Appendix N

Responses to Comments

APPENDIX N – Responses to Comments

Appendix N is organized as follows:

N.1 Introduction

N.2 Format of the Responses to Comments: This section describes the format and organization of the comments received on the DEIS and the responses to those comments.

N.3 Index of Comments Received: This section provides a list of the comments received on the DEIS, by a member of the public, agency, or organization, and lists the unique letter number for each comment letter.

N.4 Common Responses: This section provides consolidated responses for topics on which a number of similar and related comments were received.

N.5 Individual Responses to Comments: This section provides responses to individual comments for letters that contain substantive comments.

N.1 INTRODUCTION

A total of 147 comment letters were received during the public comment period for the DEIS. Forty-three comment letters received either stated support or opposition to the Project or certain aspects of the Project; or expressed thoughts or concerns, or provided information that was unrelated to the proposed Project. None of these comments provided any questions, concerns or information regarding the adequacy of the NEPA analysis, or methodologies and processes used in the DEIS. While both frequency and expression of intent are important to BLM and CPUC, they do not provide a basis that warrants any additional changes to the analysis (Section 6.9.2.1, BLM NEPA Handbook H-1790-1 Jan. 30, 2008 and CEQA Section 15088. The following letters fall into this group: 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 17, 18, 21, 22, 23, 24, 27, 34, 50, 57, 58, 68, 71, 78, 80, 87, 88, 91, 102, 113, 115, 117, 120, 133, 134, 135, 136, 140, 141.

NEPA requires all substantive comments - whether environmental or procedural in nature - to be addressed and attached to the FEIS (40 CFR 1503.4(b)). Individual responses for all substantive comments are provided in Section N.5. A number of the comments received on the DEIS discussed the same issues or environmental concerns. Rather than repeat responses, Common Responses, set forth in Section N.4, were prepared.

N.2 FORMAT OF THE RESPONSES TO COMMENTS

The comments received on the DEIS are organized by agency, organization, or member of the general public. Each comment letter or e-mail is assigned a unique number with each comment individually numbered as well. Individual comments and issues within each comment letter or e-mail are numbered individually along the margins. For example, comment 1-01 is the first substantive comment in Comment Letter 1; "1" represents the commenter; the "01" refers to the first comment in that letter. All comment letters are provided in Appendix M.

N.3 INDEX OF COMMENTS RECEIVED

Table N.3-1 lists all individuals, agencies, and organizations that provided written comments on the DEIS. As described above, each comment letter was assigned a unique number when it was received. This table is the same as Table 5-1, in the FEIS Section 5.0, Consultation, Coordination, and Public Participation.

Table N.3-1
Commenter on the Desert Sunlight Solar Power Project
Draft Environmental Impact Statement

Letter Number	Commenter	Letter Available in Appendix M, Page
1	Jeff Randall, Individual	M-5
2	Mary Zeiler, Individual	M-6
3	Supporters of Desert Sunlight Petition	M-7
4	Sign-in Sheet	M-17
5	Ali Baba Farzaneh, Individual	M-23
6	Bob Hargreaves, Individual	M-24
7	Coachella Valley Economic Partnership	M-25
8	Dennis Larney, Individual	M-26
9	Gerald Budlong, Individual	M-27
10	Graeme Donaldson, Individual	M-28
11	Kathy Gottberg, Individual	M-29
12	Larry McLaughlin, Individual	M-30
13	LR Sanders, Individual	M-31
14	Assembly Member V. Manuel Perez	M-32
15	Sign-in Sheet	M-34
16	Anco Blazev, Individual	M-39
17	Dale Jenneskens, Individual	M-42
18	Dan Allen, Individual	M-45
19	Native American Heritage Commission	M-47
20	Anco Blazev, Individual	M-52
21	George Hepker, Individual	M-53
22	George Hepker, Individual	M-54
23	Alan Beattie, Individual	M-55
24	Kim Bauer, Individual	M-57
25	Anco Blazev, Individual	M-58
26	Anco Blazev, Individual	M-60
27	Jim Turney, Individual	M-61
28	Cynthia Cox, Individual	M-62
29	Carol Gerratana, Individual	M-65
30	Cindy Zacks, Individual	M-66
31	Mearl A. Rose, Individual	M-68
32	Ramon Alviso Mendoza, Individual	M-71
33	R. Ploss, Individual	M-73
34	Beals Steve, Individual	M-76
35	Betsy Foran, Individual	M-78
36	Debbie Burgett, Individual	M-80
37	Eric Mueller, Individual	M-83
38	Gary Hunt, Individual	M-86
39	Jason Burnham, Individual	M-89
40	Les Starks, Individual	M-92
41	Richard Worthington, Individual	M-94
42	Wendy Hunt, Individual	M-96

Table N.3-1 (continued)
Commenter on the Desert Sunlight Solar Power Project
Draft Environmental Impact Statement

Letter Number	Commenter	Letter Available in Appendix M, Page
43	Jill Giegerich, Individual	M-98
44	Penny Kemp, Individual	M-101
45	Rebecca Bueller, Individual	M-103
46	Vicki Perizzolo, Individual	M-105
47	Barbara Buckland, Individual	M-109
48	Joanne Flory, Individual	M-111
49	Cynthia Anderson, Individual	M-114
50	Virgila Weeks Hawthorne, Individual	M-117
51	Alex Mintzer, Individual	M-118
52	Ernest Goiten, Individual	M-119
53	David Halligan, Individual	M-122
54	Karen Tracy, Individual	M-124
55	C.B Wolf, Individual	M-127
56	State of California, Public Utilities Commission	M-129
57	City of Indian Wells, California	M-237
58	College of the Desert	M-239
59	David Halligan, Individual	M-241
60	Cleona Jenneskens, Individual	M-243
61	Dale Jenneskens, Individual	M-244
62	Geo. Donaldson, Individual	M-245
63	John Beach, Individual	M-246
64	R&M Johnson, Individual	M-248
65	Rick Estes, Individual	M-252
66	Environmental Commons	M-253
67	John Beach, Individual	M-261
68	JoAnn Dean, Individual	M-262
69	Ron Brinkley, Individual	M-263
70	Walter Green, Individual	M-279
71	Michael Silvey, Individual	M-280
72	Bruce Ray, Individual	M-281
73	Celia Beauchamp, Individual	M-282
74	John Beach, Individual	M-283
75	National Parks Conservation Association	M-288
76	Shaun Gonzales, Individual	M-295
77	Karen Berry, Individual	M-303
78	Michele Mooney, Individual	M-307
79	William Eskin, Individual	M-308
80	B.E. Singer, Individual	M-310
81	Caltrans District 8	M-311
82	Individual (to remain anonymous)	M-314
83	JVIndividual	M-316
84	La Cuna de Aztlan Sacred Sites Protection Circle	M-317
85	Brendan Hughes, Individual	M-321
86	Diane Mossbager, Individual	M-322
87	Lorenzo Romero, Individual	M-323
88	Marian Livingood, Individual	M-324
89	Raymond Kelso, Individual	M-325
90	Suzanne Ragsdale, Individual	M-326
91	Tex Whitson, Individual	M-327

Table N.3-1 (continued)
Commenter on the Desert Sunlight Solar Power Project
Draft Environmental Impact Statement

Letter Number	Commenter	Letter Available in Appendix M, Page
92	Dennis Morrison, Individual	M-328
93	Defenders of Wildlife, Natural Resources Defense Council, Sierra Club	M-329
94	Jerry Grey, Individual	M-341
95	Janell Harder, Individual	M-342
96	Cynthia Green, Individual	M-343
97	Warren Dean, Individual	M-345
98	Edith Arizmendi, Individual	M-346
99	Gene Oliphant, Individual	M-347
100	Jonathan Levin, Individual	M-348
101	Ken and Pattie Stamp, Individual	M-349
102	Michael Rhoades, Individual	M-350
103	South Coast Air Quality Management District	M-351
104	Center for Biological Diversity	M-357
105	Citizens for the Chuckwalla Valley	M-393
106	U.S. Environmental Protection Agency	M-422
107	First Solar	M-440
108	U.S. Fish and Wildlife Service	M-473
109	Johnney/Timothy Coon/Anderson, Individual	M-479
110	Kevin Emmerich, Individual	M-480
111	Kaiser Ventures LLC	M-515
112	Laura Cunningham, Individual	M-520
113	Mary Zeiler, Individual	M-532
114	National Park Service	M-534
115	Patrick Poole, Individual	M-543
116	The Wilderness Society	M-545
117	Victor Stewart, Individual	M-557
118	Western Lands Project	M-558
119	Chris Clarke, Individual	M-562
120	enXco	M-566
121	Jared Fuller, Individual	M-568
122	Western Watersheds Project	M-569
123	Barbara Daddario, Individual	M-577
124	Claudia Sall, Individual	M-578
125	Riverside County Fire Department	M-581
126	Renee Castor, Individual	M-584
127	Southern California Edison	M-587
128	Southern California Edison	M-611
129	Metropolitan Water District of Southern California	M-614
130	Chris Crow, Individual	M-626
131	Paul Smith, Individual	M-627
132	Rebecca Unger, Individual	M-628
133	Southern California Desert Video Astronomers	M-629
134	Tammie Dye, Individual	M-633
135	Richard DeLashmit, Individual	M-634
136	Ken Statler, Individual	M-635
137	Requests to not publish, Individual	M-638
138	Riverside County Planning Department	M-640
139	Diana Millikan, Individual	M-689
140	Lois Donaldson, Individual	M-690

Table N.3-1 (continued)
Commenter on the Desert Sunlight Solar Power Project
Draft Environmental Impact Statement

Letter Number	Commenter	Letter Available in Appendix M, Page
141	Ed and Carol Schlauch, Individual	M-691
142	"We Support Desert Sunlight" petition	M-692
143	Ron Brinkley, Individual	M-697
144	Claudia Sall, Individual	M-706
145	Stephen J Wright, individual	M-711
146	Colorado River Board of California	M-713
147	Department of the Navy	M-718

N.4 COMMON RESPONSES

A number of the comments received on the DEIS discussed the same issues or environmental concerns. Rather than repeat responses, common responses identified here and set forth below were prepared:

Common Response N.4.1: Purpose and Need

Common Response N.4.2: Wilderness

Common Response N.4.3: Dark Skies

Common Response N.4.4: Adequacy of Key Observation Points and Simulations

Common Response N.4.5: Recirculation of DEIS

Common Response N.4.6: Adequacy of Analysis

Common Response N.4.7: Alternatives Analyzed

Common Response N.4.8: Property Value

Common Response N.4.9: Cadmium Exposure

Common Response N.4.10: EMF Exposure

Common Response N.4.11: Construction Employment

N.4.1 Purpose and Need

Summary of Issues Raised

Several commenters suggest that the BLM's statement of Purpose and Need is too narrow.

Response

As explained in Section 6.2.1 of the BLM's NEPA Handbook, a carefully crafted purpose and need statement can "increase efficiencies by eliminating unnecessary analysis and reducing delays in the process." The statement of purpose and need dictates the range of alternatives, because action alternatives are not "reasonable" if they do not respond to the purpose and need for the action. As correctly noted in several comments on the Project, the narrower the purpose and need statement,

the narrower the range of alternatives that must be analyzed; the converse also is true. BLM has discretion in defining the purpose of and need for the proposed action (40 CFR 1502.13). Several comments requested that the BLM substantially expand its statement to address more broad (and less specific) purposes in order to allow for consideration of a broader range of alternatives. BLM's purpose and need for the proposed action is reasonable and is not inappropriately narrow, and a reasonable range of alternatives were evaluated based on BLM's defined purpose and need.

BLM's purpose and need for the proposed action, as stated in Section 1.2.1 of the FEIS, is based on two key considerations: (i) the potential action the BLM could or would take on the specific proposed action; and (ii) the consideration of amending the CDCA Plan of 1980, as amended. The primary action that BLM is considering is in response to a specific ROW grant application from the Applicant to construct and operate a specific solar project located on federal lands managed by the BLM. As a result, the BLM determined that a key purpose of this project was to determine whether to approve, approve with modifications, or deny that ROW application for the 550 megawatt (MW) DSSF. A statement of this breadth led the BLM to consider two additional "build," or "action," alternatives on the same site, one no action alternative (No Action Alternative 4) and two no project alternatives (Alternatives 5 and 6) pursuant to which the CDCA Plan would be amended but the DSSF would not be approved (see FEIS Chapter 2).

The BLM declined requests to expand the statement to focus on the "need to generate greater amounts of electrical energy from renewable energy sources so that dependency on carbon based fuels is reduced" because it is outside the purview of the BLM. The need for increased energy from renewable sources is not the responsibility of the BLM. However, the BLM can respond, within the context of specific directives under which it operates, to those needs by considering ROW grant applications for projects that would produce renewable energy on BLM-administered lands. As a result, the BLM purpose for the Project responds in part to the specific directives related to renewable energy production that are summarized in the DEIS Section 1.3. These directives require the BLM to act expediently in increasing the production of nonrenewable energy within the bounds of its other authorities regarding the management of BLM-administered lands. The BLM is not in the business of developing and operating energy production facilities; its responsibilities are to consider and to approve, approve with modification, or deny issuance of a ROW grant to any qualified individual, business, or government entity and to direct and control the use of rights-of-way on public land in a manner that: (i) protects the natural resources associated with public lands and adjacent lands, whether private or administered by a government entity; (ii) prevents unnecessary or undue degradation to public lands; (iii) promotes the use of rights-of-way in common considering engineering and technological compatibility, national security, and land use plans; and (iv) coordinates, to the fullest extent possible, all BLM actions with state and local governments, interested individuals and appropriate quasi-public entities.

As directed by Secretarial Order 3285A1, the BLM has identified renewable energy projects as a priority throughout the lands it manages. As a result, the BLM is considering ROW grants for various renewable energy projects throughout California and other western states. Each of these projects is considered by the BLM on its own merits and with consideration of the impacts of the specific project on a specific site. Therefore, the statement of purpose and need for each project, including the proposed DSSF, is specific to each project within the broader scope of the directives prioritizing renewable energy development on federally managed lands. (The DEIS considers other applications for energy projects in the cumulative impacts analyses provided in DEIS Chapter 4.)

The BLM believes that the purpose and need for the Project, as discussed in DEIS Chapter 1, is consistent with the requirements of Title V of FLPMA and the directives described above, and satisfies the requirements of NEPA. Therefore, the purpose and need for this project was neither revised in response to these comments nor replaced wholesale in favor of replacement statements proposed in comments.

In addition to the BLM's purpose and need for the proposed action provided in Section 1.2.1 of this FEIS, Section 1.2.4 provides a statement of the CEQA project objectives for the Red Bluff Substation required by CEQA Guidelines Section 15124(b) as:

- Respond to interconnection requests as part of the LGIP from generators in the Desert Center area by constructing a substation to interconnect with the DPV 500 kV interconnection line.
- Provide safe and reliable electrical service consistent with the North American Electric Reliability Corporation (NERC), Federal Energy Regulatory Commission (FERC), CAISO, and SCE's planning design guidelines and criteria;
- Meet project need while minimizing environmental impacts; and
- Meet project need in accordance with the Large Generation Interconnection Agreement.

Under CEQA, the statement of objectives should include the underlying purposes of the project, and it should be clearly written to guide the selection of alternatives to be evaluated in the environmental document (CEQA Guidelines Section 15124(b)). "Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives…" (CEQA Guidelines Section 15126.6(c)). The case law makes clear that (provided the objectives of the proposed project are not synonymous with the proposed project, i.e., the objectives cannot include "development of the proposed project") lead CEQA agencies are given broad discretion to determine the objectives of a project for CEQA purposes, and that such objectives will often and appropriately be narrower when the project at issue is proposed by a private applicant rather than by the Lead Agency. *See, e.g., Sierra Club v. County of Napa*, 121 Cal.App.4th 1490 (2004) (upholding agency's reliance on project applicant's objectives to narrow scope of alternatives and ultimately reject reduced-scale alternative as infeasible based on its frustration of project objectives); *Sequoyah Hills Homeowners Association v. City of Oakland*, 23 Cal.App.4th 704 (1993).

Section 1.2.4 (CEQA Objectives) of the FEIS provides a statement of project objectives as required by CEQA. It provides the underlying purpose of the Red Bluff Substation, to respond to interconnection requests as part of the Large Generator Interconnection Plan (LGIP) from generators in the Desert Center area by constructing a substation to interconnect with the DPV 500 kV transmission line. These CEQA objectives were modified by the BLM from First Solar's stated project objectives in order to ensure they were clear, yet broad enough to not inappropriately narrow the scope of alternatives considered in the FEIS. Although SCE proposes to construct the Red Bluff Substation in response to interconnection requests from Desert Sunlight Holdings LLC as part of the LGIP process, the specific construction of the Red Bluff Substation was not identified in the CEQA objectives.

The discussions of alternative transmission line routes and substation layouts were focused on alternatives to the project or its location that are capable of avoiding or substantially lessening any

significant effects of the project, even if these alternatives would impede to some degree the attainment of the project objectives, or would be more costly (CEQA Guidelines Section 15126.6(b)).

N.4.2 Wilderness

Summary of Issues Raised

1. *Wilderness Experience*:

Due to the close proximity of the Project Area to Joshua Tree Wilderness, and general proximity to Chuckwalla Mountains and Palen-McCoy Wilderness areas, a number of Wilderness Visitor experience issues were raised. Disruption to solitude values and visual intrusion were the primary concerns, including the impact of facility lighting on night skies. Fugitive dust and noise in the wilderness during the construction phase were also raised.

2. *Wildlife:*

Concerns were raised about potential negative impacts of the Project to wildlife and wildlife corridors near and around Joshua Tree National Park, and Joshua Tree Wilderness.

3. *Water Quality*:

General issues over potential negative impacts to water quality near and around Joshua Tree National Park and Joshua Tree Wilderness were raised.

Responses

1. *Wilderness Experience*

To evaluate potential impacts from the Project on the wilderness visitor experience, it is important to highlight two pieces of federal legislation: the Wilderness Act of 1964 and the California Desert Protection Act of 1994.

Wilderness Act

Section 2(c) of the Wilderness Act of 1964 [Public Law 88-577], which defines designated wilderness areas, was referenced directly and indirectly by commenters. This section of the Act includes the following definitions:

> *"……which is protected and managed so as to preserve its natural conditions and which*
>
> *(1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable;*
>
> *(2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation;*
>
> *(3) has at least five thousand acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and*
>
> *(4) may also contain ecological, geological, or other features of scientific, educational, scenic, or historical value."*

California Desert Protection Act

The California Desert Protection Act of 1994 [CDPA], designated Chuckwalla Mountains and Palen-McCoy Wilderness Areas. Joshua Tree Wilderness was first designated in 1976 [Public Law 94-567], and the CDPA expanded Joshua Tree Wilderness by designating the areas around the Project area as wilderness. This CDPA specifically addressed the issue of buffer zones:

> *"The fact that nonwilderness activities can be seen or heard within a wilderness shall not, of itself, preclude such activities or uses up to the boundary of the wilderness area [Public Law 103-433, Section 103(d)]. The Act further states that "nondesignated wilderness **within** Joshua Tree [Wilderness] should receive statutory protection pursuant to the Wilderness Act [Public Law 103-433, Section 401-5]."*

Discussion

Under the aforementioned federal acts Joshua Tree, Chuckwalla Mountains, and Palen-McCoy Wilderness Areas were established to protect the unique values contained within such boundaries. Desert Sunlight Solar Project, in itself, does not physically change the natural condition or values for which each Wilderness area was designated. In addition, the Project does not change the opportunity for visitors to experience solitude or primitive unconfined type of recreation *within* those wilderness areas.

