are likely locations where wildlife pass through major roads.

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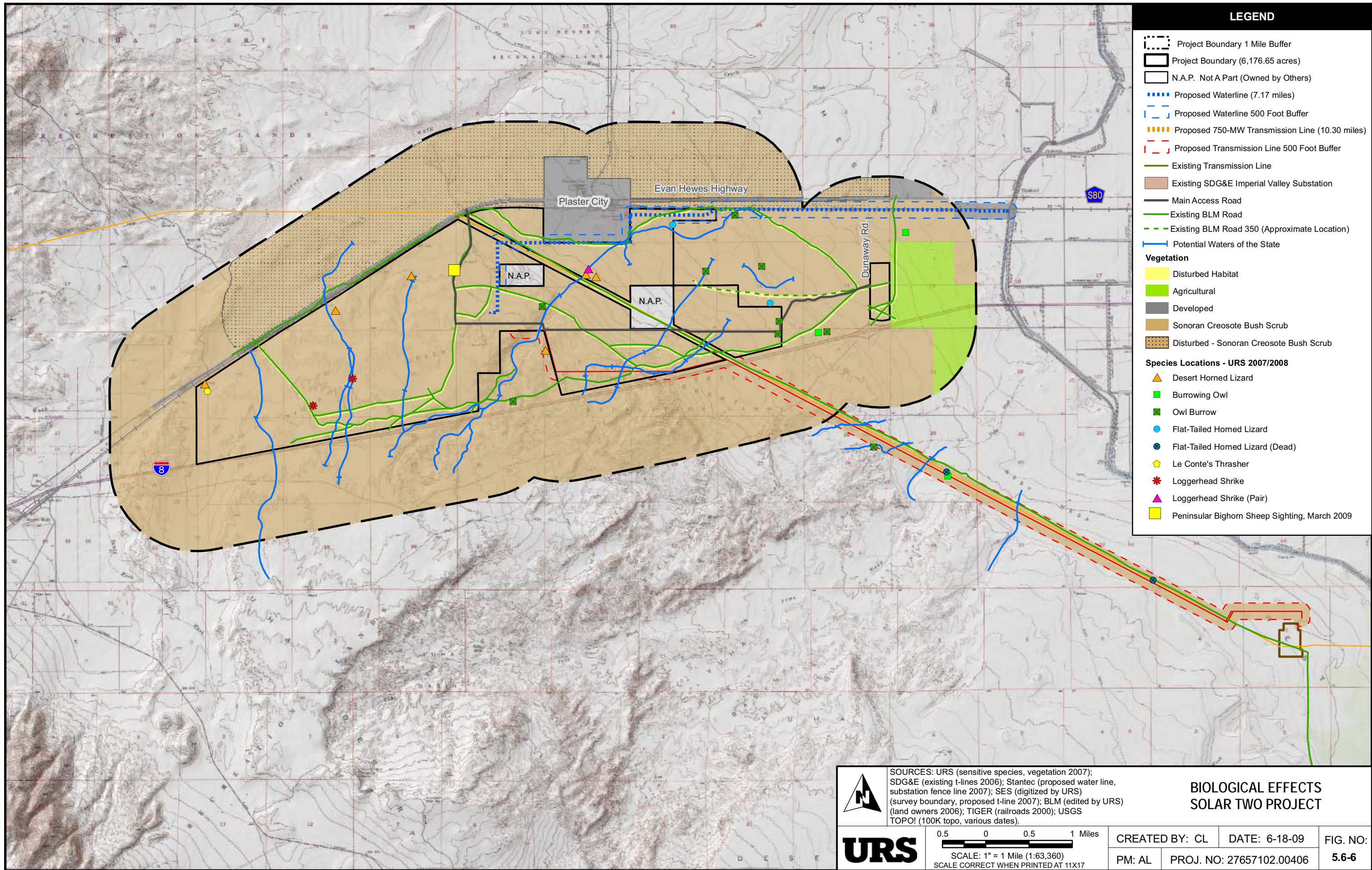
Data Request 157:

Please provide additional information on bighorn sheep occurrence within the Project area, including:

- a. A map that shows the location of the ewe group that was detected onsite.
- b. Any behavioral (e.g., foraging) observations made by Dr. Platt.
- c. Any subsequent efforts (field or other) taken by the applicant to document bighorn use of the Project site following Dr. Platt's observations.
- d. Quantification of previous efforts devoted to surveying the locations surrounding the area where sheep were recently documented. That is, of the survey days in 2007 and 2008, how many hours were devoted to surveying the area where sheep were documented?

Response:

- a. No GPS point of the bighorn sheep observed onsite was taken by Joe Platt, and therefore, only an approximate location based on the description given by Dr. Platt is shown on the attached figure, provided behind this response as attachment BIO-2.
- b. Dr. Platt's observations were provided on DR 44.
- c. No additional surveys for bighorn sheep have been initiated. Despite several subsequent site visits, Dr. Platt did not have any further sitings during his visits to the Solar Two project area.
- d. The entire site was surveyed in both 2007 and 2008. No bighorn sheep or sign of bighorn sheep were observed during the field effort.



LEGEND

- Project Boundary 1 Mile Buffer
- Project Boundary (6,176.65 acres)
- N.A.P. Not A Part (Owned by Others)
- Proposed Waterline (7.17 miles)
- Proposed Waterline 500 Foot Buffer
- Proposed 750-MW Transmission Line (10.30 miles)
- Proposed Transmission Line 500 Foot Buffer
- Existing Transmission Line
- Existing SDG&E Imperial Valley Substation
- Main Access Road
- Existing BLM Road
- Existing BLM Road 350 (Approximate Location)
- Potential Waters of the State

Vegetation

- Disturbed Habitat
- Agricultural
- Developed
- Sonoran Creosote Bush Scrub
- Disturbed - Sonoran Creosote Bush Scrub

Species Locations - URS 2007/2008

- ▲ Desert Horned Lizard
- Burrowing Owl
- Owl Burrow
- Flat-Tailed Horned Lizard
- Flat-Tailed Horned Lizard (Dead)
- ◆ Le Conte's Thrasher
- ✱ Loggerhead Shrike
- ▲ Loggerhead Shrike (Pair)
- Peninsular Bighorn Sheep Sighting, March 2009

SOURCES: URS (sensitive species, vegetation 2007); SDG&E (existing t-lines 2006); Stantec (proposed water line, substation fence line 2007); SES (digitized by URS) (survey boundary, proposed t-line 2007); BLM (edited by URS) (land owners 2006); TIGER (railroads 2000); USGS TOPO! (100K topo, various dates).

URS

0.5 0 0.5 1 Miles

SCALE: 1" = 1 Mile (1:63,360)
SCALE CORRECT WHEN PRINTED AT 11X17

**BIOLOGICAL EFFECTS
SOLAR TWO PROJECT**

CREATED BY: CL	DATE: 6-18-09	FIG. NO:
PM: AL	PROJ. NO: 27657102.00406	5.6-6

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 158: Please provide a revised assessment of potential Project impacts on the Peninsular bighorn sheep that incorporates information presented in the recovery plan.

Response: Peninsular bighorn sheep (PBHS) designated Critical Habitat occurs in the Coyote Mountains west of Ocotillo, over 5 miles west of the western project boundary. Detection of PBHS onsite in March 2009 was unexpected and is likely a very infrequent and transitory occurrence. PBHS were not detected during two seasons of field effort (2007 and 2008). The PSSH Recovery Plan does not address PBHS use of desert lands and is focused on their primary habitats in the Peninsular Mountain Ranges. The Recovery Plan specifically states that the valley floor areas are not essential habitat for PSSH. Implementation of the proposed project will likely preclude the apparent transitory use of the proposed developed portions of the site by PBHS. Given the distance from designated Critical Habitat and the relative isolation of the project site due to major highways and railroad, the project site is not considered to be critical or important for the recovery of PBHS. Loss of potential forage habitat associated with the project site is considered less than significant since the project site is not identified as a focal area for PBHS conservation and management. Potential forage habitats more closely associated with designated Critical Habitat would be of higher value to PBHS conservation than the project site.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