It is recognized, however, that adjacent land uses, which could be impacted by the project, would have important impacts on the wilderness experience or values via noise, visual disturbances and disruption of wildlife corridors.

1. *Wilderness Experience*

The Project Area would be within the viewshed of some portions of these three wilderness areas. The degree of visual impact would depend on the viewing position. There is already existing infrastructure within the viewshed, as demonstrated in Figures 4.16-8 and 4.16-9 (Viewshed Analysis: Proposed Action and Alternate Action). The construction of this Project would add to the infrastructure visible from these wilderness areas. Figure 4.14-3 shows the current view of the Project Study Areas from Joshua Tree Wilderness, near the foot of the Coxcomb Mountains. For comparison, a second view in Figure 4.14.3 is a visual simulation depicting the Desert Sunlight Solar Farm from that viewpoint. The vantage points from which the Project would be most visible would be elevated viewpoints that offer panoramic vistas for backcountry hikers. In this context, even though the solar farm covers a large area, it would not dominate the view as a whole. The views would remain dominated by the more striking visual features such as the rugged mountain

While visitor numbers within each of these areas are unknown to NPS and BLM, visitation is relatively low due to the lack of developed access and predominately steep terrain. The opportunities for solitude and a primitive and unconfined type of recreation remain relatively unchanged in each wilderness area, even though additional infrastructure would be added to those already existing in the viewshed. The typical backcountry experience within each wilderness area will take place out of sight and sound of the Project Study Area. A detailed discussion of the visual impacts and mitigation, including nighttime lighting, is found in Section 4.16-Visual Resources. Note that nighttime lighting is also addressed in Common Response N.4.3.

The FEIS acknowledges that fugitive dust from construction would create a temporary visual distraction for some users of Joshua Tree Wilderness during the construction phase. A detailed discussion of fugitive dust and mitigation measures is included in Section 4.2, Air Resources. The FEIS also acknowledges that impacts of night lighting from construction and operation of the Solar Farm Layouts B and C would be significant and unavoidable (under the CEQA significance criteria; see Section 4.16.3 under "*Impact VR-3: Light and Glare")*. Mitigation Measure VR-4 has been modified in the FEIS to ensure that the effects of sky glow do not exceed the thresholds for light pollution set by the National Park Service for Joshua Tree National Park (see Common Response N.4.3, below).

In addition, noise levels during the construction phase of the Project will vary depending on the location of the wilderness visitor. Noise levels immediately adjacent to the Project Area are determined to be acceptable levels, within Riverside County's normally acceptable range for both rural residential land uses and open space, which are both 45 dBA during the daytime and at night. A detailed discussion of the audible impacts and mitigation is found in 4.10, Noise and Vibration.

2. *Wildlife*

The FEIS recognizes direct, indirect, and cumulative impacts to wildlife from the proposed action and alternatives in the Section 4.4, Wildlife. The discussion of impacts to wildlife in Joshua Tree National Park has been clarified in the FEIS (Section 4.4), and direct impacts to intermountain wildlife movement are specifically addressed. The FEIS describes that construction of the Solar Farm would create obstacles to intermountain and localized movements of wildlife including, but not limited to, Nelson's bighorn sheep, desert tortoise and Palm Springs round-tailed squirrel. Potential for intermountain wildlife movement among Joshua Tree National Park, Joshua Tree Wilderness and Chuckwalla Mountains Wilderness would be altered. Construction of the Gen-Tie Line alternatives and access roads would minimally affect movement of wildlife among these open space areas. Impacts to wildlife movement have been clarified, and are considered to be less than significant (under the CEQA significance criteria) in the Final EIS, including wildlife movement through Joshua Tree National Park.

Additionally, Section 4.4.9, as revised in the FEIS, details a cumulative impact analysis of project impacts to wildlife from the project:

> *In addition to the intermountain habitats*, desert dry wash woodlands are likely important areas for wildlife movement within Project locations and would be directly impacted by construction. Exclusion fencing surrounding the Solar Farm and Red Bluff Substation would also directly impact the movement of wildlife in the region. Finally, impacts of the Project on the Chuckwalla DWMA and Chuckwalla CHU could adversely impact important movement corridors for the desert tortoise and other wildlife species in these areas. *In consideration of the existing and future development within DWMAs, CHUs, desert washes, and other regionally important movement corridors, project Alternatives 1, 2, and 3 would contribute to cumulative impacts on wildlife movement in these areas.* However, due to locations of project facilities under Alternatives 1 and 3, and the addition of a mitigation measure for Alternative 2, the Project would not have a cumulatively considerable contribution to this impact.

3. *Water Quality*

There are no permanent water bodies or Waters of the United States in the Project Study Area and only intermittent surface water flows occur. No impacts on surface water quality are expected. The potential for groundwater to be impacted by vertical transport of contaminants to the water table by surface water infiltration is expected to be very low. The potential for water quality impacts would be further reduced by implementation of Construction Best Management Practices. A detailed discussion of water quality impacts and mitigation is found in Chapter 4.17, Water Resources. Impacts to water quality in Joshua Tree National Park would not occur as a result of construction, operation, or decommissioning of the proposed Project.

Section 4.17.2 of the FEIS clarifies that, under CEQA, the proposed Project would have a significant impact on water resources if it would have the specific effects defined in the nine significance criteria set forth therein. Section 4.17 (Water Resources) of the DEIS analyzes Alternatives 1, 2, and 3 against these nine CEQA impacts criteria, including detailed CEQA significance determinations. Impacts to water quality on Joshua Tree National Park from the proposed Project would be less than significant under the CEQA significance criteria.

N.4.3 Dark Skies

Summary of Issues Raised

These comments raise concerns about the Project's effect on the darkness of the night sky (i.e., light pollution) generally and, in particular, for users of the Joshua Tree National Park, located as close as 1.3 miles west of the proposed solar facility. Many of the commenters question the adequacy of the DEIS analysis related to light, and request additional details on the level of nighttime lighting needed for construction, operation and maintenance of the DSSF.

Response

Description of the Existing Nighttime Light Environment

The DEIS describes the area's value in terms of the high quality of its nighttime skies (Sections 3.16 and 4.16). This is attributable to the scarce and scattered nature of existing light sources in the surrounding area and the prevalence of federally administered land in the region, which limits opportunities for development. As briefly stated in Section 4.16.3, existing light sources in the Chuckwalla Valley are provided by motorists on I-10. Existing light sources also include street lamps, residences, and other commercial/service land uses in the communities of Desert Center and Lake Tamarisk; lighting associated with the former Desert Center Airport (now a private special-use airport); motorists on local roads; and widely scattered homesteads on private land along Kaiser Road, Desert Center/Rice Road, and Eagle Mountain Road. Despite the presence of these existing light sources, the area remains highly valued for the quality of its night sky.

Clarifications on Project-Related Lighting Requirements

On January 5, 2011, the Project Applicant responded to a data request to clarify the lighting footprint of the DSSF (First Solar Inc. 2011). While providing additional details, its response was generally consistent with the description on lighting requirements in Chapter 2 of the DEIS.

During construction, dusk-to-dawn security lighting would be required for the construction staging areas, parking area, construction office trailer entries, site access points, and the security guard booth. Most of these areas would be concentrated on a 10 to 20 acre area on the southwestern corner of the 3,912 acre site (see Figure 2-30). Staging areas would be 8 acres each, scattered at four locations across the site. Lighting is not planned for typical construction activities because construction activities would occur primarily during daylight; however, if required, any lighting would be limited to that needed to ensure safety and would be temporary. Security lighting during operations would be limited to shielded, down-directed, area-specific lighting for the operations and maintenance (O&M) facility, on-site substation, visitor center, main entrance gate, and security guard booth. Service lighting would be placed in key safety-sensitive areas, such as the switchyard of the on-site substation. Service lighting would be provided by floodlights, which would be controlled by a local switch or lighting contactor and would only be used during the course of maintenance and emergency activities. Temporary portable service lighting could be used occasionally in other portions of the solar farm for O&M activities.

To clarify some of the Project's lighting requirements, Section 2.2.3 of the DEIS has been modified as follows:

> During operations, lighting would be limited to shielded area-specific lighting for security purposes for the O&M facility and the on-site substation. Power for the lights would come from the on-site substation and/or the existing electrical distribution service*. Service lighting would be placed in key safety-sensitive areas, such as the switchyard of the on-site substation.* The level and intensity of lighting during operations would be the minimum needed for security and safety purposes. *Security lights would use motion sensor technology* that would be triggered by movement at a human's height during maintenance or emergency activities.

As described above, the lighting footprint of the Project during construction and operation would be largely confined to a small area on the southwestern corner of the solar farm. The project area as a whole would never be flooded with light. While it is not feasible to totally eliminate the amount of back-reflected light from shielded, down-directed lamps, the presence and extent of nighttime O&M lighting would not be substantially out of character with other existing lighting sources found scattered throughout the Chuckwalla Valley. As such, the Project is likely to represent a minor addition to the total nighttime light environment. Detailed information on the location, intensity and type of light sources will be specified in the lighting plan to be developed during the Project's final design phase, but the applicant has indicated that the lighting would be shielded and confined to the site, and only used in areas needed for safety and security. Further, Mitigation Measure MM-VR-4 in the DEIS, as modified in response to these comments (see below), provides performance standards to be met in the development and implementation of the lighting plan.

Adequacy of Analysis in the DEIS

BLM's Visual Resource Management Policy is the agency's implementation of legal requirements for managing scenic resources, established through NEPA (1969) and FLPMA (1976). A Visual Resource Management (VRM) system has been developed by the BLM to apply a standard visual assessment methodology to inventory and manage scenic values on lands under its jurisdiction. This is the methodology used in the DEIS to identify and analyze visual resource impacts of the Project. As indicated in DEIS Section 3.16, this method focuses on a landscape's intrinsic visual quality, the

extent to which it is visible, and the level of public concern to define its visual value. The VRM system requires assessment of the visual contrast of a project within the affected landscape, but does not require an assessment of a project's affect on night skies. Nevertheless, in cooperation with the National Park Service (NPS) and in response to these comments, Mitigation Measure MM-VR-4 has been modified as follows to incorporate additional standards to minimize light pollution.

> Mitigation MM-VR-4: Lighting Control. Consistent with safety and security considerations, the Applicant and SCE shall design and install all permanent exterior lighting and all temporary construction lighting such that a) lamps and reflectors are not visible from beyond the Solar Farm site, including any off-site security buffer areas; b) lighting shall not cause excessive reflected glare; c) direct lighting shall not illuminate the nighttime sky, except for required FAA aircraft safety lighting (which shall be an on-demand, audio-visual warning system that is triggered by radar technology); d) illumination of the Project and its immediate vicinity shall be minimized; *e) skyglow caused by Project lighting will be avoided, and f) the plan shall comply with local policies and ordinances. All permanent light sources shall be below 2,500 Kelvin color temperature (warm white) and shall have cutoff angles not to exceed 45 degrees of nadir. All lights, temporary and permanent, are to be fully shielded such that the emission of light above the horizontal will be prevented. The Applicant and SCE shall submit to the BLM and CPUC for review and approval a Lighting Mitigation Plan that includes the following:*
>
> - *Specification that LPS or amber LED lighting will be emphasized, and that white lighting (metal halide) would (a) only be used when necessitated by specific work tasks, (b) not be used for dusk-to-dawn lighting, and (c) would be less than 2500 Kelvin color temperature;*
> - *Specification and map of all lamp locations, orientations, and intensities, including security, roadway, and task lighting;*
> - *Specification of each light fixture and each light shield;*
> - *Total estimated outdoor lighting footprint, expressed as lumens or lumens per acre;*
> - *Definition of the threshold for substantial contribution to light pollution in Joshua Tree National Park, in coordination with the Night Sky Program Manager (see below);*
> - *Specifications on the use of portable truck-mounted lighting;*
> - Lighting design shall consider setbacks of Project features from the site boundary to help satisfy the lighting mitigation requirements;
> - Light fixtures that are visible from beyond the Project boundary shall have cutoff angles sufficient to prevent lamps and reflectors from being visible beyond the Project boundary, except where necessary for security;
> - *Specification of m*otion sensors *and other controls to* be used, especially for security lighting;
> - Surface *treatment specification that will be employed* to minimize glare *and skyglow*;

- *Results of a Lumen Analysis (based on final lighting plans), in consultation with the NPS Night Sky Program Manager (Chad Moore – (970) 491-3700), in order to determine the extent of night lighting exposures in the surrounding NPS lands. If the lighting exposure on NPS lands exceeds the allowable threshold (which is to be determined in consultation with the NPS Night Sky Program Manager), additional control measures will be instituted to reduce the lighting exposures to levels below the action threshold; and*

- *Documentation that the necessary coordination with the NPS Night Sky Program Manager has occurred.*

The preparation and execution of a lighting mitigation plan as described above would ensure that the lighting requirements of the proposed action and alternatives do not substantially contribute to light pollution in the region and for backcountry hikers in surrounding wilderness. Further, Section 4.2, Air Resources, concludes that the net change in wind erosion as a result of the Project would be minor, and would not be detectable by visual observation. The air resources section also concludes that changes in night sky visibility due to project-related fugitive dust would be minor. Fugitive dust emissions during construction of Project facilities would occur primarily during daytime hours. The applicant would implement a dust control plan including the use of dust suppressants during facility construction. Airborne dust generated from construction sites would be widely dispersed and greatly reduced in concentration by nighttime hours. Construction activity would be phased across the Solar Farm site over a 26-month period, limiting the amount of disturbed area that could produce fugitive dust from wind erosion at night. Development of the Project would result in only a small increase in wind erosion potential compared to natural conditions.

N.4.4 Adequacy of Key Observation Points (KOPs) and Simulations

Summary of Issues Raised

Commenters raised concerns about the adequacy of key observation points (KOPs) used to simulate the DSSF into existing views. Several commenters are particularly concerned about the lack of visual simulation from high-elevation portions of surrounding wilderness and Joshua Tree National Park.

Response

The visual impact assessment of the DSSF focuses on the most critical viewpoints, or KOPs. The intent of establishing KOPs is to visualize the contrast created by the proposed action from locations most representative of how the public perceives the affected landscape. The "public" may include highway travelers, travelers on local roads, off-highway vehicle users, or dispersed recreational users in surrounding wilderness areas. The sensitivity of these diverse user groups to changes in the landscape are influenced by a number of factors, including how prominent the view of the proposed project is (in terms of scale, distance and angle of observation), the number of affected viewers, the duration that viewers are exposed to the view, and whether the viewer groups are aware of their surroundings or are expectant of high-quality views.

The KOPs used in the DEIS were selected with the above referenced criteria in mind, focusing on well-traveled roadways, population centers (Lake Tamarisk and Desert Center) and adjacent special designation areas. While potentially affected viewers would also include wilderness users in high-elevation areas of Joshua Tree National Park as well as some residences on private land, simulations

of the DSSF from these locations were not included based on the low number of affected viewers. Visitor use in the wilderness areas, while unknown by NPS and BLM, is likely to be low due to lack of developed access and steep terrain. Further, simulation from private property lines is considered inappropriate because the only affected viewers would be the owners, guests or leasers of the property.

However, lack of project simulations from certain vantage points does not preclude an analysis of potential visual impacts. As it is not feasible to include vantage points for all potentially affected viewers, KOPs are intended to be representative; meaning potential effects of the proposed project from other vantage points can be estimated from existing simulations by extension or proxy. For example, views of the proposed project from nearby locations are likely to be similar in the degree of contrast to the simulation from KOP 3 (Figure 4.16-4). Conversely, views of the DSSF from middleground or background zones are shown from KOPs 1, 2 and 4, and are likely to be similar from other middleground/background vantage points at similar elevations.

However, the DEIS has been revised to provide a more in-depth discussion of the potential effect of the proposed action and alternatives on views from elevated vantage points in surrounding wilderness, including Joshua Tree National Park. To identify backcountry wilderness users as a small, but noteworthy user group, the last paragraph of Section 3.16 has been modified, as follows:

> The ROI is surrounded by the scenic landscapes of Joshua Tree National Park (including the Joshua Tree Wilderness Area) and Chuckwalla Mountains Wilderness Area. The proposed Project is over 1.5 miles from the closest Wilderness Area. It is important to note that the portions of Wilderness Areas closest to the proposed Project have landscape characteristics that more closely resemble the proposed Project area than most of the Wilderness Area. Additionally, use of the surrounding mountains by dispersed recreational users is low *due to the general lack of visitor serving facilities, developed access, permanent natural water sources and the steep terrain. While use levels in these areas are low, the remote and isolated character of the landscape and the access to unencumbered, panoramic views of the region are attributes that are highly valued by its users. As such, these users are likely to be highly sensitive to visual changes in adjacent landscapes that are visible from the wilderness areas*.

In addition, the following discussion of potential impacts to wilderness areas and Joshua Tree National Park has been added to Section 4.16.3, before the heading titled "Summary of Construction Impacts":

> ***Visual Impacts for users of BLM Wilderness Areas and Joshua Tree National Park***
>
> *Construction of SF-B, GT-A-1, and Red Bluff Substation would also affect views of the Chuckwalla Valley from adjacent wilderness areas (Chuckwalla Mountains Wilderness, Joshua Tree Wilderness, and Joshua Tree National Park), particularly from elevated viewpoints within the Project's viewshed (see Figures 4.16-8 and 4.16-9). KOP 2 provides a low-elevation view from the boundary of Joshua Tree Wilderness, which as discussed above indicates a weak to moderate contrast within the landscape. This is due in large part to the effect of perspective foreshortening, which reduces the apparent size and scale of the Project due to a low elevation difference and the narrow angle of view. While elevated/mountainous portions of the surrounding wilderness are further removed in distance, the increased elevation difference would cause the size and shape of the DSSP to become increasingly apparent. As viewed from higher elevations, the level of contrast in form, line and texture would increase significantly; but this increase in contrast would be tempered*

by a decreased dominance of the Project within the affected views. As vantage points increase in elevation and distance, views become increasingly regional and panoramic, thereby decreasing the portion of view affected by the proposed Project.