- Data Request 159:** Please clarify the discrepancy between the applicant's responses to CURE data requests 48 and 50-52 (regarding burrowing owl mitigation), and statements made in the AFC, Biological Resources Technical Report, and Supplemental Cumulative Analysis.
Specifically, please:
- a. Clarify how the applicant was able to conclude no burrowing owls are present onsite even though active burrows with burrowing owl sign (i.e., scat) were detected.
 - b. Discuss the survey techniques that were implemented to monitor the status of owl burrows that were detected during Project surveys.
 - c. Clarify whether the applicant intends to propose mitigation for the two burrowing owls that were observed along the proposed transmission line corridor.
 - d. Clarify why the applicant considers the site only "marginally suitable" burrowing owl habitat.

- Response:**
- a. The area originally surveyed was much larger than the current impact footprint. The burrows with owl sign now fall outside the modified impact footprint. The text in the Biological Resources Technical Report was not modified to reflect this prior to submittal. With the exception of one active burrow and associated owls observed near the proposed transmission line route, no potentially active burrowing owl burrows with sign were observed within the current project development footprint.
 - b. None of the potential owl burrows within the project development footprint were monitored because they did not contain owl sign.
 - c. Mitigation for the owls observed along the transmission line is not proposed because installation of the transmission line is not expected to displace any burrowing owls during or after project implementation.
 - d. Burrowing owls in the Imperial Valley are closely associated with agricultural fields. Burrowing owl use of desert scrub habitats is very limited in this region. The Solar 2 site is desert scrub having varying levels of disturbance and does not contain an abundance of suitable burrows or foraging habitat.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 160: Please clarify whether the applicant considers the results of its burrowing owl surveys a sample of 38% of the site (similar to FTHL sampling) or a survey providing 100% coverage of impact areas. If the latter, please discuss the specific efforts (i.e., not associated with incidental movement through the site) that were dedicated to burrowing owl detection outside of FTHL survey plots.

Response: The entire site (100%) was surveyed at least 3 times during 2007 and 2008, first during the vegetation mapping/habitat assessment, second during the FTHL surveys, and third during the rare plant surveys. Any owls/burrows that may have been present onsite would have most likely been detected during this field effort.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 161: Burrowing owl protocol requires surveys to be conducted in the hours around sunrise or sunset. Please justify why the applicant considers its survey results valid even though a significant amount of its survey effort was conducted outside of these time periods and when owls are generally less detectable.

Response: See response to DR 160 above. The burrowing owl protocol states: *“Each project and situation is different and these procedures may not be applicable in some circumstances. Finally, these are not strict rules or requirements that must be applied in all situations. They are guidelines to consider when evaluating burrowing owls and their habitat, and they suggest options for burrowing owl conservation when land use decisions are made.”*

Owl detection is not limited to early and late periods of the day. The field effort did detect owls, but they were limited to the transmission line linear alignment and other areas close to agricultural fields.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 162: Please provide a revised analysis of Project impacts to burrowing owls that considers environmental stochasticity and documented concerns on the viability of owls associated with agricultural habitat.

Response: There is no substantial evidence that burrowing owls occupy the project site. The proposed construction BMPs for the project require additional surveys prior to vegetation clearing to avoid take of owls. Protocols to exclude any owls during the non-breeding season will be implemented if an owl-occupied burrow is detected. The habitat mitigation program can be modified as deemed appropriate to account for the displacement of any owls detected during project implementation.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 163: Please clarify the applicant's response to CURE data request 49, which stated the applicant's pre-construction surveys will follow the Burrowing Owl Consortium survey protocol. Specifically, does the applicant intend to conduct the four survey phases outlined in the protocol?