However, from the elevated vantage points in Joshua Tree Wilderness (Eagle Mountains to the west and north and Coxcomb Mountains to the east), with their open, unobstructed, and panoramic views, the proposed Project would appear spatially prominent and central to the views of the northern Chuckwalla Valley. From these locations, viewers would observe a high level of visual contrast between the proposed Project and the surrounding desert basin and mountain landscape. The Project would appear co-dominant with the other prominent landscape features (desert basin and surrounding mountains). The overall visual change would be moderate-to-high, and in the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact on viewers in Joshua Tree Wilderness would be substantial. Construction-related dust plumes would be controlled using dust palliatives and limiting vehicle speeds, as described in the air resources analysis in Section 4.2. Light pollution would be minimized as described in Mitigation MM-VR-4, lighting control.

This additional analysis is considered applicable to construction, operation, and decommissioning impacts as well, and would not be substantially different for the other action alternatives. As such, appropriate references to this discussion have been added to the Final EIS text for O&M and decommissioning impact discussions for each alternative. The CEQA analyses have also been updated accordingly. To acknowledge wilderness users as a viewer group, the fourth paragraph of the cumulative impact discussion in Section 4.16.9 has been modified, as follows:

> The proposed Project would have significant and permanent adverse impacts on visual resources. Due to their type and location, the future foreseeable projects are expected to have impacts similar to those of the proposed Project; consequently, cumulative adverse impacts on visual resources would be significant and permanent. The cumulative impacts would involve the conversion of natural desert landscapes to landscapes with prominent industrial character (complex industrial forms and lines and surface textures and colors not found in natural desert landscapes). *Due to the number and extent of projects in the cumulative scenario, visual disturbances would dominate views of the Chuckwalla Valley from elevated vantage points (e.g., Joshua Tree National Park), resulting in a strong contrast with the existing visual environment.* Viewers within the I-10 corridor*, as well as dispersed recreational users of surrounding wilderness areas,* would witness industrial landscapes and activities that are out of character with the desert landscape. Mitigation (such as MM-VR-1 through MM-VR-6 and other forms of mitigation) to minimize the sprawl of an industrialized landscape along the surface of the I-10 corridor are available to reduce adverse unavoidable cumulative impacts on visual resources. *Nonetheless, the proposed Project's contribution to visual impacts would be cumulatively considerable.*

N.4.5 Recirculation of DEIS

Summary of Issues Raised

1. Some commenters suggest that the DEIS should be recirculated as a Supplemental DEIS because it failed to clearly identify the California Desert Conservation Area (CDCA) Plan Amendment as part of the project being evaluated and did not provide the specific wording for the proposed Plan Amendment.

2. Other commenters suggest that other parts of the CDCA Plan may need to be amended, that the Purpose and Need is "impermissibly narrow, and that BLM must revise and re-circulate the DEIS." Many of the recommendations for recirculation were in the context of comments about additional or substitute information that commenters requested be included (e.g., additional studies, revised characterization of environmental setting/conditions, revised statement of project objectives, consideration of additional alternatives) in the EIS.

Response

NEPA Guidance on Recirculation. According to Section 5.3 of the BLM's NEPA Handbook, supplementing an EIS is required only in the following limited circumstances:

1. When substantial changes to the proposed action are made and are relevant to environmental concerns (40 CFR 1502.9(c)(1)(i));

2. When a new alternative is added that is outside the spectrum of alternatives already analyzed (see Question 29b, CEQ Forty Most Asked Questions Concerning CEQ's NEPA Regulation, March 23, 1981); and

3. When there are new significant circumstances or information relevant to environmental concerns and have bearing on the proposed action or its effects (40 CFR 1502.9(c)(1)(ii)).

No substantial changes to the proposed action have been made, no new alternatives have been added and no new significant circumstances or information relevant to environmental concerns have been identified. Accordingly, supplementation or recirculation of the DEIS is not required.

CEQA Guidance on Recirculation. Because this EIS may be used by the California Public Utilities Commission in support of its decision on SCE's Red Bluff Substation, recirculation must also be considered under CEQA. Under CEQA, if significant new information is added to an EIR (or an EIS serving the purpose of an EIR under CEQA Guidelines Section 15221) after commencement of public review but prior to certification of the final document, the agency must issue a new notice and must "recirculate" the revised document, or portions of the document, for additional comment and consultation (Pub. Res. Code § 21092.1; CEQA Guidelines § 15088.5; *Laurel Heights Improvement Ass'n. v. Regents of Univ. of Cal. (Laurel Heights II)*, 6 Cal.4th 1112, 1129 (1993)). Recirculation requirements were addressed by the California Supreme Court in *Laurel Heights II*. The Court's holding is now reflected in CEQA Guideline Section 15088.5, which requires recirculation of an EIR only when "significant new information" is added to the document. Examples of the type of new information that is significant enough to require recirculation include:

(1) A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.

(2) A substantial increase in the severity of an environmental impact would result unless mitigation measures are adopted that reduce the impact to a level of insignificance.

(3) A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.

(4) The draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Therefore, under CEQA, the critical issue in determining whether recirculation is required, is whether the new information added to the document is "significant." If it is, then recirculation is required under Public Resources Code Section 21092.1. If not, the document may be certified without a further round of public review and comment. In fact, a significant purpose of CEQA's Draft document circulation and comment process is to elicit information and to allow the agency to provide refined analysis and to make adjustments to the project that reduce impacts in the Final document.

The inclusion of new information that does not show new or increased significant impacts, the conclusion that an impact is less than assessed in the Draft document, or the identification of new mitigation measures or alternatives that offer reduced impacts and are within the range of alternatives analyzed in the Draft document (unless they create their own significant impacts), do not require recirculation.

The information and analysis presented in this FEIS has not changed such that any of those situations exist here. The FEIS does not disclose any new significant environmental impacts or increased severity of impacts, nor does it disclose any new mitigation measures or alternatives that the Project applicant, First Solar, has not agreed to accept or that are outside of the range of mitigation measures and alternatives already analyzed in the DEIS. The new information and analysis presented in the FEIS clarifies and amplifies the information and analysis presented previously in the DEIS. Under these circumstances, CEQA does not require recirculation.

Specific Responses:

1. The EIS clearly identifies the CDCA Plan Amendment as part of the proposed Project. Section 1.2.1 of the DEIS states "The BLM's actions will also include concurrent consideration of amending the CDCA Plan of 1980, as amended." Section 1.3.1 specifies that "BLM authorization of a ROW grant for the Project would require a resource management plan amendment (PA) to the CDCA Plan (BLM 1980), as amended." Section 1.6 of the DEIS states "[b]ecause solar power facilities are an allowable use of the land as it is classified in the CDCA Plan, the proposed Project does not conflict with the Plan. However, Chapter 3 (Energy Production and Utility Corridors element) of the CDCA Plan, as amended, also requires that newly proposed power generation facility sites that are not already identified in the Plan be considered through the Plan Amendment process. The application area is not identified within the Plan, and therefore a Plan Amendment is required to include the area as a recognized element of the Plan and to determine the suitability of the application area for solar development."

   Additionally, Section 2.2.2 of the DEIS explains that each of the action alternatives would require an amendment to the CDCA Plan, as would the two No Project Alternatives. Specifically, each of the three action alternatives analyzed in the FEIS, would require a finding of suitability for solar development. The No Action Alternative and two No Project Alternatives would require either no plan amendment, a plan amendment to identify the land as suitable for solar development or a plan amendment to identify the land as not suitable for solar development, respectively. Chapter 2 describes the plan amendment process and the land use

plan amendment decisions to be made. The specific language relating to a plan amendment will be provided in the ROD once a decision is made on the project. The environmental consequences of each of these No Action/No Project Alternatives are addressed in the EIS. Additionally, Section 2.2.2 in the FEIS has been revised to more specifically state the land use plan amendment decisions connected with each alternative.

2. Please refer to Common Response N.4.1 for a response to the comment relating to Purpose and Need.

N.4.6 Adequacy of Analysis

Summary of Issues Raised

1. Various commenters claim that BLM failed to: compile an adequate inventory of resources; provide adequate baseline information and description of the environmental setting; properly identify and analyze impacts to resources from all project components; and identify adequate mitigation measures to comply with NEPA and CEQA.

2. Commenters suggest that the DEIS identifies a large number of deferred studies in the form of mitigation measures, that deferral of analysis to some future study is counter to basic disclosure purposes of law, and that deferral of important studies makes it impossible to completely identify the affected environment and whether adverse impacts can be mitigated.

Response

1. Section 1.5.2 identifies the 16 environmental components addressed in the FEIS - air resources; biological resources (vegetation and wildlife); climate change; cultural; paleontological; geology and soil; lands and realty; noise and vibration; public health and safety and hazmat; recreation; socioeconomics and environmental justice; special designation areas; traffic and transportation; visual and water resources (surface and groundwater). Further, additional detailed information for some resources such as noise, air quality, biological resources, hydrology, geology, traffic and hazardous wastes is provided in technical reports and supporting information in technical appendices.

The environmental setting (existing condition) of the Project area is described in Chapter 3 using information from literature reviews, fieldwork, and input from appropriate federal, state and local agencies. Where appropriate, the individual resource sections in Chapter 3 define and describe a resource-specific region of influence (ROI), which serves as the baseline for environmental impact analysis. Defining the existing situation allows for characterization and anticipation of the proposed Project impacts and forms the basis for the environmental analysis. Sources for the literature reviews include published technical reports, internet resources, government sources, aerial photos, and information provided by applicant. Where existing information regarding the Project area was insufficient or outdated or specifically required by jurisdictional agencies, new surveys and studies were conducted to determine existing conditions from which to base impacts.

As described above, extensive surveys were completed for the proposed Project site. Focused and protocol-level surveys for the suite of species known to occur on the proposed Project site were not performed for the entire site; however, based on published data about species and habitat in the region and the reconnaissance surveys that were performed throughout the site, the DEIS and FEIS

assume and conclude that threatened or endangered species and suitable habitat for these species exist on the project site. In *Association of Irritated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383, the Court specifically addressed whether protocol-level surveys were required to adequately determine the significance of impacts to special-status species in an EIR and concluded that they were not. According to the Court, "CEQA does not require a lead agency to conduct every recommended test and perform all recommended research to evaluate the impacts of a proposed project. The fact that additional studies might be helpful does not mean that they are required," particularly, where, as here, there is sufficient information regarding the biological resources on site to determine potential impacts.

The individual sections in Chapter 4 describe the individual and cumulative impacts to the various resources anticipated as a result of the Project and identify mitigation measures designed to reduce or eliminate such impacts. Table ES-3, Applicant Measures (AMs) and Mitigation Measures (MMs), provides a consolidated comprehensive list of mitigation measures designed to reduce or eliminate negative impacts associated with the Project.

NEPA requires that an EIS include consideration of mitigation measures to reduce adverse environmental impacts. There is no requirement in NEPA to mitigate all impacts below a threshold as required under CEQA, but mitigation may be proposed and required as part of the approved project. However, because this document may be used by the California Public Utilities Commission in its decision to issue a permit for the Red Bluff Substation, this document has been prepared in an effort to be consistent with CEQA pursuant to Section 15221 of the CEQA Guidelines; therefore, the EIS must describe feasible measures which could minimize significant adverse impacts per CEQA Guidelines Section 15126.4(a)(1). Consistent with this requirement, the FEIS describes all feasible mitigation measures to minimize significant adverse impacts. Nonetheless, certain impacts of the proposed Project and action alternatives remain significant and unavoidable despite mitigation. The final mitigation measures that will be implemented as part of the Project, if approved, will be disclosed in the Record of Decision (ROD). The DEIS and the FEIS include extensive mitigation measures addressing the potential adverse impacts of the Project. Many of these are measures that have been used extensively throughout the State and, therefore, are anticipated to effectively address the adverse Project impacts. In addition, many of the measures include standards or other requirements that, if not met, would trigger the need for additional mitigation. Many of the mitigation measures require the preparation of detailed plans during final design and prior to any activity on the Project site. This is consistent with the requirements of NEPA because these measures identify the impacts intended to be addressed by those plans and key activities that would be included in those plans to mitigate the identified impacts. This is also consistent with the requirements of CEQA as described in detail under (2) below.

In summary, the DEIS provided an adequate baseline and inventory of resources, and the mitigation measures in the FEIS are adequate to address the adverse Project impacts (and the significant adverse impacts under CEQA). Where there are adverse impacts that mitigation measures cannot entirely mitigate, these impacts have been identified as unavoidable adverse impacts of the Project and other alternatives, as applicable.

2. Several commenters stated that DEIS mitigation measures improperly defer mitigation by requiring completion of future plans. Mitigation measures that predicate future actions and obligations on data, analysis and results of future studies do not improperly defer mitigation, are not counter to disclosure, nor do they deprive the public of a meaningful opportunity to comment on

the adequacy of the mitigation measures. To the contrary, the mitigation measures proposed in the FEIS provide performance standards that are sufficiently detailed to allow for meaningful agency and public review. Requirements for the timing, coverage and contents of the surveys are established, as are standards for surveyor qualifications and training. Requirements for operational plans that have yet to be developed also are established in great detail.

CEQA Notes on Adequacy of Analysis

The DEIS reflects a good faith effort to investigate and disclose environmental impacts of the project (see CEQA Guidelines §§ 15003(i), 15151), and the EIS's mitigation measures are legally adequate. CEQA states that formulation of mitigation measures may specify performance standards which would mitigate the significant effects of the project and which may be accomplished in more than one specified way. CEQA Guidelines § 15126.4(a)(1)(B). The DEIS identified a number of mitigation measures that require the preparation of a more precise mitigation plan after certification of the EIS, which is acceptable under CEQA provided that practical considerations make it difficult to develop the plan at this stage of the planning process and the agency "commits itself to eventually devising measures that will satisfy specific performance criteria articulated at the time of approval." *Sacramento Old City Association v. City Council* (1991) 229 Cal.App.3d 1011, 1028-1029.

In *Sacramento Old City Association v. City Council*, the city approved a menu of options for reducing the parking effects of an office complex and convention center. The options were proposed as possible components of a program that would be designed to meet a performance standard of 90-percent parking usage. The court upheld the measure, reasoning that, when it is known that mitigation is feasible but it is impractical to devise specific measures early in the planning process, "the agency can commit itself to eventually devising measures that will satisfy specific performance criteria at the time of project approval." *Id*. at 1029; *see also Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 307.

It is common for formulation of a mitigation plan to be deferred when a regulatory agency other than the Lead Agency will be reviewing or approving the mitigation and can be expected to impose mitigation requirements independent of CEQA as a condition of the permit. These requirements are often worked out through a consultation and approval process that takes place after the environmental document is completed. In this type of situation, it often makes sense to defer formulation of the specifics of mitigation measures to ensure they will meet the regulatory agency's requirements. Compliance with regulatory agency standards for mitigation can be relied upon to ensure adequate mitigation under CEQA. As a result, regulatory approval of a mitigation program might serve as an adequate performance standard as long as the regulatory agency's standards for adequate mitigation are identified in the EIR (or in an EIS that is used in lieu of an EIR). See *Defend the Bay v. City of Irvine* (2004) 119 Cal.App.4th 1261, 1275 (holding no improper deferral of mitigation even though future investigations and consultation with regulatory agencies was required and further holding that an agency may defer defining the specifics of mitigation measures if it "commits itself to mitigation and lists the alternatives to be considered, analyzed and possibly incorporated in the mitigation plan"); *Endangered Habitats League v. County of Orange* (2005) 131 Cal.App.4th 777, 794 (upholding habitat mitigation measure because the EIR called for either off-site preservation of habitat at a specified ratio or obtaining habitat loss permits from relevant agencies).

In the case of the proposed Project in the DEIS, the deferred mitigation criticized by commenters focused on mitigation plans that will be subject to review and input by other regulatory agencies –

for example, in the case of species protection, mitigation measures that will be required under the federal and state endangered species acts through consultation and incidental take permit programs. In addition, the mitigation described in the DEIS contains details of the mitigation requirements (and refer to the detailed plans to be developed).

In this case, the practical difficulty of identifying the precise mitigation requirements for this project stems in part from the role of other regulating agencies in approving the project, including the United States Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG). These agencies would be required to issue "incidental take" permits based on the project's potential impact on listed species. The need for some level of deferral is necessary to avoid a mitigation approach that might ultimately be rejected by these agencies. In the context of biological resources mitigation, the Court in *Defend the Bay v. City of Irvine* (2004, 119 Cal.App.4th 1261, 1275-1276) determined that the Lead Agency may defer defining the specifics of mitigation measures if the agency commits to the mitigation, the EIR specifies performance standards, and the agency "lists the alternatives to be considered, analyzed, and possibly incorporated in the mitigation plan." In *Defend the Bay*, the Court upheld as adequate a mitigation measure that required the applicant to (1) consult with the USFWS and CDFG; (2) conduct surveys during the breeding season to determine if the birds are in fact present; (3) obtain a determination regarding the long-term value of the habitat area; (4) obtain permits from the USFWS and CDFG; and (5) coordinate avoidance measures as required by USFWS and CDFG.

Additional case law supporting the EIR mitigation approach can be found in *California Native Plant Society v. City Rancho Cordova* (2009) 172 Cal. App. 4th 603. In the *Rancho Cordova* case, the California Native Plant Society claimed that mitigation for significant impacts to wetlands and vernal pool fairy shrimp habitat was inadequate because the requirement for creation and protection of replacement habitat did not identify a specific location for the replacement habitat. The Court rejected that argument, concluding that "the agency does not have to commit to any particular mitigation measure in the EIR, as long as it commits to mitigating the significant impacts of the project." The Court ruled that the City could defer the development of the specific manner in which off-site mitigation was provided.

Based on the discussion above, and other relevant case law, the mitigation measures proposed in the FEIS provide performance standards that are sufficiently detailed under CEQA to allow for meaningful agency and public review.

N.4.7 Alternatives Analyzed

Summary of Issues Raised

1. Some commenters suggest that the BLM should consider an all-private-lands alternative. Some commenters suggest that sites closer to urban areas or on previously disturbed lands should have been considered. Other commenters suggest that solar panels should be on rooftops in towns or cities or on already highly degraded desert lands not where it is currently proposed and therefore the full range of possible sites to mitigate negative environmental impacts were not considered.

2. Some commenters suggest that the Gen-tie Line should be placed underground or suggested that they prefer Gen-Tie Line A-2 (GT-A-2).

Response

1. Concerning siting decisions, the BLM's role in managing public lands includes facilitating land uses on lands under the BLM's jurisdiction while appropriately balancing and responding to multiple interests concerning federal mandates, collaborating agencies' directives, and BLM's own interests. As a result, the site considered in the FEIS focuses on actions by the BLM that would respond to the specific application for a ROW grant received by the BLM for the DSSF project. The Applicant's proposal to construct, operate, and ultimately decommission the DSSF on the proposed site is evaluated, and alternatives proposed in the FEIS, consistent with the BLM's role in managing the public lands subject to its authority.

The BLM appreciates the concerns raised regarding the potential authorization of solar energy developments on previously undeveloped sites. The BLM, the DOE, and the State of California have all identified commercial-scale solar energy as an integral component of a future energy system which is sustainable, while reducing the emission of greenhouse gases. The BLM agrees that locating commercial-scale solar energy facilities on previously disturbed sites is desirable. For example, the EPA's RE-Powering America's Land program has identified a number of contaminated lands and abandoned mine sites nationwide, including some sites on BLM-managed lands in California, that have the potential for renewable energy development (See, e.g., EPA 2010). However, the Applicant for the DSSF has not proposed to develop its project on such lands, and the BLM has not received any applications for commercial-scale solar energy projects on such lands. To access the innumerable benefits of solar energy, sites must be identified that meet a variety of technical criteria (such as high solarity and particular slope and grade), and that minimize impacts to environmental resources.