Response: As stated in the protocol, "*Preconstruction Survey. A preconstruction survey may be required by project-specific mitigations and should be conducted no more than 30 days prior to ground disturbing activity.*" Upon agency approval, any potential burrows will be scoped during the non-breeding season, and if deemed unoccupied, will be collapsed prior to ground disturbance. No take of burrowing owl is expected.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 164: Please clarify what the applicant considers avoidance when “practicable” for the purposes of the MBTA.

Response: Initial vegetation clearance will occur outside of bird nesting period. If any vegetation needs to be removed within the nesting period, that area will be surveyed for nests prior to disturbance. If any nests are located and determined to be active, agency required protocols will be followed.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 165: Please clarify the applicant's response to data requests 54-55 by:

- a. Discussing how bird nests detected were determined inactive (as opposed to temporarily vacant or in the nest building phase).
- b. Identifying the species associated with inactive nests (old nests lead to valid inferences on past and probable future nesting).
- c. Discussing the applicant's interpretation of why nests from such few species (i.e., 3) were detected during two years of survey efforts conducted during the avian breeding season.

Response:

- a. Nests were old and deconstructed or falling apart.
- b. Photos of nests were taken for identification, but most of the inactive nests were too degraded to determine species.
- c. The site does not support a high diversity or abundance of bird species. The vegetation is very sparse with extensive areas of desert pavement that is not suitable nesting habitat for most species onsite. Most of the active nests detected onsite were on the ground.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 166: Please provide support for the conclusion that the territories (or home ranges) of the three species identified can be reduced without affecting survivorship or nesting success, as CURE requested in data request 57.

Response: Of the three species with identified nests onsite, mourning dove is an abundant breeding resident, house finch is a common breeding resident, and lesser night hawk is an abundant breeder in the Imperial Valley (Patten *et al.* 2003). Because their nesting requirements are not highly specialized and there are suitable nesting locations throughout the region, the loss of nesting habitat associated with the Solar 2 project would not substantially affect the overall nesting success or survivorship of these species' populations in the region.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 167:

If project impacts are evaluated on the basis of the carrying capacity estimates in the AFC, or are being used to infer habitat quality, please:

- a. Indicate the data that was recorded in the field to achieve perceived abundance (e.g., relative abundance values, species lists by day).
- b. Clarify whether the use of frequency of observation to determine relative abundance accounted for varying detection rates among species (i.e., some species are elusive and hard to detect even when abundant).
- c. Clarify how encountering species throughout the site is a measure of abundance instead of distribution.
- d. Clarify the relationship between frequency of observation and relative abundance given that a species may exhibit low absolute abundance, but still be relatively abundant. For example, if the site has 10 individuals of species A and 50 individuals of species B, then species A is relatively less abundant *within* the site. However, if other sites only have five individuals of species A, then the species is relatively more abundant *among* other sites.
- e. Identify the surveyors that were capable of identifying all potentially occurring bird species by ear.
- f. Provide a species-specific response to CURE's initial data request 61 that asked the applicant to discuss the Project's relative significance on regional populations (including critical factors affecting those populations). Specifically, provide the analysis for the applicant's response that bird diversity and abundance are likely higher at other sites.
- g. Discuss the relevance of using carrying capacity estimates to infer site habitat quality given that higher quality sites may have fewer not more individuals.

Response:

- a. Surveyors were asked to document birds detected and their impression of their abundance during surveys. This information was then used to estimate approximate relative abundance.
- b. Yes, frequency of observation was one contributing factor.
- c. The detection of species and frequency of being encountered were used to measure abundance.
- d. Relative abundance relates to categories of abundance (rare, uncommon, common, abundant) for the area surveyed.
- e. All surveyors are experienced in visual and audible bird identification.
- f. This request is beyond the scope of review of this regulatory process. BLM has established ACECs and DWMA's that conserve substantial acreages of high quality habitat that benefit the common species of wildlife in the region. The low quality of the vegetation onsite is supported by the field biologists' impression that bird species abundance was lower than other more pristine habitats in the project vicinity.
- g. The logic of the question is not clear. It is generally accepted that extensive areas of undisturbed habitats are more valuable to regional

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populations than disturbed sites due to reduced forage capacity, reduced availability of suitable nest sites, and ongoing edge effects (weeds, non-native wildlife, human activities, noise, etc.) that degrade habitat quality.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 168: Please provide additional information demonstrating the site does not provide suitable habitat for the Colorado Desert fringe-toed lizard and explain the apparent discrepancy between the applicant's response and information presented in the AFC (i.e., on presence of fine, wind-blown sand).