Locating a utility-scale renewable energy generating facility in an urban area or on previously disturbed lands would present considerable challenges relating to site control, negotiations with numerous landowners, and overall acreage needs. Alternative sites on other BLM managed lands were not considered because the BLM is responding to the application for the specific parcel identified in the applicant's ROW grant application.

As a result, the alternatives considered in the FEIS focus on alternatives that would require an action by the BLM and that respond to the specific application for a ROW grant received by the BLM for the DSSF (see, e.g. BLM NEPA Handbook H-1790-1, January 2008, Section 6.6.1 Reasonable Alternatives). It was confirmed in the California Energy Commission (CEC)/BLM CEQA/NEPA joint documents (e.g., the Palen Solar Power Project and Genesis Solar Energy Project documents) on large-scale solar-thermal power plants, that all-private-lands alternatives present considerable challenges, including difficulties associated with obtaining sufficient site control from a number of different landowners who may or may not be motivated to allow utility-scale energy generation facilities to be developed on their property, the large number of acres that would be required for a viable project of this type, and the absence of any clear environmental benefit associated with development on private versus public land. In addition, many of the private parcels identified in the joint CEC/BLM environmental documents mentioned above that could support large-scale renewable energy development have subsequently been secured by other developers. Accordingly, BLM declined to accept suggestions that it consider the placement of the proposed utility-scale renewable energy projects on private lands.

The EIS also considers an alternative in which rooftop and other "distributed" solar would be developed rather than the large scale solar project included in the proposed action. Section 2.6.8 considers this alternative, and explains that it is eliminated because the rate of distributed PV development observed in 2009 would result in it taking over 50 years to achieve the 33 percent Renewables Portfolio Standard goal through reliance on distributed PV alone, threatening the utilities' compliance with Renewable Portfolio Standards. While distributed solar may be one component of the larger solution to energy concerns, it does not currently appear feasible that it could entirely replace the role large scale projects such as the Desert Sunlight project play in meeting the goals defined in California's Renewables Portfolio Standard.

With regard to the comments relating to the FEIS not considering the full range of possible alternatives or the comment suggesting that the public land area within the application that has been excluded from the footprint of the proposed Project and the reduced acreage alternative should be excluded from future energy development, NEPA directs the BLM to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources" (NEPA Section 102(2)(E)). A discussion of alternatives need not be exhaustive. What is required is information sufficient to permit the BLM to make a "reasoned choice" among alternatives so far as environmental aspects are concerned (40 CFR 1502.14).

In order to establish the reasonable range of alternatives to be considered, the defined project purpose and need functions as the first and most important screening tool. Thereafter, the range of alternatives is based on the applicant's proposed action, alternatives that would reduce or avoid adverse impacts of the applicant's project, and appropriate No Action Alternatives. The full range of possible alternatives may be narrowed to a "reasonable number" that covers the full spectrum of alternatives. In determining the alternatives to be considered, the emphasis is on what is "reasonable" rather than on whether the proponents or others like or are capable of implementing the alternative. See BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) §6.6.1.

The number and range of alternatives considered in the EIS is reasonable. In total, 16 alternatives to the proposed action were considered by the BLM. Five were carried forward, in addition to the proposed action, for more detailed review. Three of the six are action alternatives (the Proposed Action Alternative with Land Use Plan Amendment, Alternate Action Alternative with Land Use Plan Amendment and the Reduced Solar Farm Footprint Alternative with Land Use Plan Amendment) and one "no action" and two "no project" alternatives, under which no project would be approved and no approval of a CDCA Plan amendment would occur (No Issuance of a Right-of-Way Grant and No Land Use Plan Amendment, No Issuance of a Right-of-Way Grant with Land Use Plan Amendment to Identify the Area as Unsuitable for Solar Energy Development and No Issuance of a Right-of-Way Grant with Land Use Plan Amendment to Identify the Area as Suitable for Solar Energy Development). This is a reasonable number of alternatives given the breadth of the BLM's statement of purpose and need. Further, the alternatives carried forward for more detailed consideration in the FEIS sufficiently cover the full spectrum of alternatives because the scope of impacts assessed went from none (no action) to some (reduced acreage) to lessened in some respects (reconfigured).

CEQA Notes on Alternatives Analyzed

CEQA requires a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives (CEQA Guidelines 15126.6(a)).

An environmental document need not consider alternatives that are infeasible (CEQA Guidelines Section 15126.6(a)). The alternatives presented in an environmental document must be potentially feasible, defined as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors" (Pub. Res. Code §21061.1). The Guidelines add the term "legal" to the list of factors to take into account (CEQA Guidelines §15364). The alternatives discussed in an environmental document must be reasonable alternatives, selected to foster informed decision-making and public participation (CEQA Guidelines § 15126.6(a)). An environmental document need not consider an alternative whose effect cannot reasonably be ascertained or whose implementation is remote and speculative (CEQA Guidelines § 15126.6(f)(3)).

CEQA does not contain ironclad rules relating to the range of alternatives to be discussed in an environmental document. The nature and scope of the alternatives analysis is governed by the rule of reason (CEQA Guidelines §15126.6(a)). An environmental document is not deficient if it excludes potential alternatives from its analysis so long as it discusses a reasonable range of alternatives. No set number of alternatives is necessary to constitute a legally adequate range of alternatives. The scope of alternatives will vary from case to case depending on the nature of the project under review. If a reasonable basis for the choices the agency makes is found in the environmental document or elsewhere in the record, a reviewing court will defer to the agency's selection of alternatives. *See, e.g., Save San Francisco Bay Ass'n v. San Francisco Bay Conserv. & Dev. Comm'n* (1992) 10 Cal. App. 4th 908. 919, (upholding an EIR's discussion of alternatives because the record showed that the city had considered a number of potential alternatives and selected a range of prototypical alternatives for analysis in the EIR).

CEQA does not require the discussion of alternative locations for the project. Under the CEQA Guidelines, the environmental document must include a reasonable range of alternatives to the project or to the location of the project (CEQA Guidelines Section 15126.6(a)). However, a key factor in considering alternative sites is whether the project would or could be implemented at the alternative site. CEQA compliance requires consideration of concrete alternatives that will actually provide an alternative measure of carrying out the project. It does not require consideration of unrealistic, hypothetical alternatives.

As stated above, the DEIS considered 16 alternatives to the proposed project. After consideration, some of these alternatives did not meet most of the project objectives. Other alternatives were found not to meet the key requirement of reducing impacts as compared to the proposed Project or were not feasible. Three action and three no action/no project alternatives were carried forward for more detailed review. The DEIS also considered two alternative locations for the Red Bluff Substation: Substation A (to the east) and Substation B (to the west). Impacts associated with these alternative locations are analyzed in detail in the EIS.

In conclusion, the DEIS contains a reasonable range of alternatives meeting CEQA's requirements.

2. Based on public comment, the BLM has considered whether to pursue an alternative in which all or a portion of the Gen-Tie Line routes would be installed underground because of its proximity to Lake Tamarisk and the Town of Desert Center. Section 2.6.9, Underground Installation of Gen-Tie Lines, has been added to the discussion of alternatives eliminated from detailed analysis. That discussion concludes as follows:

> BLM and the CPUC have evaluated the information included in First Solar's report and have determined that, based on the Agencies' own experience, expertise and research, undergrounding Desert Sunlight's gen-tie lines would be infeasible. Although the technology for underground transmission lines is available and has been used to reduce visual impacts and to avoid overhead construction through congested areas by major utilities in California, the increased environmental impacts that would result in other resource areas does not justify the use of undergrounding in this case. Specifically, the lack of adequate paved roadways for installation of the gen-tie lines serving the Desert Sunlight project would result in substantially greater impacts in biological resources, cultural resources, air quality, and noise than for the overhead gen-ties. The additional costs and technical risks associated with undergrounding also make it undesirable under these conditions. As a result, the underground gen-tie alternative has been eliminated from detailed consideration.

N.4.8 Property Value

Summary of Issues Raised

Various comments indicate concerns that the proposed Gen-Tie routes would adversely affect future use of the private properties adjacent to the proposed right-of-way routes and also reduce property values of the neighboring properties. Several commenters expressed the opinion that the Proposed Action Alternative would preclude potential future commercial or industrial development of the properties along Kaiser Road near Lake Tamarisk.

Most of the commenters specifically expressed their opposition to the Gen-Tie Alternative A-1 (i.e., Kaiser Road Route) and their preference for the Gen-Tie Alternative A-2 (East of Lake Tamarisk Route). While most of the Gen-Tie Alternative A-1 is located on BLM land, the short segment near the Lake Tamarisk area would traverse private properties. This area is also currently identified in the current Desert Center Area Plan of the 2003 Riverside County General Plan as the future location for potential community development.

Response

Most of the land in the Project area is undeveloped and in its natural state. There are also a few agricultural properties dedicated to jojoba production in the area. The Lake Tamarisk community consists of single family retirement housing, a lake, and a golf course. The current land use designations for the area are discussed in Section 3.9, Lands and Realty. The land parcels directly adjacent to the right-of-way for the proposed Gen-Tie Alternative A-1 are currently designated for rural residential or recreation use (see Figure 3.9-3). Potential future use of the parcels and the nearby Lake Tamarisk community is for Community Development (see Figure 3.9-19).

The foreseeable future demand and likelihood of any such development occurring in the area is unclear and uncertain given its current small residential population, rural location and limited infrastructure. Consequently, it is highly speculative that future development will occur and

therefore insufficient likelihood that any physical impacts would occur. Simply stated, there is insufficient information to attribute an impact to the properties that would represent an adverse environmental and physical impact under CEQA or NEPA to the currently undeveloped property.

Most of the commenters expressed concern about potential adverse effects on property values from the proposed Project. Potential visual impacts as well as health and safety effects are generally the primary concerns commonly associated with living near power lines. The Project's visual impacts are analyzed in the DEIS, Section 4.16, Visual Resources, and mitigation measures are identified that reduce the Project's impacts to visual resources. Although the presence of Electric and Magnetic Fields (EMF) is generally not recognized as a NEPA or CEQA issue, the potential relevance and effects of EMFs are discussed in the DEIS, Sections 3.11 and 4.11, Public Health and Safety/Hazardous Materials and in Common Response N.4.9, below.

In recent years, extensive analysis of the potential impacts of high-voltage transmission lines on residential property values has been performed. The impacts are not easily measurable. Many studies indicate no significant effect on residential property values. Other studies have found some evidence that transmission lines may affect property values under some circumstances. The research has generally found any property value effects to be smaller than anticipated with an average discount of between 1 and 10 percent of property value reported for homes in very close proximity to the power lines. The property value impacts are reduced as distance from the line increases and at a distance of 200 feet the property value impact generally disappear. In cases where views are completely unobstructed, negative impacts may extend up to a quarter of a mile but the effects are reduced considerably by even partial screening (e.g. trees, landscaping or topography (Pitts 2007).

Value diminution attributable to tower line proximity is temporary and usually decreases over time – disappearing entirely in 4 to 10 years (except for properties adjacent to or in direct view of the tower structures where the effects may be longer lasting). High-end custom homes are also more susceptible to value diminution effects than lower-end homes (Pitts 2007).

Projecting the magnitude of any site specific decrease in home values requires extensive real estate market analysis and is beyond the scope of environmental review under NEPA or CEQA. CEQA Guidelines § 15131(a) states that economic or social effects of a project shall not be treated as significant effects on the environment, and these effects only need to be considered in a chain of cause and effect if they would result in a physical change to the environment that was caused in turn by the economic or social changes. Furthermore, in a predominantly undeveloped and/or agricultural area such as that within the study area, property prices would be mostly determined by the land's agricultural productivity. Consequently, since the proposed Project would have a very small (if not negligible) impact on the area's local agricultural productivity[1] the proposed Project may correspondingly be reasonably expected to have a similarly very small impact on local property prices. Potential property diminution impacts would mostly be attributable and at issue for the Gen-Tie Alternative A-1 (Kaiser Road) route. While the Gen-Tie Alternative A-2 route would traverse several private properties, the right-of-way acquisition process can be expected to largely address any land value and/or farmland productivity impacts to the local land owners because landowners allowing use of their land for the gen-tie would be compensated for use of their land by the Applicant.

[1] Most of the proposed Right of Way route alternatives would not cross existing agricultural land. Along sections where the route it would traverse farmland, continued jojoba cultivation could continue given the relatively low height of mature jojoba shrubs.

Additionally, the FEIS considers an alternative in which all or a portion of the Gen-Tie Line would be underground, but ultimately determines that such an alternative would be infeasible for the reasons described in Common Response N.4.7 and new FEIS Section 2.6.9.

N.4.9 Cadmium Exposure

Summary of Issues Raised

Commenters have concerns regarding the potential threats to the environment and human health from exposure to cadmium telluride (CdTe) used in the semiconductor materials of the PV modules. As indicated in the DEIS, Chapter 4.11, the CdTe is bound to a glass sheet by vapor transport deposition during the manufacturing process, followed by sealing the CdTe layer with a laminate material and then encapsulating it in a second glass sheet.

Response

While CdTe itself is a hazardous substance in an isolated form (i.e., not embedded within a PV module), any risk to human health or the environment is minimized by a combination of product design, testing, and routine monitoring. The panels meet rigorous performance testing standards demonstrating their durability in a variety of environmental conditions. The modules conform to the International Electrotechnical Commission (IEC) test standards IEC 61646 and IEC61730 PV as tested by a third party testing laboratory certified by the IEC. In addition, the modules also conform to Underwriters Laboratory (UL) 1703 a standard established by the independent product safety certification organization. In accordance with UL 1703, the modules undergo rigorous accelerated life testing under a variety of conditions to demonstrate safe construction and monitor performance. Furthermore, First Solar conducts its own testing including proprietary light soak testing under high intensity light and heat to evaluate potential long term degradation, high-cycle dynamic load testing where the modules are mechanically flexed thousands of times, and extending the IEC and UL tests to multiple test cycles to ensure the module design and performance margin can exceed these standards.

As also stated in the DEIS, Chapter 4.11, the project includes operational and maintenance protocols that would be used to identify and remove damaged or defective PV modules during annual inspections. Any identified damaged or defective PV modules would be removed from the site, as well as PV modules at the time of decommissioning, and then collected and recycled in accordance with First Solar's pre-funded PV module collection and recycling program.

Inadvertent release of CdTe from PV modules have been the subject of various scientific studies and according to the Brookhaven National Laboratory and the National Renewable Energy Laboratory (Fthenakis, Zweibel 2003), the only pathways by which people might be exposed to PV compounds from a finished module are by accidently ingesting flakes or dust particles, or inhaling dust and fumes. Dust particles would only be generated if the solar module were to be purposefully ground to a fine dust or vaporized in a fire, due to upset scenarios that are not reasonable during normal operations. The thin CdTe/CdS layers are stable and solid and are encapsulated between thick layers of glass, which would crack but not shatter under expected module breakage scenarios. Small amounts of CdTe could vaporize and be released from panels during a wildfire at the Project site. However, such conditions are unlikely to occur at the Project site because of the lack of fuel to support a sustained wildfire and the wildfire mitigation measures for the Project (Mitigation AM-

HAZ-4). Grass fires are the most likely fire exposure for ground-mounted PV systems, and these fires tend to be short-lived due to the thinness of fuels. As a result, these fires are unlikely to expose PV modules to prolonged fire conditions or to temperatures high enough to volatilize CdTe, which has a melting point of 1,041 degrees Celsius where typical grass fires have a maximum temperature of 1000 degrees Celsius (University of Toronto 2009). Moreover, even if a desert wildfire could reach that temperature, the actual loss of CdTe from a module would be insignificant (approximately 0.04 percent). For these reasons, the probability of sustained fires and subsequent emissions in adequately designed and maintained utility systems is extremely low (Fthenakis 2005). In addition, small amounts of CdTe could leach from broken panels exposed to low pH precipitation, such as acid rain (NGI 2010; SAL 2010). However, leaching would primarily occur with finely ground materials, which are not expected to be created under natural or intentional/vandalism scenarios. Furthermore, removal and recycling of damaged and end-of-life panels would limit the potential exposure time of any broken modules to the elements.

In conclusion, the environmental risks from CdTe PV are minimal and would be less than significant. Policy and scientific experts from the German Ministry of Environment, Brookhaven National Laboratory, Projekttrager Julich, Joint Research Centre of the European Commission, and the German Industry Association for Solar Energy concluded that the "emissions produced during the life-cycle of the modules are extremely low, and large scale use of CdTe photovoltaic modules does not present any risks to public health and the environment." (Jager-Waldau 2005)

References

NGI (Norwegian Geotechnical Institute). 2010. Leaching from CdTe PV module material – results from batch, column and availability tests. April 2010.

SAL (Sierra Analytical Laboratories). 2010. Cadmium testing of CdTe Solar Panels. July 2010.

Jager-Waldau, Arnulf. 2005. Summary Report: Peer Review of Major Published Studies on the Environmental Profile of Cadmium Telluride (CdTe) Photovoltaic (PV) Systems. [online] http://www.firstsolar.com/Downloads/pdf/SummaryReport_Environmental_Profile_NA.pdf

University of Toronto. 2009. Grass Fire Behaviour and Flame. [online] http://www.firelab.utoronto.ca/behaviour/grass_fire.html. Updated July 14.

N.4.10 EMF Exposure

Summary of Issues Raised

Various commenters indicate concerns regarding impacts resulting from EMF (Electromagnetic fields) exposure and negative health impacts.

Response

As stated in the DEIS, Chapter 4.11, generation of EMF is not considered a NEPA or CEQA issue and no impact significance is presented because: 1) there is no agreement among scientists that EMF does create a potential health risk; and 2) there are no adopted NEPA or CEQA standards for defining health risks from EMF. However, as indicated and discussed at length in Chapter 3.11, the CPUC has undertaken an investigation to consider its role in mitigating the health effects, if any, of EMF from utility facilities and power lines. The conclusions of the investigation as summarized in

CPUC issued Decision D.06-01-042, on January 26, 2006, resulted in the adoption of rules and policies to improve utility design guidelines for reducing EMFs. The CPUC also stated "at this time we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences." Regarding interference with electrical equipment, the Institute of Electrical and Electronic Engineers (IEEE) has published a design guide (IEEE 1971) that is used to limit conductor surface gradients to avoid electronic interference. Although high frequency energy may interfere with broadcast signals or electronic equipment, this is generally not a problem for transmission lines. In addition, as also stated in Chapter 3.11, EMF levels can be reduced through shielding, field cancellation or increasing the distance from the source. Shielding, which primarily reduces exposure to electric fields, can be actively accomplished by placing trees or other physical barriers adjacent to the EMF generating structure. Since electric fields can be blocked by most materials, shielding is effective for the electric fields but of limited effectiveness for magnetic fields. Buildings are also effective in shielding electric fields.

Magnetic fields can be reduced by either cancellation or by increasing distance from the field. Cancellation is achieved in two ways. A transmission line circuit consists of three "phases": three separate wires (conductors) on a transmission tower. The configuration of these three conductors can reduce magnetic fields. When the configuration places the three conductors closer together, the interference or cancellation, of the fields from each wire is enhanced. The most common electronic equipment that can be susceptible to magnetic field interference is probably computer monitors. Magnetic field interference results in disturbances to the image displayed on the monitor. In most cases it is annoying, and at its worst, it can require interference measures to correct the problem. Possible solutions to this problem include relocating the monitor, using magnetic shield enclosures, installing software programs, and replacing cathode ray tube monitors with liquid crystal displays that are not susceptible to magnetic field interference.

The transmission lines would be approximately 135 feet high which has proven effective in reducing exposure because the reduction of the field strength drops rapidly with distance. The Project would locate the Gen-Tie lines in existing transmission corridors where possible. The Project area is predominantly undeveloped and no residences are located within approximately a quarter-mile of any Project component.

N.4.11 Construction Employment

Summary of Issues Raised

Several comments raised concerns that DSSF's construction employment needs would result in a major influx of new workers to the local communities. The comments also questioned how construction workers would commute to the work site and whether construction worker in-migration would occur and adversely affect local municipal services.

Response

The availability of Project construction workers within the existing regional workforce is a key issue underlying the potential for in-migration to occur as a result of the Project. In addition, the availability of transit options would also affect the ability of the Project to meet its workforce needs with regional workers.

Supplemental analysis has been performed to more precisely evaluate the potential for the region's workforce to supply the construction workers needed during the Project's 26-month construction period. The "worker availability" analysis is presented separately due to its length and to avoid extensive and confusing revisions to the DEIS text. The approach and data for the analysis is adapted from similar worker availability analysis performed for the recently approved Blythe and Genesis Solar Projects. In addition, the analysis is based on more conservative and specific assumptions than the DEIS regarding the supply and origin of project workers from the region. Consequently, its conclusions provide additional analysis to confirming the DEIS analysis's findings.

Supplemental Construction Worker Availability Analysis

Affected Area

This supplemental analysis provides information and assesses the potential origin and housing/ lodging resources available for future project workers. The origin of the DSSF workers likely would be a central factor determining the magnitude and extent of the proposed action's potential for socioeconomic impacts to the local and regional communities and economy. The expected catchment area for DSSF construction workers' commuting daily to the site is a primary determinant of the project's social and economic affected environment. If there would be an insufficient number of suitable workers to staff the proposed action locally or regionally, then individuals may be attracted to the area (either temporarily or permanently), which consequently could result in increased demand for housing and local services.

There is little research and analysis providing guidance for determining the socioeconomic affected area for power facilities. The widely referenced EPRI analysis (BLM 2010) generally is cited as research showing that workers may commute as much as two hours each direction from their communities rather than relocate (BLM 2010). In addition, recent testimony by a representative of the Riverside/San Bernardino Building Trades Council also stated the opinion that construction workers associated with the proposed action could commute daily two to three hours each way (CEC 2010).

For the purposes of the supplemental analysis of construction worker, and as a conservative assumption recognizing the rural nature of eastern Riverside County, a two-hour daily commute radius is used to define the regional study area. As estimated by ESA based on similar analysis by AECOM for other similar nearby solar projects in Eastern Riverside County, the two-hour commute shed extends into parts of San Diego, Imperial and San Bernardino counties in California. The commute radius also extends into western Maricopa County in Arizona to the east and to Banning in Riverside County to the west. The north-eastern boundary for commute radius includes the very small community of Morongo Valley within San Bernardino County just north of its border with Riverside County.

However, given that there are no major populated urban centers located within the commute radius within the counties of San Diego, Imperial and Maricopa, these areas are not included in the regional study area for the proposed action. The relatively small community of Twentynine Palms is shown to be within the outermost limits of the two-hour radius; however, given both the relatively poor roadway connection along Route 62 (suggesting that actual commute time may be higher) and the prevalence of other solar projects closer to these communities, it is expected that relatively few if any San Bernardino residents would commute daily to work at the DSSF site.

Consequently, for analysis, the regional study area is determined to consist predominantly of eastern Riverside County in California and La Paz County in Arizona. In addition, the small city of Twentynine Palms, the community of Morongo Valley and their respective nearby unincorporated areas of San Bernardino County. The western limit for the two commute radius catchment area is assumed to extend as far as the community of Banning as a realistic representation of actual typical drive time conditions from the project site.

The local study area consists of the five nearest communities: the City of Blythe, California (approximately 60 miles east of the site); the very small community of Desert Center, California; the City of Ehrenburg, Arizona (approximately 65 miles east of the site); and the Cities of Indio and Coachella, California (both approximately 60 miles west of the site). These cities represent all the major communities located within an hour commute of the site and therefore together represent the local study area for the proposed action.

Population

The current population estimates and recent growth trends for both the regional and local study areas are summarized in Table 5-2. All the cities determined to be located within a two-hour commute of the site are shown. In addition, data for Riverside, San Bernardino, and La Paz Counties are presented. Zip code population estimates were used to estimate the approximate size and location of the residential populations within the unincorporated areas of eastern Riverside County located within the two-hour commute distance of the site. The unincorporated communities of Cabazon, Desert Center, Mecca, Thermal and Thousand Palms are represented within the unincorporated area population estimates of Riverside County. The unincorporated community of Morongo Valley also is represented within the unincorporated area population estimates of San Bernardino County.

Table 5-2
Population Profile of the Regional Study Area

	Population		
	Year		
Area	2000 Population	2010 Population	Average Annual Growth Rate (2000 – 10)
Riverside County, CA	1,545,387	2,139,535	3.3%
Blythe	20,465	21,812	0.6%
Coachella	22,724	42,591	6.5%
Indio	49,116	83,675	5.5%
Indian Wells	3,816	5,144	3.0%
La Quinta	23,694	44,421	6.5%
Palm Desert	41,155	52,067	2.4%
Rancho Mirage	13,249	17,006	2.5%
Cathedral City	42,647	52,067	2.0%
Palm Springs	42,805	48,040	1.2%
Desert Hot Springs	16,582	26,811	4.92%
Banning	23,562	28,751	2.00%
Unincorporated Area[1]	64,269	99,322	4.5%
Eastern Riverside County, CA	364,084	521,707	3.6%

Table 5-2 (continued)
Population Profile of the Regional Study Area

	Population		
	Year		
Area	**2000 Population**	**2010 Population**	**Average Annual Growth Rate (2000 – 10)**
San Bernardino County, CA	1,710,139	2,073,149	1.9%
Twentynine Palms[2]	14,764 (est)	16,877	1.4%
Unincorporated Area	5,890	10,580	6.0%
South San Bernardino County, CA	20,654	27,457	2.9%
La Paz County, AZ	19,715	21,616 [3]	0.9%
Ehrenburg	1,357	1,488 [3](est)	0.9%
Quartzite	3,354	3,731 [3]	1.1%
Cibola	172	189 [3] (est)	0.9%
Unincorporated Area[4]	4,226	4,621	0.9%
Western La Paz County, AZ	9,109	10,029	1.0%
Local Study Area[5]	93,662	149,566	4.8%
Regional Study Area	392,908	559,193	3.5%

Notes: CA Cities are shown (by County) in order of their relative distance from the project site.
1 Adjusted to remove Chuckwalla and Iron Wood State Prison population and includes Desert Center residents.
2 Estimated population to adjust for Twentynine Palms Military Base.
3 2009 Data
4 Consists of entire remainder of La Paz County except for the population of the City of Parker (3,401) and the estimated Colorado River Reservation population (8,186).
5 Blythe, CA; Coachella, CA; Indio, CA; and Ehrenburg, AZ.
Source: California Department of Finance, 2010; Arizona Department of Commerce, 2010.

The total population of eastern Riverside County within the regional study area is estimated to be 559,193 and approximately 26.1 percent of the County's total population.

Housing

Current housing conditions for the regional and local study areas are summarized in Table 5-3. All the cities determined to be located within a two-hour commute of the site are shown. In addition, data for Riverside, San Bernardino, and La Paz Counties are presented.

In 2010, Riverside County had 784,357 total housing units, with a vacancy rate of 13.0 percent. Also shown in Table 5-3, the regional study area contains a high number of housing units, with La Paz County having the highest vacancy rate.

Among the cities in Riverside County relevant to the proposed action,[2] Palm Springs had the highest vacancy rate (33.4 percent), and is behind only Palm Desert in number of housing units, with 33,479. Among the cities in La Paz County relevant to the Project, Cibola had the highest vacancy rate (60.0 percent), but Quartzsite had the highest number of vacant units at 1,336.

[2] The high vacancy rates for the affluent cities of Indian Wells and Rancho Mirage primarily reflect a large proportion of vacation homes and these cities are not expected to provide much of the Project workers population.

Table 5-3
Housing Profile of the Regional Study Area (2010)

Housing		
	Year	
Area	**2010 Total Housing Units**	**2010 Vacancy Rate**
Riverside County, CA	784,357	13.0%
Blythe	5,472	16.1%
Coachella	9,145	4.4%
Indio	28,167	18.0%
Indian Wells	5,025	48.4%
La Quinta	21,491	28.5%
Palm Desert	34,425	30.9%
Rancho Mirage	13,542	38.6%
Cathedral City	21,527	21.5%
Palm Springs	33,603	33.4%
Desert Hot Springs	11,073	16.7%
Banning	11,644	8.4%
Unincorporated Area	36,990 (est)	15.3%
Eastern Riverside County, CA	232,104	23.7%
San Bernardino County, CA	693,712	11.58%
Twentynine Palms	9,228	14.7%
Unincorporated Area	4,650 (est)	28.3%
Eastern San Bernardino County, CA	13,878	19.3%
La Paz County, AZ	16,765 [1]	45.0% [1]
Ehrenburg	824 [2]	34.9% [2]
Quartzite	3,541 [1]	41.9% [2]
Cibola	161 [2]	60.0% [2]
Unincorporated Area[3]	4,262 [1] (est)	49.5% [1]
Western La Paz County, AZ	8,788 [1]	45.3% [1]
Local Study Area[4]	43,608	15.2%
Regional Study Area	219,328	25.0%

Notes: CA Cities are show (by County) in order of their relative distance from the project site.
[1] 2009 Data
[2] 2000 Data
[3] Consists of entire remainder of La Paz County except for the population of the City of Parker (3,401) and the estimated Colorado River Reservation population (8,186).
[4] Blythe, CA; Coachella, CA; Indio, CA; and Ehrenburg, AZ.
Source: California Department of Finance, 2010; Arizona Department of Commerce, 2010.

Population Projections

The forecasted population trends for Riverside, San Bernardino, and La Paz Counties are shown in Table 5-4. The projected population growth for eastern Riverside County is estimated based on the county-wide growth projections. Population growth in Riverside County is expected to slow over the next few decades. The growth rate is projected to be 3 percent per year between 2010 and 2020, and then to fall to 2.1 percent per year between 2020 and 2030. The population projections discussed above were made prior to the economic recession that began in 2008, likely explaining the decrease in the 2010 actual population estimate for Riverside County from the previously estimated population growth projections.

Table 5-4
Population Projections for Riverside County and the Regional Study Area

	Population			
	Year			
Area	2010 Actual Population	2010 Projected Population	2020 Projected Population	2030 Projected Population
Riverside County, CA	2,139,535	2,239,053	2,904,848	3,507,498
Eastern Riverside County, CA[1]	521,707	545,974	708,322	855,273
San Bernardino County, CA	2,073,149	2,177,596	2,582,777	2,957,744
South San Bernardino County, CA[1]	27,457	28,840	34,207	39,173
La Paz County, AZ	21,544	22,632	25,487	28,074
Western LaPaz County, AZ[1]	10,029	10,535	11,865	13,069
Regional Study Area	559,193	585,349	754,393	907,514

Notes:
[1] Estimates based on Countywide growth projections.
Source: CEC GSSP 2010; ESA 2010.

Temporary Housing Resources

Rental Homes

As shown in Table 5-3, vacancy rates are high in the study area. Based on reported current vacancy rates for the City of Blythe, approximately 881 vacant housing units are unoccupied in 2010 and may be available for rental (or purchase) by future DSSF workers. Similarly, the data also suggests that up to another 5,760 local housing units may be available within the city of Ehrenburg and cities of Indio and Coachella (BLM 2010). However, the condition, suitability, and availability of the existing housing resources for use as temporary housing for DSSF-related construction workers is unknown. In addition, as shown by the high vacancy rates elsewhere in the region study area, some "vacant" homes may be second homes and, therefore, less likely to be available for use as temporary housing.

Hotel and Motel Accommodations

In addition to the existing residential units, DSSF construction workers and operational workers could use local lodging facilities as temporary housing. Hotel/motel lodging suitable for potential temporary housing use typically is concentrated in urban areas or near major transportation nodes. For the purposes of this analysis, only those hotels in the communities closest to the proposed action were tabulated under the assumption that construction and operations workers would congregate to this area for commuting ease.

Data compiled by Smith Travel Research for hotels and motels with 15 or more rooms identified 19 hotels with a total of 878 rooms within Blythe in 2008, which presents the most current available data (BLM 2010). In addition, 120 hotel/motel rooms are located in Ehrenberg, Arizona (Arizona Department of Commerce, 2010). In addition, there are approximately an estimated 1,010 rooms at 15 hotel and motels located in the Indio and Coachella area (ESA, 2010).

The extent that the local motel and hotels within the local study area could provide temporary housing for DSSF construction workers would depend both on the then-current room rates and occupancy rates. Typical room rates for most of the hotel/motels are currently relatively inexpensive

during the off-season with quoted rates of $60 to $70 per night (not including tax). Provided operators would maintain comparable rates, these local hotel/motel rooms would likely be a possible temporary housing option particularly for workers that might be willing to share accommodations.

Forty-two hotels with a total of 7,275 rooms were identified in communities located from 1 to 1.5 hours drive from the DSSF site (BLM 2010). These communities include Palm Desert, Indian Wells, and Rancho Mirage. Applying the 2008 average occupancy ratio (70.8 percent) suggests that, on average, 2,124 unoccupied rooms are available for rent within 1 to 1.5 hours drive of the DSSF site. A total of 129 hotels with 7,541 rooms were identified in communities within 1.5 to 2 hours' drive from the DSSF site (BLM 2010). These communities include Desert Hot Springs, Palm Springs, and Needles. Assuming an annual average occupancy rate of 70.8 percent, 2,202 unoccupied motel and hotel rooms were available for rent within 1.5 to 2 hours drive from the DSSF site. It should be noted that data was unavailable for local study area hotel/motel rooms located within Arizona, but is certainly available to workers.

The average annual occupancy rate for hotels in Riverside and San Bernardino Counties in 2007 was 70.8 percent (BLM 2010). Applying this ratio (70.8 percent) to the total number of hotel rooms identified within the local study area would suggests that, on average, in 2008 a total of 298 unoccupied rooms were available for rent in the local study area. However, given the seasonality of local tourism to the area, it is considered likely that higher occupancy and room rates would apply during the winter season (December to March), while higher vacancy rates lower room rates would apply during the off-season (summer and early fall) when very hot local conditions persist during the summer months.

Considerable additional hotel and motel facilities are available in the other communities within two hours of the DSSF site. Another 57 hotels with a total of 8,285 rooms were identified in communities located from one to 1.5 hours drive from the site (BLM 2010). These communities include Indio, Palm Desert, Indian Wells, and Rancho Mirage. Applying the 2008 average occupancy ratio (70.8 percent) suggests that, on average, 2,419 unoccupied rooms are available for rent within 1.5 hours drive of the project. Another 129 hotels with 7,541 rooms were identified in communities within two hours drive from the project (BLM 2010). These communities include Palm Springs and Desert Hot Springs.

However, the attractiveness of these temporary housing resources for DSSF construction workers generally would decrease the further they are located from the site. Furthermore, given the size of these hotels and their location within more affluent communities, it is likely that many of these hotels would likely have higher room rates and, therefore, would not be suitable temporary housing for DSSF workers.

Campground/RV Parks

In addition, other housing opportunities are available in the form of recreational vehicle (RV) facilities, mobile home sites, and campgrounds. Under some circumstances, these types of facilities could be usable by DSSF construction workers as temporary housing. Generally their lower cost for overnight use could make them more attractive as a potential temporary housing resource. Particularly for construction workers who may own their own RV or trailers, RV parks with utility

hook-ups and other amenities would be more suitable for use during the summer and could serve as a longer-term rental for workers who prefer a weekly commute.

There are at least 10 RV parks located in the vicinity of Blythe, with a combined total of about 800 spaces (BLM 2010). RV parks in Blythe tend to be located along the Colorado River and receive higher levels of use during the summer. Research performed on small sample of these RV parks suggests that, while they have a large number of spaces, many are occupied by year-round residents or are privately-owned and, therefore, would not be available for use by construction workers (BLM 2010). Additional RV parks are located in Ehrenberg and Quartzsite, Arizona, approximately four miles and 20 miles east of Blythe, respectively. The town of Quartzsite's web site states there are more than 70 campgrounds in the vicinity of the community that are typically occupied between October and March, with visitors attracted to the gem, mineral, and swap meet shows which are popular tourist attractions in the area (BLM 2010). Twenty local RV parks are identified by the Quartzite Chamber of Commerce as operating within Quartzite.

Long-term camping is available by permit in Long-Term Visitor Areas (LTVAs) on BLM lands. There are two LTVAs located in the vicinity of the Project site: Mule Mountain LTVA, which includes two primitive campgrounds, Wiley's Well and Coon Hollow, and Midland LTVA, which is located north of the City of Blythe. BLM also operates another LTVA within the local study area at La Posa, south of Interstate 10 near Quartzsite, Arizona. LTVAs are intended for recreation use only and workers would generally not be permitted to use these areas (BLM 2010). However, BLM may allow temporary LTVAs to be established on site for construction workers for the duration of project construction as temporary lodging facilities.

Campgrounds also are located nearby. Corn Springs is the closest BLM campground to the DSSF, located about 20 miles drive south of the project. However, the BLM imposes a 14-day stay limit at this campground, which would seem to make it an undesirable base camp for construction workers. Cottonwood Springs is the closest National Park Service (NPS) campground to the DSSF, located over 50 miles drive west of the project site. However, since this campground is located within a National Park that has an entrance fee, this location may also seem undesirable for construction workers. Further, the NPS strictly enforces a 30-day camping limit each year; visitors' stay is limited to a total of 14 nights between October and May.

Except for "special areas" with specific camping regulations, vehicle camping is allowed anywhere on BLM-administered land within 300 feet of any posted Open Route. There are, however, no facilities in these locations and there is a 14-day limit for camping in any one location. After 14 days, campers wishing to stay in the area longer are required to move 25 miles from their original camp site (BLM 2010).