Response: There are a few, small isolated dune areas located on the Solar Two site associated with some of the larger washes. However, there are no contiguous soft dune areas suitable for Colorado Desert fringe-toed lizards present on the site. No Colorado Desert fringe-toed lizard occupied habitat is known to occur within 10 miles of the project site.

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Data Request 169: Please clarify the relevance of the FTHL occupancy estimate. Specifically, please indicate whether the estimate is being used to assess Project impacts and appropriate mitigation measures.

Response: The FTHL occupancy estimate was provided per BLM request, likely to update local databases. The FTHL occupancy estimate is not being used to assess project impacts or determine mitigation measures. The entire site is presumed to be occupied by FTHL and suitable habitat and prey resources for FTHL occur throughout the site. Habitat mitigation for the entire project disturbance area is being considered.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 170:

If the occupancy estimate is being used to assess Project impacts or determine mitigation, please:

- a. Discuss how the applicant's surveys differed from the distribution monitoring protocol in Appendix 5 (i.e., were modified).
- b. Discuss the measures that were implemented to demonstrate survey personnel were competent at locating FTHLs (as specified in Appendix 5).
- c. Indicate whether data on disturbance and other variables of interest were recorded (as specified in Appendix 5).
- d. Provide copies of the distribution monitoring data sheets.
- e. Provide a copy of the applicant's FTHL survey plan and discuss any measures that were taken to ensure surveyors were effectively implementing survey techniques.

Response:

The occupancy estimate is not being used to assess project impacts or determine mitigation. For additional information regarding the occupancy estimate, please see the response to DR 169 above.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 171: Please provide the applicable information from the Range-wide Management Strategy that supports the applicant's statement that the 10 mitigation measures are only meant for small projects.

Response: The scale of the survey protocols and mitigation measures indicate that typical projects envisioned by the plan preparers are much smaller than the proposed project. The plan specifically states that "*The [mitigation] measures are to be modified to conform to the nature of the project.*" (page 60). The scale of the proposed project is much larger than any of the examples mentioned in the plan, which are on the order of 10s or 100s of acres rather than 1000s. The practicality of implementation is an important consideration for mitigation measures to be considered. The plan's suggested mitigation measures will be implemented where deemed practical and effective in attaining the goals and objectives of the plan.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 172: Please discuss the methods that were used to monitor avian mortality at the sites referenced in the applicant's response.

Response: There is no formal monitoring program for avian activity of any kind at the Solar Thermal Test Facility (Sandia) in Albuquerque, New Mexico, although the solar test site is in a migratory path for several bird species. That said, the solar test site, with a varying number of solar dishes of various sizes under test over the past thirty years, has engineers out observing the test field and working with these dishes on a daily basis. If bird mortality were an observed phenomenon at any time and with any of the hardware there, it would have been noted and recorded. According to Dr. Thomas Mancini, who is the Sandia manager of the concentrating solar power program, no bird deaths due to dish interference have been cited.

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Data Request 173: Please provide any additional data or information that supports the applicant's assertion that birds would not be injured or killed from Suncatchers at the SES Two Site, other than the anecdotal information supplied by the Solar Thermal Test Facility in Albuquerque, New Mexico.

Response: The information was provided based on personal observation by scientific and engineering personnel at the Sandia National Laboratory. No other data are available.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

- Data Request 174:** Please indicate whether land within the Project site is covered by the Yuha Desert Management Plan.
- a. If the answer to data request 174 is no, please support your answer by showing the Project site and plan area on a map.
 - b. If the answer to data request 174 is yes, please discuss the Project's compliance with the plan.