Employment

Regional employment statistics by industry sector and county for 2008 are summarized in Table 5-5. The government is Riverside County's largest employer. Governmental employment accounts for over 17 percent of the total jobs in the County. Additional important industries in the area include natural resources, mining, and construction; manufacturing; transportation; trade (wholesale and retail); information; financial activities; and services (e.g., professional, business, educational, health). In Riverside County, natural resources, mining and construction, government, and retail trade services are the leading industry groups in terms of employment.

Table 5-5
Employment by industry Group – 2008

	Riverside County Employment		San Bernardino County Employment		La Paz County Employment	
Industry Group	**Total**	**Percent of Total**	**Total**	**Percent of Total**	**Total**	**Percent of Total**
Agriculture	13,800	2.3%	2,967	0.3%	323	5.65%
Natural Resources, Mining, and Construction	55,100	9.3%	57,660	6.5%	289	5.05%
Manufacturing	48,600	8.2%	63,634	7.2%	218	3.81%
Transportation, Warehousing, and Utilities	21,400	3.6%	63,164	7.2%	146	2.55%
Wholesale Trade	20,400	3.4%	40,192	4.6%	n/a	n/a
Retail Trade	84,200	14.2%	106,217	12.1%	1,340	23.43%
Information	7,700	1.3%	8,949	1.0%	n/a	n/a
Financial Activities	22,300	3.8%	29,563	3.4%	515	9.01%
Professional and Business Services	57,700	9.7%	151,391	17.2%	161	2.82%
Educational and Health Services	58,800	9.9%	96,586	11.0%	n/a	n/a
All Other Services	94,300	15.9%	120,791	13.7%	261	4.56%
Government	110,200	18.5%	139,329	15.8%	2,465	43.11%
Total	**594,500**	**100%**	**880,443**	**100.0%**	**5,718**	**100.00%**

Source: California EDD, 2010a; Bureau of Economic Analysis, 2010.

Labor Force

The labor force of the study area counties and communities is presented in Table 5-6. As of December 2010, Riverside County had a labor force of 905,000 workers, of which 776,500 were employed. Consequently, Riverside County's unemployment rate was 14.2 percent - considerably higher than the State-wide unemployment rate of 12.3 percent. Within Blythe, there is a labor force of 7,100 workers. The cities of Indio and Coachella have total labor forces of 27,100 and 12,300 respectively. Altogether, the local study area has a total labor force of 47,130 when the Ehrenburg labor force is also included.

The labor force and employment estimates for the unincorporated area within the DSSF's regional study area were based on the County-wide average. As of December 2010, Twentynine Palms had a labor force of 6,100 workers of whom 5,100 were employed (the population of the Twentynine Palms military base has been excluded since those residents would not be available to work at the proposed solar facility). Consequently, Twentynine Palms's unemployment rate was 17.1 percent – also considerably higher than the 12.3 percent statewide unemployment rate.

In Arizona, La Paz County had an estimated labor force of on average 7,675 workers in December 2010. No 2010 sub-County area labor force data is available. Therefore, labor force estimates for the sub-County areas were based on 2008 data and adjusted for subsequent population growth. The total labor force for the local study area is estimated to be 47,130 workers. The total labor force for the regional study area is estimated to be 236,265 workers.

Table 5-6
Labor force and Unemployment Data for the Regional Study Area

Jurisdiction	Civilian Labor Force	Total Employment	Number Unemployed	Unemployment Rate	Median Household Income[1]
Riverside County	905,000	776,500	128,600	14.2%	$60,085
Blythe	7,100	5,900	1,200	17.0%	$39,187
Coachella	12,300	9,600	2,700	22.1%	$41,797
Indio	27,100	23,000	4,200	15.4%	$55,598
Indian Wells	1,700	1,600	100	5.1%	$122,983 [2]
La Quinta	14,500	13,400	1,100	7.5%	$81,498
Palm Desert	24,600	22,500	2,100	8.5%	$57,038
Rancho Mirage	6,400	5,600	800	12.7%	$78,284 [2]
Cathedral City	25,900	22,300	3,600	13.9%	$43,411
Palm Springs	25,900	23,000	2,900	11.1%	$46,632
Desert Hot Springs	9,500	7,600	1,900	19.8%	$39,733
Banning	11,600	9,700	1,900	16.2%	$40,849
Unincorporated Area	57,500 (est)	49,300 (est)	8,200 (est)	14.2%	na
Eastern Riverside County, CA	224,100	193,500	30,700	13.5%	na
San Bernardino County, CA	855,600	738,800	116,800	13.7%	$58,440
Twentynine Palms	6,100	5,100	1,000	17.1%	$44,879
Unincorporated Area	3,000 (est)	2,600 (est)	400 (est)	13.7%	na
Southern San Bernardino County, CA	9,100	7,700	1,400	15.4%	na
La Paz County, AZ	7,675	6,925	750	9.7%	$31,812
Ehrenberg	630 (est)	570 (est)	60 (est)	9.7%	$35,330 [2]
Quartzsite	720 (est)	650 (est)	70 (est)	9.7%	$30,165 [2]
Cibola	75 (est)	70 (est)	5 (est)	9.7%	$28,420 [2]
Unincorporated Area	1,640 (est)	1,480 (est)	160 (est)	9.7%	na
Western La Paz County, AZ	3,065	2,770	295	9.7%	na
Local Study Area	47,130	39,070	8,160	17.3%	na
Regional Study Area	236,265	203,970	32,395	13.7%	na

Notes:
[1] 2005-2007 Census average converted in 2010 dollar values.
[2] 2000 Census data converted in 2010 dollar values.
Source: California EDD, 2010; U.S. Census, 2010; U.S. Census 2000; Arizona Department of Commerce, 2008 and 2010.

Unemployment Rates

The unemployment rate for Riverside County in December 2010 was 14.2 percent. In Riverside County, the community with the highest unemployment rate is the City of Coachella (22.1 percent). Reported unemployment data for the two communities located within the regional study area differed greatly. Mecca's labor force reported a 27.5 percent rate of unemployment for December 2010 while the more affluent community of Thousand Palm's 2,500 labor force had a 10 percent rate of unemployment. However, in the absence of more specific information, the Riverside County unemployment rate was used to estimate the current unemployment for the unincorporated areas within Eastern Riverside County.

As discussed above, Twentynine Palms's unemployment rate was 17.1 percent in December 2010, and higher than the San Bernardino County's unemployment rate of 13.7 percent. In Arizona, the unemployment rate for La Paz County was 9.7 percent in December 2010. No 2010 sub-county area unemployment data is available. Generally, past unemployment rates for most of the communities within the regional study area have been lower than the County-wide average. However, in the absence of more current information, the La Paz County unemployment rate was used to estimate the current unemployment for the sub-county areas within the County.

The unemployment rate for the local study area is estimated to be 17.3 percent. Given the estimated local study area labor force estimate of 47,130, it is estimated that there are approximately 8,160 unemployed local study area residents. The unemployment rate for the regional study area is estimated to be 13.7 percent. Given the estimated local study area labor force estimate of 236,265, it is estimated that there are approximately 32,395 unemployed regional study area residents.

Labor Force Growth Projections

Table 5-7 presents County labor force estimates and projections for those skilled workers (by craft) required for construction and operation of the project as estimated by the Applicant. Employment figures for 2006 are provided, as well as employment projections for the selected occupations for 2016. The California Employment Development Department (EDD) groups Riverside and San Bernardino into one statistical area for data presentation purposes. As of 2006, there were relatively high numbers of skilled workers in Riverside and San Bernardino County, including metal workers (19,460), carpenters (28,850), and construction laborers (27,930).

Relevant specialized positions generally were fewer in number, including paving, surfacing, and tamping equipment operators, power plant operators, and construction trade helpers. Employment figures for all occupations presented are anticipated to either remain constant or grow by 2016. The two occupations with the largest anticipated growth are plant and system operators (26.5 percent) and architects, surveyors, and cartographers (25.0 percent) (EDD 2010).

No County-level employment projections for La Paz County are available. Given the small size of available the Arizona labor force within the regional study area, any future growth to the La Paz labor force would have a very minor change in future employment for construction occupations.

Project Construction Labor Needs

The availability of the local and regional workforce to meet the DSSF's construction labor needs has been analyzed to determine whether the DSSF would induce population growth. Consistent with the geographic demarcations for the local and regional study areas, the "local workforce" consists of employable residents living in relatively close proximity to the site (i.e., the cities of Blythe, California or Quartzite, Arizona; or the community of Ehrenburg, Arizona).[3] The "regional workforce" consists of all potential employable adults currently living up to a two-hour commute (one-way) to the site. As discussed previously, the regional labor force consists of the employable adults living west of the site along I-10 as far as, and including, the Banning.

[3] Residents of the unincorporated areas near these communities or within an hour's commute of the project would also be considered local labor. However, given the very limited data on the unincorporated residents, it is conservatively assumed that the identified unincorporated population are regional residents.

Table 5-7
Construction Labor Pool by Craft – Riverside and San Bernardino Counties

	Annual Average Employment		Employment Change		Average Annual Job Openings		
Occupational Title	**2006**	**2016**	**Number**	**Percent**	**New Jobs**	**Net Replacements**	**Total**
Construction Managers	4,380	5,110	730	16.7%	135	160	295
Carpenters	28,850	32,390	3,540	12.3%	198	380	578
Cement Masons and Concrete Finishers	4,110	4,690	580	14.1%	38	120	158
Construction Laborers	27,930	32,080	4,150	14.9%	348	236	584
Paving, Surfacing, and Tamping Equipment Operators	630	720	90	14.3%	8	16	24
Operating Engineers and Other Construction Equipment Operators	4,790	5,460	670	14.0%	37	85	122
Electricians	6,740	7,600	860	12.8%	66	336	402
Plumbers, Pipefitters, and Steamfitters	4,630	5,330	700	15.1%	81	249	330
Metal Workers and Plastic Workers	19,460	20,800	1,340	6.9%	0	1024	1024
Helpers – Construction Trades	120	130	10	8.3%	35	169	204
Welders, Cutters, Solderers, and Brazers	3,960	4,640	680	17.2%	48	178	226
Architects, Surveyors, and Cartographers	1,420	1,670	250	17.6%	56	135	191
Engineering Managers	1,370	1,600	230	16.8%	43	170	213
Supervisors, Construction and Extraction Workers	10,990	12,380	1,390	12.6%	95	216	311
Machinists	2,630	2,960	330	12.5%	0	161	161
Total	**122,010**	**137,560**	**15,550**	**12.9%**	**1,188**	**3,635**	**4,823**

Source: EDD, 2010.

The Applicant expects that construction would last 26 months, with an average of up to 500 daily construction workers with a peak employment of 655 workers during Months 6 and 7 of construction (First Solar 2010). Generally, increased employment represents a beneficial economic impact on local communities from the new job opportunities and increased income generated for the local economy. However, in rural areas such as Blythe and/or projects with more skilled/specialized job requirements, increased labor demand can also have adverse indirect socioeconomic impacts on the local communities if it significant in-migration occurs that the existing local housing, infrastructure and/or other public services cannot support. The estimated peak employment of 655 is used to analyze worst-case construction employment related impacts from potential in-migration.[4]

Labor Force Supply

Table 5-7 shows Year 2006-2016 occupational employment projections for the Riverside/ San Bernardino/Ontario MSA[5] by construction labor skill. The primary trades required for construction of the proposed action will likely include pipefitters, skilled and unskilled laborers, electricians, carpenters, equipment operators, ironworkers, and truck drivers.

Table 5-7 shows that there is a very large population of suitably skilled construction workforce currently living within Riverside and San Bernardino Counties.[6] However, only a portion of these workers could be expected to be currently living within the region. Based on the regional study area's estimated 2010 population of 559,193 residents, compared to a corresponding Riverside and San Bernardino population of 4,212,684, the regional study area's skilled labor force would total approximately 13.3 percent of the skilled workforce shown in Table 5-7. Overall, that would suggest a total skilled labor force of approximately 17,260 workers (13.3 percent of approximately 129,785 total skilled construction workers[7]) living within the regional study area.

Applying the current regional unemployment levels of 13.7 percent within the regional study area would suggest that approximately 2,365 unemployed skilled workers may currently reside in the regional study area. Compared with the required average project employment need of 500 workers, the proposed action could employ up to approximately 21.1 percent of the estimated currently unemployed construction workers. During peak construction, 655 workers would be needed, which would employ up to nearly 27.7 percent of the estimated available unemployed skilled workforce. There also could be individuals amongst the region's other estimated 30,030 unemployed (i.e., 32,395 total regional unemployed – 2,365 regional skilled unemployed construction workers) that have or could obtain the necessary training to perform the facility construction. Also, it is likely that some of the currently employed skilled local construction workers would change their jobs in order

[4] This is a very conservative assumption since arguably Red Bluff Substation construction employment will use existing SCE workers or contractors, and peak employment for the on-site substation and Gen-Tie Line will be completed after Month 8.

[5] Metropolitan Statistical Areas (MSA) are geographic entities defined by the U.S. Office of Management and Budget (OMB). The Riverside/San Bernardino/Ontario MSA consists of Riverside and San Bernardino Counties combined and as such include individuals residing outside the likely daily commuting range from the site.

[6] Given its more rural character and the far smaller size of its labor force, only a very minor proportion of future construction workers would be expected to originate from La Paz County in Arizona. For this analysis, it is conservatively assumed that all construction workers for the DSSF would be California residents.

[7] Using the average of 2006 and 2016 skilled labor force estimates shown the Table 5-7.

to work closer to home and their vacated positions could be filled by other workers living outside of the regional study area.

Consequently, it is expected that most, if not all, of the construction employment for the DSSF would consist of construction workers who live within a two-hour commute from the site. Employee ride sharing, and the relatively long duration of the work would likely encourage workers to commute considerable daily distances to work on the project.

Potential for Housing and Lodging Impacts within the Local Study Area

As shown previously in Table 5-3, the current published vacancy rates for the cities of Blythe, California; Ehrenberg, Arizona; Coachella and Indio, California are 16.1, 34.9, 4.4 and 18 percent, respectively. These vacancy rates indicate that some currently vacant housing could be available for construction workers who choose to relocate within the local study area. Altogether, it is conservatively estimated that up to approximately 6,641 existing housing units could be available as potential housing for future construction workers (this estimate does not account for other potential available housing within the unincorporated local study area). The extent to which construction workers choose to rent local housing would depend on the rental prices and the condition of the available housing. Especially if construction workers would be willing to share rental accommodations, rental housing could be an option for workers wishing to relocate or, more likely, commute weekly to work at the site.

In addition, as previously discussed, analysis of the current motel and hotel businesses and their occupancy rates suggests that lodging could be available to accommodate construction workers who choose to stay temporarily at a local motel or hotel to be close to the site. There are approximately 1,000 hotel/motel rooms within the local study area (i.e., the Cities of Blythe and Quartzite and community of Ehrenburg) (BLM 2010).

Other lodging opportunities also could be available at privately-owned RV/campgrounds and public campground areas within the local study area. However, during the high season (December to March) these facilities can be popular with visitors and, therefore, could have only limited availability for construction workers. In addition, most of the public campgrounds (including the BLM administered Long Tern Visitor Areas) are intended for recreational use; construction workers might not be permitted to use these areas. Consequently, it is unlikely that the public RV/campgrounds would be very suitable or attractive lodging options for most DSSF construction workers who seek local accommodations.[8] However, BLM may allow temporary LTVAs to be established on site for construction workers for the duration of project construction as temporary lodging facilities.

Furthermore, particularly during the non-winter season, it is likely that there would be considerable housing opportunities within the local area for construction workers seeking temporary accommodations. Lodging facilities within the local study area could include both rental housing for workers seeking longer term local housing and motel lodging for those looking for more occasional or shorter stay accommodations. The relatively high vacancy rates also would ensure that any DSSF-related temporary housing needs would be met with existing housing or lodging facilities. As a result, no new housing or motel development would be expected to be induced by the proposed action and

[8] Except for construction workers that already own their own RV or camper trailers.

the increased use of these under-utilized housing or motel lodging would be considered beneficial for local property owners.

Construction Worker Expected Commuting Patterns

Given the major skilled labor force residing within the areas of Riverside and San Bernardino Counties, and the common construction worker commuting habits (ESRI 1982; CEC 2010), it is reasonable to expect that DSSF construction workers residing outside the regional study area would commute weekly to the local area rather than in-migrate with their families. Furthermore, the employee shuttle option will also be expected to be used by a large majority of project construction workers. Consequently, any such workers who choose to reside temporarily in the local area would have a limited service impact on local public services and infrastructure. Furthermore, given that existing housing and/or lodging facilities would be used to accommodate the few (if any) construction workers who choose to stay temporarily in the local area, the local transient occupancy tax revenues, local rental home owners' property, and/or business taxes payments should account for their limited local infrastructure and public service usage.

Therefore, it is concluded that the proposed project would not induce substantial growth or concentration of population in either the regional or local study areas. Furthermore, construction of the proposed action would not encourage people to relocate to the area and, thereby, would not result in new and unplanned growth or land use changes.

Project Worker Transit Provisions

The DEIS also includes Applicant Measures and Mitigation Measures proposed to encourage and facilitate regional workers commuting to the project site. Specifically as stated in the DEIS:

- AM-AIR-5: Sunlight would arrange a shuttle bus program for construction workers, with assembly points in the Palm Springs and Blythe areas. Sunlight expects this shuttle bus system to be heavily used by construction workers, with an average of 89.5 percent of construction workers accessing the Solar Farm site by shuttle bus.
- AM-TRANS-1: Sunlight shall prepare a Construction Traffic Control Plan in conjunction with Riverside County and/or Caltrans in accordance with Caltrans Manual on Uniform Traffic Control Devices and the California Joint Utility Traffic Control Manual (2010). At a minimum, the Plan shall address the following:
    - Determine timing of heavy equipment and building materials deliveries, scheduling these trips for off-peak hours to the extent feasible;
    - Determine timing of construction worker arrival and departure times, scheduling these trips for off-peak hours to the extent necessary;

In its supplemental information response, the Applicant also provided additional information describing the "final transit options" that Sunlight proposes to implement to transport workers from nearby population centers and facilitate both accessibility to the project site and service other projects' in the region. The Shuttle assembly areas are likely to be located in regional population centers, such as Blythe and in the Palm Springs area, at existing parking areas with sufficient parking for the number of workers expected to be taking the shuttle. Approximately three acres of

construction parking would also be provided at the Solar Farm Site. In addition, the Applicant Input to the FEIS on the Final Transit Options issue specifically states:

> "In cooperation with the construction contractors, the Applicant will develop the "final transit options" for workers traveling to and from the site during the construction phase of the project. The transit options considered would include formal rideshare, carpooling, and/or use of shuttle buses in order to minimize traffic and air quality impacts associated with individual vehicle use. Depending on the construction schedule for other projects in the area, the Applicant will also endeavor to work with other projects in the vicinity of Desert Center to most efficiently and effectively transport construction workers to multiple sites where practical.
>
> In addition, the Applicant would consult with the County of Riverside and the California Department of Transportation (Caltrans) District 8 office in the preparation and implementation of a Traffic Control Plan (TCP). Desert Sunlight will submit the proposed TCP to the County of Riverside and the Caltrans District 8 office in sufficient time for review and comment prior to the proposed start of construction and implementation of the plan.
>
> The Traffic Control Plan (TCP) will include a work schedule and end-of-shift departure plan designed to ensure that stacking does not occur at intersections necessary to enter and exit the Project site. The Applicant will consider using one or more of the following measures designed to prevent stacking: staggered work shifts, off-peak work schedules, and/or restricting travel to and departures from the Project site (First Solar, 2011)."

Implementation of these measures may be expected to facilitate daily commuting by Project construction workers from the surrounding region and thereby substantially reduce the likelihood of worker in-migration occurring to the local communities. Consequently, furthermore in the absence of extensive worker in-migration occurring, little additional demand on local public services would be expected to result during the Project's 26-month construction period.

Potential Social Impacts of Project Construction Employment

The potential for DSSF-related impacts to the local study area's social character are determined by the nature of economic impacts of the construction activity and any DSSF-related in-migration.

As discussed above, construction of the DSSF could be expected to generate considerable economic benefits directly for both construction workers and local businesses providing materials and services for construction. In addition, major indirect and induced spending benefits for the local and eastern Riverside County economies would be generated by subsequent spending of the construction workers and construction businesses' income within the local and regional economy. The economic benefits are expected to extend widely within the local and regional economy but would most benefit food, retail, lodging, real estate, and medical related businesses.

The additional new income for the local economy from the DSSF would have a positive, but short-term, contribution towards supporting local business and maintaining the economic vitality of the Cities of Blythe, Indio and Coachella and other nearby communities. The positive effect for the local economy would be increased given the local study area's recent and on-going economic weaknesses as a result of both longer term changes and the more recent economic downturn. For example, the

continued viability of Blythe's local business community is essential for its long-term well-being. Increased local employment opportunities would improve local residents' standard of living and will help retain younger residents who otherwise would be more likely to leave the community if there are insufficient local employment opportunities. The local community's positive social attitudes to the proposed action may generally be expected to increase based on the extent that local residents are employed (either directly or indirectly) or otherwise benefit from the DSSF.

If it were to occur, DSSF-related in-migration of new residents could affect the social character of the local study area. An influx of new individuals with different values, lifestyles, and/or socio-demographic backgrounds could have a positive or negative influence on the quality life and/or community values. The existing community members' attitudes and opinions to any such changes could vary greatly among individuals. However, in general, the magnitude of the in-migration would need to be relatively substantial for the social environment to be noticeably altered. Furthermore, social changes typically require, or are most commonly associated with, permanent changes to the community's composition and/or attitudes rather than as the result of short-term influences or changes.

As discussed above, the majority of construction workers for the DSSF would be expected to commute daily to the site. Given that most workers would likely travel to the site from their homes located far from Desert Area and are expected to use employee transit, local residents may have little daily interaction with most workers. It is possible that some construction workers could chose to commute weekly from their homes and stay within the local area at local hotels/motels or perhaps rent homes. In this case, after the workday is over, these individuals would be more likely to interact with existing residents at local businesses or community facilities. However, given the very limited number of construction workers expected to stay in the local area during the work week, the presence of these individuals would not be expected to result in substantial or long-term adverse effects to the local area's social composition and character.

Therefore, in general, given the expected new local employment opportunities and economic benefits to local business and relatively limited temporary in-migration of construction workers, most local residents and stakeholder groups would be expected to be supportive or, at a minimum, would not oppose the solar facility's construction. Consequently, the DSSF would be expected to have a minor and largely positive impact on the social character of the local study area for the temporary duration of facility construction.

Conclusions

Supplemental analysis of the local and regional workforce for the project confirms that there is likely to be sufficient construction workers in the region to meet the project's short term construction needs. Relatively high levels of local and regional unemployment as well as regional housing and lodging availability will likely ensure that project workers will be willing and able to commute from the local and regional area to work at the project site. In addition, the planned employee transit provisions will also facilitate and encourage a large majority of project construction workers to access the site by bus. Consequently, limited if any project-related in-migration may be expected to occur and as a result limited social or municipal service impacts would likely result from the construction worker employment.

References

Arizona Department of Commerce, Community Profiles, available at http://www.azcommerce.com /SiteSel/Profiles/Community+Profile+Index.htm , accessed on July 19, 2010.

Bureau of Economic Analysis (BEA), 2010, Regional Economic Information System, available online at http://www.bea.gov/regional/reis/default.cfm?selTable=CA25, accessed on July 16, 2010.

Bureau of Land Management, *Genesis Solar Power Project FEIS*, August, 2010.

California Department of Finance, *Table 5-3: E-5 Population and Housing Estimates for Cities, Counties and State, 2001-2010 with 2000 Benchmark,* May 2010.

California Employment Development Department (EDD), *California Employment Projections of Employment by Industry and Occupation - Riverside County,* available at http://www.labormarketinfo. edd.ca.gov/?pageid=145 and accessed September 2010.

California Employment Development Department (EDD), *Industry Employment and Labor Force – by Annual Average,* March 2009 Benchmark. 2010.

California Energy Commission (CEC), *Transcript of Conversation with Bill Perez, Business Manager of the Building Trades Council for San Bernardino and Riverside Counties*, June, 2010.

First Solar, *Applicant Input to FEIS*, January 5, 2011.

U.S. Census, *American Factfinder, U.S. Census data from 2000* available at http://factfinder.census.gov/ home/saff/ accessed on July 16, 2010.

N.5 INDIVIDUAL RESPONSES TO COMMENTS

Letter - 10.

10-01 See Chapter 2 for a description of the Project and its technology.

Letter - 16.

16-01 See Common Response N.4.9.

Letter - 19.

19-01 Commenter details actions required for analysis of cultural resources for the FEIS, including contacting the appropriate California Historic Resources Information Center; preparation of archaeological surveys, if required; mitigation plans in case of discovery of previously unknown archaeological resources; and provisions in case of discovery of human remains. Cultural resource information can be found in Chapter 3.6.

Letter - 20.

20-01 Commenter expresses concern about the use of cadmium by the proposed Project. See Common Response N.4.9.

Letter - 25.

25-01 Commenter expresses concern about the use of CdTe modules. See Common Response N.4.9.

Letter - 26.

26-01 Commenter expresses concern about the use of CdTe modules. See Common Response N.4.9.

Letter - 28.

28-01 Commenter has concerns about the Project's impact on the local economy. The proposed Project is predominantly located on BLM lands and is entirely outside Joshua Tree National Park. The potential Project impacts to the area have been analyzed on a resource by resource basis. As discussed in Section 4.12 (Recreation), current recreation use of the local area is rare (except for OHV use) and there would be a less than significant impact to local recreation. Consequently, there is little evidence to suggest that the Project would substantially reduce local tourism. Furthermore, as 99 percent of park entries occur through the park's five major entrance stations and the Black Eagle Mine Road access to the park is a four-wheel-drive only access road, there is no evidence that there is currently substantial tourism via the local area to Joshua Tree National Park (Joshua True National Park 2004 Visitor Study). Therefore, it may be concluded that that proposed Project would have a less than significant effect on local tourism and tourism spending.

28-02 Commenter has concerns about impacts on dark night skies. See Common Response N.4.3.

28-03 Commenter expresses concern about the generation of particulate matter by the Project. For discussion of fugitive dust emissions that would be associated with construction and operations of the Proposed Action, refer to Final EIS Section 4.2.3.

28-04 Commenter suggests that removing desert pavement would increase fine particulates and impact the health of nearby residents. For discussion of fugitive dust emissions that would be associated with construction and operations of the Proposed Action, refer to Final EIS Section 4.2.3.

28-05 Commenter suggests that disturbing desert soil would release arsenic and threaten human health. See Response to Comments 109-02 and 110-15.

28-06 Commenter expresses concern that removal of old growth desert will result in loss of carbon sequestering creosote. The carbon sequestration capacity of desert soils in the vicinity of the Project are discussed in Sections 3.5 and 4.5, in regard to greenhouse gas emissions and climate change. As discussed therein, current estimates of desert soil carbon sequestration potential are substantially less than had been previously estimated. For additional discussion, please refer to Section 3.5 and 4.5 of the DEIS.

28-07 Commenter expresses concern that climate change and the effect the Project would have on desert tortoise populations in the Chuckwalla Valley. The FEIS Chapter 4.5, Impacts

on Climate Change, has been updated to include a discussion of the potential indirect impacts of climate change, including effects on vegetation and wildlife, and changes in mitigation values of proposed mitigation lands. Please refer to this updated section for additional information.

28-08 Commenter expresses concern that the residents of Chuckwalla Valley are burdened inequitably by pollution, industrial facilities, and crime. The DEIS environmental analysis determines the future environmental impacts associated with the proposed Project. The environmental justice analysis specifically assessed the potential for any such major impacts to be disproportionately distributed to minor or low-income population within the local area. While certain potential impacts are significant and unavoidable (e.g., air resources, cultural resources, and visual resources), none of the Project's impacts were determined to have a disproportionate impact on local low-income or minority populations. The combined effects of the proposed Project with the other past, present and reasonably foreseeable future projects within the Chuckwalla Valley have been evaluated in the cumulative analysis performed for each resource area.

28-09 Commenter expresses concerns about invasive plant and animal species impacting Joshua Tree National Park as a result of the Project. Implementation of Applicant Measure (AM) BIO-2 will be required which will reduce the potential for the introduction of invasive species during construction, operation and maintenance, and decommissioning of the Project. AM BIO-2 involves implementing the Integrated Weed Management Plan, which was prepared specifically for the Project and pursuant to BLM's Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States and the National Invasive Species Council's National Invasive Species Management Plan. Measures required in the plan include equipment cleaning, soil management, use of weed-free products, training of construction personnel regarding weed management, containment and control measures, and monitoring and reporting to ensure compliance with these measures. By controlling weeds on the Project site, implementation of AM BIO-2 will also reduce the potential for the spread of invasive species into areas outside of and/or surrounding the Project areas, such as Joshua Tree National Park. Non-native wildlife species (e.g., starlings or house sparrows) may utilize the Project site but there is no expectation that the Project would cause their populations to disperse into Joshua Tree National Park. Soils of roads and administrative areas within the Project site would be compacted after construction, which would reduce the wind-erosion potential of the site. Further, the Applicant would be required to apply dust palliatives between the rows of solar panels using a water truck per Mitigation Measure MM-AIR-3. The Project would not increase the wind-erosion susceptibility of the site and, therefore, would not contribute to cumulative dust generation from past, present and future projects. Also, fugitive dust generated during construction would be short-term and temporary and would be minimized with AM-AIR-1, which requires implementation of a Dust Control Plan including the use of dust suppressants during facility construction.

28-10 Commenter suggests that solar panels belong on rooftops not on public lands miles from urban centers. See Subsection 2.6.8 in the FEIS for a discussion on distributed generation.

Letter - 29.

29-01 Commenter opposes the proposed Project and expresses concern about its impacts on the tourist economy of Joshua Tree National Park. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and does not require a specific response.

29-02 Commenter expresses concern about impacts to dark skies. See Common Response N.4.3.

29-03 Commenter expresses concern about dust and non-native growth. Implementation of Applicant Measure (AM) BIO-2 will be required which will reduce the potential for the introduction of invasive species during construction, operation and maintenance, and decommissioning of the Project. AM BIO-2 involves implementing the Integrated Weed Management Plan, which was prepared specifically for the Project and pursuant to BLM's Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States and the National Invasive Species Council's National Invasive Species Management Plan. Measures required in the plan include equipment cleaning, soil management, use of weed-free products, training of construction personnel regarding weed management, containment and control measures, and monitoring and reporting to ensure compliance with these measures. By controlling weeds on the Project site, implementation of AM BIO-2 will also reduce the potential for the spread of invasive species into areas outside of and/or surrounding the Project areas, such as Joshua Tree National Park. Further, the Applicant would be required to apply dust palliatives between the rows of solar panels using a water truck per Mitigation Measure MM-AIR-3. The Project would not increase the wind-erosion susceptibility of the site and, therefore, would not contribute to cumulative dust generation from past, present and future projects. Also, fugitive dust generated during construction would be short-term and temporary and would be minimized with AM-AIR-1, which requires implementation of a Dust Control Plan including the use of dust suppressants during facility construction.

29-04 Commenter expresses concern about the loss of habitat and impacts to desert tortoise. The BLM, FWS, CDFG, and CPUC have required extensive desert tortoise surveys to determine existing populations within the footprint of the Project and estimated mortality rates of translocated desert tortoises. As a result, the Applicant has reduced the solar farm footprint from 4.000 acres 3,912 acres to avoid impacts to the more sensitive tortoise areas. In addition, a Desert Tortoise Translocation Plan (per AM-WIL-1) and a Habitat Compensation Plan (per MM-BIO-2) would promote recipient sites for desert tortoise that are best suited to achieve a high success rate for translocated tortoises.

29-05 Commenter suggests that the Project would promote the spread of Sahara mustard, an invasive plant. See Response to Comment 29-3.

29-06 Commenter supports the use of rooftop solar panels. This comment does not provide any specific feedback on the proposed Project. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and does not require a specific response.

Letter - 30.

30-01 Commenter submitted a form letter expressing same issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 31.

31-01 Commenter submitted a form letter expressing same issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 32.

32-01 Commenter submitted a form letter expressing same issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 33.

33-01 Commenter suggests that other technology can be used in place of a large solar PV energy generation facility that is being proposed. Also, the commenter expresses same issues of concern as stated in Letter 28. Considering siting the Project on other lands and using different technology please see Common Response N.4.7. Please see Response to Comments for Letter 28 for the other issues raised.

Letter - 35.

35-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 36.

36-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 37.

37-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.Considering siting on previously disturbed lands, see Common Response N.4.7. Also, please see responses to Letter 28.

Letter - 38.

38-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 39.

39-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 40.

40-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 41.

41-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 42.

42-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 43.

43-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 44.

44-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 45.

45-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 46.

46-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 47.

47-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 48.

48-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 49.

49-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 51.

51-01 Commenter expresses concern about impacts to the desert fungus garden ant. The desert fungus garden ant (Acromyrmex versicolor), is not considered a special-status species according to the definition presented in Section 3.4.2 and Table 3.4-1 of the DEIS. Although USFWS-designated critical habitat does not exist for this species (because it is not federally listed under the Endangered Species Act), it is understood that the commenter was instead likely describing the importance of the habitat for the desert garden fungus ant within and near the Project area. These ants are found within the Sonoran desert as well as deserts of Arizona. Habitat for the ant generally includes areas under mature dominant Sonoran trees; nests are established in the soil and under the canopy of these trees whose leaves they harvest. Colonies are found in aggregations on large trees and do not disperse great distances. Due to the lack of such habitat within the project footprint, there is low potential for this species to occur on-site and impacts to this non-special-status species would be minimal, if any.

Commenter also expresses concern about dark night skies, air quality (fugitive dust), and distributed generation. Please see Common Response N.4.3 (dark skies), and Subsection 4.2.3 and 2.6.8 for air quality and distributed generation, respectively, in the FEIS.

Letter - 52.

52-01 Commenter expresses concern that mitigation measures not adequate for NEPA / CEQA compliance. Other concerns expressed are same as in Letter 28. See Common Response N.4.6 and Response to Comments in Letter 28, above.

Letter - 53.

53-01 Commenter opposes the proposed Project. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and does not require a specific response.

53-02 Commenter suggests siting the Project on disturbed lands. See Common Response N.4.7.

53-03 Commenter opposes the siting of the proposed Project in the California desert. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and does not require a specific response.

53-04 Commenter expresses concern about impacts on wildlife, air quality, and water quality near Joshua Tree National Park. See Common Response N.4.2. In addition, see Chapter 4.2-Air Resource, Chapter 4.4, Wildlife, and Chapter 4.17, Water Resources, for a discussion on potential Project impacts on air quality, wildlife and water quality.

Letter - 54.

54-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 55.

55-01 Commenter submitted a form letter expressing similar issues of concern as stated in Letter 28. Please see Response to Comments for Letter 28.

Letter - 56.

56-01 See Response to Comments 56-2 through 56-65. In addition, Attachment 1 in the cover letter refers to Cumulative Impact Analysis as revised by CPUC. These revisions have been incorporated into the FEIS text.

56-02 Applicant Measures have been added to Chapter 2 in the FEIS.

56-03 Text in the FEIS Subsection 3.3.3, Soils and Topography, has been added that includes a discussion of soils found within the Project Study Area and those specific to the Project components. Additionally, text from page 3.3-10 of the DEIS which discusses fine sand habitats found on the Project sites was reorganized and moved to the Active Desert Dunes discussion under Subsection 3.3.6; a subheading for Fine Sand Habitats was added which includes clarification that aeolian sand deposits do not exist within Project footprints.

56-04 A footnote has been added to Table 3.3-2 in the FEIS for the definition of NECO.

56-05 Text has been added to Section 3.3.5 in the FEIS to state that the likelihood of presence is unlikely.

56-06 Text has been added to Section 3.4.4 in the FEIS which provides greater depth to habitat description and the likelihood of occurrence.

56-07 The requested sentence has been integrated with revisions to the natural history description of the sheep and the likely use of the valley floor by the sheep in Section 3.4 of the FEIS.

56-08 The requested statement has been added to the discussion in Section 3.4 of the FEIS.

56-09 Text has been added to Section 4.17.3, which provides additional analysis regarding potential for the Project to result in the violation of water quality standards or existing waste discharge requirements.

56-10 The indicated discussion has been updated to reference the 2608-3346 range indicated in Table 4.17-1.

56-11 The cumulative analysis sections associated with the respective resources have been revised in the FEIS to address this comment.

56-12 Mitigation Measure MM-AIR-4 has been added to address this comment.

56-13 A South Coast Air Quality Management District (SCAQMD)-recommended measure has been added to the Final EIS to replace MM-AIR-1 (see Response 103-6). It appears that the intent of the CPUC-recommended measure would be achieved through implementation of a revised MM-AIR-1.

56-14 MM-BIO-2 has been added to Subsection 4.3.3 of the FEIS.

56-15 The last sentence under AM-BIO-3 in Subsection 4.3.3 has been revised to read: "All cacti observed will be flagged for tranplantation and special status plant species observed will be flagged for salvage." In addition, MM-BIO-3 has been added.

56-16 MM-BIO-4 has been added to Subsection 4.3.3 of the FEIS. Edits were also made to AM-BIO-5 to ensure consistency with and reference to MM-BIO-4.

56-17 See Response to Comment 56-16.

56-18 Impact BIO-2 in the FEIS has been edited to include reference to MM-BIO-2 and to provide an explanation as to why impacts are reduced to a level considered less than significant or cumulatively considerable. Impacts discussion under each impact were edited to address the concern of the impacts to special status plants and that they would be mitigated below a level of significance.