Response: The Project site is located within the study area for the Yuha Desert Management Plan (1985).

The Yuha Desert Management Plan "presents a reexamination of public land management within the Yuha Desert Study Area." As stated on page 1 of the Yuha Desert Management Plan: "The study area is located in southwestern Imperial County. Traversed by Interstate 8 and State Highway 98, the project areas lies between Old Highway 80 and the International Border. The eastern border abuts agricultural lands, while the western border parallels the Jacumba Mountains. The desert community of Ocotillo, California, lies just west of the study area."

While the Yuha Desert Management Plan study area encompasses several special designation areas, all are located outside the Project site. (The Yuha Basin ACEC Management Plan is located between Interstate 8 and Highway 98, south of the Project site. The Yuha Desert Wildlife Habitat Management Plan coincides with the ACEC but extends south to the International Border. Crucifixion Thorn Natural Area and Unusual Plant Assemblages is located within the boundary of the ACEC and the Habitat Management Plan. Mt. Signal Research Natural Area is located within the boundary of the Habitat Management Plan.) As stated in the Yuha Desert Management Plan, three non-specially designated areas were included within the study area, including: 1) an area that lies west of the HMP, 2) a segment between interstate 8 and Highway 80, and 3) a former Naval Reservation in the southeast of the study area.

The segment between Interstate 8 and Highway 80 coincides with the Project site. As stated in the Yuha Desert Management Plan, the portion between Interstate 8 and Highway 80 was included in the study area because: 1) impacts are similar to other parts of the Yuha, 2) resources are similar to other parts of the Yuha, 3) it contains a part of the Yuha Basin Discontinuous District, an archaeological site complex listed on the National Register of Historic Places and 4) the former shoreline of Lake Cahuilla, a giant prehistoric inland sea, passes through the area (the shoreline is a sensitive area due to the location of many archaeological sites along its length).

- a. Not Applicable
- b. Compliance with the Yuha Desert Management Plan is discussed on Page 5.9-21 of the Land Use section of the AFC. The following paragraphs supplement information provided in the AFC regarding the Project's consistency with the Yuha Desert Management Plan.

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Project Compliance with the Yuha Desert Management Plan.

The Yuha Desert Management Plan does not address renewable energy development within the study area; however two goals related to energy development and transmission were analyzed for the Project's compliance with the Yuha Desert Management Plan. These goals (which are listed on pages 44 and 45 of the Yuha Desert Management Plan) are: *Goal G. - Develop energy resources in an environmentally sound manner* and *Goal I. - Reduce impacts from electrical transmission lines and access roads*. In addition *Goal E.- Retain all lands within Federal ownership* was also evaluated for consistency with the Project.

Goal E. – Retain all lands within Federal ownership to ensure long-term protection of sensitive resources. Obtain private in holdings to further this goal.

Management actions specified to achieve this goal are to: 1) reject proposals for agricultural development and other disposal actions, and 2) Obtain private in holdings through purchase or exchange, where landowner is amenable.

The Project is expected to require a right-of-way for the development of a solar project on public lands and would not require BLM disposal of any lands within the study area/Project site. Therefore, the Project would be in compliance with Goal E. of the Yuha Desert Management Plan.

Goal G. - Develop energy resources in an environmentally sound manner

A management action of the Yuha Desert Management Plan specified to achieve this goal is to “remain consistent with existing ACEC and HMP planned actions regarding geothermal and oil and gas development.” In 1985 when the Yuha Desert Management Plan was published, potential for energy development (which was limited to geothermal or oil and gas development at the time) was virtually nil within the study area, so management prescriptions related to energy resources development were not reexamined by the Yuha Desert Management Plan. Implementation of Goal G. was expected to be completed through “established lease procedures” upon applicant submittal of a lease application.

Project compliance with Goal G. of the Yuha Desert Management Plan was initiated upon BLM's receipt of the Project's right-of-way application and Plan of Development. An analysis of the Project's environmental effects has been documented in the Project's Application for Certification. Analysis of the Project's environmental effects is currently undergoing further evaluation in the California Energy Commission's (CEC) facility certification process, which will result in a joint document that combines the CEC staff analysis with the BLM Environmental Impact Statement.

Goal I. - Reduce impacts from electrical transmission lines and access roads

Management actions outlined in the Yuha Desert Management Plan to achieve this goal include: 1) closing most access roads to general public use and 2) allowing transmission line maintenance on a case-by-case basis in the least impacting manner feasible (i.e., through construction measures that reduce effects to botany, cultural resources, and wildlife habitat).

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The Project is consistent with Goal I. of the Yuha Desert Management Plan because it would not require the opening of access roads to public use. Furthermore, the construction of the proposed transmission line in parallel to the existing transmission line within the BLM designated Utility Corridor "N," and would minimize disturbance effects to sensitive resources (botany, cultural resources and wildlife habitat) in the area of the Project through joint-use of access roads for construction and maintenance of the Project transmission line.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 175: Please indicate the biological resources of management concern in the management areas depicted in the figure referenced above. Please identify whether the Project has the potential to have an adverse effect on these biological resources of management concern (i.e., in addition to the already identified potential increase in raven abundance).

Response: Of the wilderness areas displayed on the referenced figure, the Yuha Desert Wildlife Management Area is shown in green directly south of the project. This DWMA is managed by the BLM and USFWS and is separated from the site by I-8. The proposed offsite transmission line occurs within the Yuha DWMA within the existing the BLM designated Utility Corridor "N".

The area shown as green hatched directly east of the project site was surveyed in connection with the Solar 2 Project and eliminated from the design footprint due to the presence of cultural resources. No other impacts to this area are proposed as part of the Solar 2 Project.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 176: Please discuss any informal consultation that has occurred as a result of Peninsular bighorn sheep being detected on the Project site. If consultation has not yet occurred, please discuss the anticipated schedule for consultation.

Response: BLM and the USFWS will be conducting an inter-agency consultation regarding this Project in the near future. Information has been forwarded to the USFWS. A list of threatened and endangered species for the project area has been requested from USFWS by BLM. It is expected that BLM will inform us in the near future when the inter-agency consultation will occur.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 177: Please specify the timing (i.e., order of activities) of fence installation in relation to pre-construction surveys, proposed wildlife mitigation measures, Project construction, and any other Project activities that may affect resident wildlife species.

Response: Construction BMPs and surveys would occur prior to ground disturbing activities within the Phase I areas. Vegetation clearing would occur during the bird non-breeding season. FTHL would be relocated prior to vegetation clearing and monitored for presence during initial ground disturbing activities after vegetation has been cleared. Surveys for burrowing owl would also occur prior to vegetation removal during the non-breeding season. Biological construction monitoring will be ongoing during project implementation.

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TECHNICAL AREA: BIOLOGICAL RESOURCES

Data Request 178: Please specify how the applicant intends to minimize entombment and other types of construction related mortality to wildlife for which clearance surveys have not been proposed.

Response: Loss of some burrow-occupying wildlife (e.g., common rodent species) that may inhabit the site will be unavoidable. Incidental loss of common species of wildlife is considered adverse, but less than significant.



**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
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**APPLICATION FOR CERTIFICATION
For the SES SOLAR TWO PROJECT**

Docket No. 08-AFC-5

PROOF OF SERVICE

(Revised 5/26/09)

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DECLARATION OF SERVICE

I, Angela Leiba, declare that on June 25, 2009, I served and filed copies of the attached Responses to CURE Data Requests, Part Two. 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:

[www.energy.ca.gov/sitingcases/solartwo]. The document has 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:

X sent electronically to all email addresses on the Proof of Service list;

X by personal delivery or by depositing in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list above to those addresses **NOT** marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

X 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.

Original Signed By:

Angela Leiba