56-19 Text referring to MM-BIO-2 has been added to the text of AM-BIO-1 in the FEIS.

56-20 The typo has been corrected in the FEIS and text added that refers to M-BIO-2.

56-21 Text has been added to Impact BIO-5 under Subsection 4.3.3 of the FEIS to clarify that the Project is in compliance with the open space policies of the Riverside County General Plan.

56-22 The impact discussion text for Section 4.3 in the FEIS for special status plant species, natural vegetation communities and sensitive communities, including cumulative discussion, have been edited to make clear the determination language throughout the chapter.

56-23 Additional text has been added to the FEIS, Subsection 3.4.4 for the descriptions for each species, as needed. Section 4.4 was expanded to describe impacts to these species and provide mitigation for those impacts to these species.

A discussion on the topic of polarized light and glare has been added to Section 4.4. The discussion states that glare is not a problem but that polarized light may produce light pollution that can confuse wildlife, effect their navigation ability and ultimately effect dispersal and reproduction. This is also tied into effects to local plant communities.

MM-WIL-5 has been added to Section 4.4.

Additional text was added with regard to impacts on movements of wildlife, specifically with regard to Nelson's big horn sheep and Palm Springs round-tailed round squirrel. The clarifying text has been added to all relevant subsections under Section 4.4.

56-24 Additional text has been added to Section 3.4 in the FEIS, providing more background on critical habitat and its location with respect to the project sites. Also, a discussion was added in Section 4.4 about the project components and locations of critical habitat.

56-25 Reference to the USFWS guidance has been added to AM-WIL-1 in the FEIS, Section 4.4.

56-26 The typo has been corrected and MM-WIL-1 has been added to the list of Applicant and Mitigation Measures in the Executive Summary and in Section 4.4 of the FEIS.

56-27 AM-WIL-3 has been edited to include reference to USFWS's 2010 avian and bat guidelines.

56-28 Text under Impact WIL-1 in Section 4.4 of the FEIS has been edited to include reference to MM-BIO-2 as supportive reasoning that impacts would be reduced to less than significant.

56-29 Edits have been made to both Sections 3.4 and 4.4 in the FEIS to ensure consistency with the significance conclusion.

56-30 Additional text has been added to the FEIS, Section 4.4 under discussions related to Impact WIL-3 to clarify the importance of the valley floor as a movement corridor as well as text referring to mitigation for these impacts. Subsection 3.4.4 for the descriptions for each species, as needed.

56-31 Clarifying text has been added to Impact WIL-4 in Section 4.4 of the FEIS.

56-32 The impact determinations in Section 4.4 of the FEIS have been revised where appropriate to make clear the determination language throughout the section.

56-33 Section 4.4.3, Wildlife Management Areas and Critical Habitat in the FEIS has been amended to include the issue of polarized light and MM-BIO-5 has been added per this comment.

56-34 The discussion under Section 4.9.5 in the FEIS has been expanded to address this comment.

56-35 The intent of CEQA Significance Criterion NZ-4 is to address potential impacts that could occur even if Project-related operational noise levels would be less than applicable land use compatibility standards. In general, a 10 dB increase in noise level is perceived as a doubling in loudness. For the purposes of this analysis, BLM considers a perceived Project-related long-term doubling in loudness (i.e., increase in 10 dB) of ambient levels to represent a substantial permanent increase compared to noise levels without the Project. Therefore, such a long-term increase relative to ambient noise levels would be considered a significant impact.

56-36 The recommended mitigation measure has been included in the Final EIS as MM-NOI-1 to supersede applicant measure AM-NZ-1.

56-37 Comment noted, and the sentence has been deleted. The Project would recycle the panels if damaged or at termination, therefore discussion of land disposal is not relevant.

56-38 AM-HAZ-5 in the FEIS has been expanded to include more detail on the elements of an emergency response plan per this comment.

56-39 AM-HAZ-10 in the FEIS has been revised to add more detailed performance standards per this comment.

56-40 The text has been corrected to recognize that the travel routes could be returned to original baseline conditions after decommissioning, and the reference to "beneficial impact" has been removed.

56-41 As stated on page 4.15-6 of the DEIS, the Red Bluff Substation would be monitored remotely and would have about three or four visits per month, which translates to an average on about one visit per week. When trips are generated at such a low-level frequency, there would be no impact on traffic flow conditions at any time of the day (peak traffic hours or otherwise). That is, changing the assumed time of day for analysis from "outside of peak traffic hours" to "during peak traffic hours" would be no effect on the impact determination presented in the DEIS. The same applies to the analysis of Gen-Tie Line trip generation.

56-42 The updated FAA regulations referred to in the comment would not require SCE to file a Form 7460-1 for the telecommunications tower; nonetheless, SCE has agreed to Applicant Measure AM-HAZ-7, as amended, requiring that SCE file a Form 7460-1 with the FAA and comply with FAA's determination. SCE has filed a 7460-1 with FAA. See text revisions in Sections 4.15.4, 4.15.6, and AM-HAZ-7, as amended, in Section 4.11.3 in the FEIS.

56-43 The section headers have been revised in the Final EIS to more accurately reflect what is discussed in text. Headers titled "Interim Visual Management Class" have been revised to "Visual Contrast Analysis", and the headers titled "Summary of Operation and Maintenance Impacts" have been revised to "Consistency with Interim Visual Resource Management Objectives."

56-44 CPUC has expressed the need to make a determination under CEQA as to the impacts of the "whole of the action" which includes not only the Red Bluff Substation but all project components associated with the Project whether located on private land or BLM land. Accordingly, the Final EIS text under the headings "CEQA Significance Determination" has been revised as suggested.

56-45 See response to Comment 56-44

56-46 See response to Comment 56-44

56-47 See response to Comment 56-44

56-48 See response to Comment 56-44

56-49 See response to Comment 56-44

56-50 See response to Comment 56-44

56-51 See response to Comment 56-44

56-52 See response to Comment 56-44

56-53 See response to Comment 56-44

56-54 See response to Comment 56-44

56-55 See response to Comment 56-44

56-56 See response to Comment 56-44

56-57 See response to Comment 56-44

56-58 See response to Comment 56-44

56-59 See response to Comment 56-44

56-60 See response to Comment 56-44

56-61 See response to Comment 56-44

56-62 The indicated text has been updated to include a more complete characterization of potential impacts to flooding, both onsite and off.

56-63 The indicated text has been updated to include a more complete characterization of potential impacts to flooding, both onsite and off.

56-64 Text updated to indicate that alternative sources could include bottled water or the use of a small scale/on site drinking water purification system.

56-65 Text updated; non-binding language removed.

Letter - 59.

59-01 Commenter opposes the Project. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and does not require a specific response.

59-02 Commenter suggests that the EIS did not consider the full range of alternatives. See Common Response N.4.7.

59-03 Commenter suggests that the analysis in the EIS did not take into consideration impacts to Joshua Tree National Park (JTNP). See Common Response N.4.2 and Chapter 4.12, Recreation. In addition, a subsection has been added (Subsection 4.14.9) that summarizes Project impacts to JTNP.

59-04 Commenter opposes the Project. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and does not require a specific response.

Letter - 60.

60-01 Commenter supports the proposed Project unless power lines cross a populated area, particularly Kaiser Road. Commenter suggests routing power lines along Eagle Mountain Road. See Common Responses N.4.7 and N.4.8.

Letter - 61.

61-01 Commenter supports the proposed Project unless power lines cross a populated area, particularly Kaiser Road. For discussion associated with impacts related to transmission line corona discharge, refer to Final EIS Section 4.10.3, under the operations and maintenance impact discussion for Gen-Tie Line 1-A.

61-02 Commenter expresses concern about impacts of power lines on property values. Potential Project-related effects on local land uses and property values are discussed in Common Response N.4.8.

Letter - 62.

62-01 Commenter expresses concern about the route that would be taken by power lines serving the proposed Project. Please see Response to Comment 61-01 and 61-02 regarding power lines.

Letter - 63.

63-01 Commenter expresses support for the proposed Project with one reservation, the preferred route of the Gen-Tie line. Please see Common Response N.4.8 regarding land use impacts of the Gen-Tie lines. Also, see Common Response N.4.7 regarding alternatives analyzed.

63-02 Commenter expresses support for the proposed Project with one reservation, the preferred route of the Gen-Tie line. See Response to Comment 63-01.

63-03 Commenter expresses support for the Project. Comment is noted.

Letter - 64.

64-01 This letter raises the same concerns in form Letter 28. Please see Response to Comments to Letter 28.

Letter - 65.

65-01 Commenter urges the No Action Alternative be adopted. Comment is noted.

65-02 Commenter suggests that tourism to the area should be emphasized not job creation. See Response to Comment 28-01.

65-03 Commenter expresses concern about impact to night skies. See Response to Comment 28-02.

65-04 Commenter expresses concern about desert tortoises and climate change. See Response to Comment 28-07.

65-05 Commenter states that desert tortoises in the Chuckwalla Valley are the reservoir for future mitigation into Joshua Tree National Park. See Response to Comment 28-07.

65-06 Commenter expresses concern about non-native species introduced to Joshua Tree National Park, as a result of the Project. See Response to Comment 28-09.

65-07 Commenter expresses concern about the disturbing desert soils and encouraging blooms of a non-native plant, the Sahara Mustard. See Response to Comment 28-09.

65-08 Commenter suggests that solar panels belong on rooftops not on public lands miles from urban centers. See Response to Comment 28-10 and Subsection 2.6.8 in the FEIS for a discussion on distributed generation.

Letter - 66.

66-01 In response to the commenter, the words "the Project applicant and proponent" have been added at the beginning of the text to clarify per the comment.

66-02 In response to the commenter, the word "only" has been eliminated from the Executive Summary as it describes permanent disturbance of acreage.

66-03 Commenter suggests that the purpose and need for the Project is too narrowly defined. See Common Response N.4.1 regarding the purpose of the Project and Common Response N.4.7 regarding the alternatives evaluated.

66-04 Commenter expresses concern about the scope and level of analysis of the alternatives. See Common Response N.4.7. In addition, as stated in the Subsection 2.2.1 of the DEIS, there are many possible alternative configurations. Alternative site configurations were developed to avoid and then minimize impacts on sensitive environmental resources. The alternatives analyzed are considered to be a reasonable range of alternatives that are technologically and economically feasible and respond to the purpose of and need for the Project. The way the alternatives were combined into larger system alternatives has no bearing on the ability of the agencies' decision makers to select a different combination than what was presented in the EIS.

66-05 Commenter expresses concern about the scope and level of analysis of the alternatives. See Common Response N.4.7. The commenter suggests that Alternative 6 (no proposed Project ROW grant, amend CDCA Plan to allow renewable energy development at the proposed Project site) should analyze the largest possible project that could be developed under this scenario and the impacts associated with such development. The size of any future renewable energy development at the project site would depend on a future application for a ROW grant from another developer. Because there is no such application before BLM at this time, defining the maximum size of renewable energy development at the project site is speculative.

66-06 Commenter expresses concern about the analysis of alternatives to the proposed Project. Concerning a reasonable range of alternatives see Common Response N.4.7. Also, regarding the adequacy of the analysis please see Common Response N.4.6.

66-07 Commenter expresses concern about the analysis of alternatives to the proposed Project. Concerning a reasonable range of alternatives see Common Response N.4.7. Also, regarding the adequacy of the analysis please see Common Response N.4.6.

66-08 Commenter suggests there is no clear analyses of impacts to sacred sites. Sections 3.6 and 4.6 state that Indian tribes, during ongoing government-to-government consultation with the BLM, have identified no sacred sites that would be impacted by the Project. The FEIS acknowledges the possibility that such sites may be identified as consultations with tribes continue during the NEPA and Section 106 compliance processes. Because no sacred sites have been identified, the analysis of impacts does not differ among the alternatives with respect to such sites. See Response to Comment 66-11 with regard to the continuing consultation with tribes and resolution of adverse effects through development and implementation of a Memorandum of Agreement for the Project.

66-09 Commenter states that analysis of impacts in the Draft EIS is not adequate because mitigation measures defer requirements for studies. See Common Response N.4.6 regarding adequacy of analysis in the Draft EIS.

66-10 Commenter notes that Applicant Proposed Measure Vegetation BIO-5 includes requirements for the future preparation of a Vegetation Resources Management Plan. See Common Response N.4.6 regarding the adequacy of analysis in the DEIS. Please note the creation of more detailed mitigation plans after certification of the environmental document, is acceptable under CEQA provided that practical considerations make it difficult to develop the plan at this stage of the planning process and the agency "commits itself to eventually devising measures that will satisfy specific performance criteria articulated at the time of approval" (Sacramento Old City Association v. City Council (1991) (229 Cal.App.3d 1011, 1028 1029). See also CEQA Guidelines (14 Cal. Code Regs 15123.4 (a) (1) (B)), which provides that mitigation measures may specify performance standards that would mitigate the signifi-cant effect of the project and that may be accomplished in more than one specific way.

66-11 Commenter suggests that all impacts to cultural resources should be identified before issuance of the DEIS. Memorandums of Agreement are commonly used to comply with Section 106 of the NHPA on projects like the Desert Sunlight Solar Project. The Memorandum of Agreement for the Project will govern a process for completing identification and evaluation of cultural resources that will be affected, and for determining mitigation consistent with their values, prior to construction or other activities that could affect them. The Memorandum of Agreement will be completed and signed prior to approval of the ROD. Consulting parties and stakeholders, including the State Historic Preservation Officer and Indian tribes, will have an opportunity to participate in consultations on the terms and provisions of the Memorandum of Agreement before the project is approved.

66-12 The Project's potential effect on cultural and natural resources with the project area are identified and evaluated in Section 4.6 (Cultural Resources) of the DEIS. The Project site's cultural resources (including Native American values, history and culture) are analyzed in the Section 4.6. Native American consultations were initiated in mid-April 2010 and are ongoing. No sacred sites, TCPs, or traditional use areas have been identified, but such areas may be identified as the consultation process moves forward and if such cultural resources are found mitigation will be occur as appropriate and possible. Additionally, any disproportionate impacts to ethnographic resources, such as described in this comment letter would be identified and included in the results of the Native American consultations and formalized in a Memorandum of Agreement. As shown in Table 3.13-5, the environmental justice populations for the project are predominantly Hispanic and African American. The Native American population within the Project area is less than 1 percent of the population. The environmental justice analysis determined that the effects to the minority population were not disproportionate given the nature of the Project-related physical and cultural resource impacts identified as well as the very limited Native American population within the project area.

66-13 Commenter suggests that opportunities for environmental justice communities to participate in the NEPA process were inadequate. Native American consultations were initiated in mid-April 2010 and are ongoing. In addition, public scoping for the project was performed in full compliance with NEPA requirements. Section 5 of the DEIS (Consultation, Coordination and Public Participation) describes the extensive public outreach performed for the DEIS. Furthermore, as shown in Table 3.13-5, the environmental justice populations for the project are predominantly Hispanic and African American. The Native American population within the Project area is less than one percent of the local population. Consequently, the Project's public outreach and scoping efforts have not been disproportionate for the minority populations within the Project area.

66-14 Commenter summarizes previous comments. See Responses to Comments 66-3 through 66-13.

Letter - 67.

67-01 Commenter expresses support for the propose Project and clarifies previous comments (Letter 63) regarding gen-tie line route alternatives. See Common Response N.4.7 regarding gen-tie line route alternatives.

67-02 Commenter notes that portions of the gen-tie line route could be built underground in order to reduce visual impacts. See Common Response N.4.7 regarding gen-tie line route alternatives.

Letter - 69.

69-01 Commenter expresses opposition to the proposed Project because of impacts to the environment in the Chuckwalla Valley. This comment does not provide any specific feedback on the proposed action. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008), and CEQA Section 21091(d)(2)(A), this is not

considered a substantive comment on a particular environmental issue, and it does not require a specific response.

69-02 Commenter suggests that the proposed Project would not provide as much electricity as is indicated in the Draft EIS. This comment does not provide any specific feedback on the proposed action. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008), and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on a particular environmental issue, and it does not require a specific response.

69-03 Commenter supports the use of rooftop solar panels on previously disturbed or built areas; see Common Response N.4.7 regarding the Project alternatives evaluated in the Draft EIS.

69-04 Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008), this is not considered a substantive comment.

69-05 Commenter expresses general opposition to renewable energy projects that have negative environmental impacts. This comment does not provide any specific feedback on the proposed action. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008), and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and it does not require a specific response.

69-06 Commenter supports the use of rooftop solar panels on previously disturbed or built areas; see Common Response N.4.7 regarding the project alternatives evaluated in the Draft EIS.

69-07 Commenter supports the use of rooftop solar panels on previously disturbed or built areas, see Common Response N.4.7 regarding analysis of project alternatives.

69-08 The commenter opposes the Project. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008), and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and it does not require a specific response.

69-09 The commenter opposes the Project. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008), and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and it does not require a specific response.

69-10 The commenter opposes development in the desert. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008), and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and it does not require a specific response.

69-11 The commenter supports integrated solar technology. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008), and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and it does not require a specific response.

69-12 The commenter opposes development in the Project area. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008), and CEQA Section 21091(d)(2)(A),

this is not considered a substantive comment on an environmental issue, and it does not require a specific response.

69-13 The commenter supports solar development on previously disturbed or built areas, see Common Response N.4.7 regarding analysis of alternatives in the Draft EIS.

69-14 The commenter supports energy conservation. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008), and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and it does not require a specific response.

69-15 The commenter opposes pumped water storage. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008), and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and it does not require a specific response. This comment also addresses wildlife corridors and wilderness. Wildlife corridors and the wilderness experience are addressed in Comment Response N.4.2.

69-16 The commenter opposes the Project and supports solar development on previously disturbed or built areas, see Common Response N.4.7.

69-17 BLM acknowledges that microclimates on site would be affected by the installation of the proposed solar panels. For instance, shading of the desert surface directly underneath the solar panels is expected to result in a reduction in soil surface temperatures in that area, in particular during the summer. Air circulation and light conditions are also expected to be altered on site. However, changes in shading, temperature, and wind patterns would be limited to the proposed solar fields and their immediate vicinity on the Project site. The Project would not result in the alteration of off-site microclimates. On-site impacts to vegetation, wildlife, hydrologic resources, and other resource categories are evaluated in the body of the DEIS, and no further evaluation of discussion is warranted.

69-18 Commenter suggests that increases in traffic related to the proposed Project would affect wildlife, including endangered species. See discussions in Chapter 4.15, Transportation, and 4.4, Wildlife.

69-19 Commenter recommends considering siting the proposed Project on previously disturbed or built areas. See Common Response N.4.7 regarding alternatives analyzed in the Draft EIS.

69-20 The commenter supports integrated solar technology on previously disturbed or built areas, see Common Response N.4.7 regarding alternatives analyzed in the Draft EIS.

69-21 The commenter supports integrated solar technology on previously disturbed or built areas, see Common Response N.4.7 regarding alternatives analyzed in the Draft EIS.

69-22 The commenter opposes the Project but supports renewable energy. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008), and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and it does not require a specific response.

Letter - 70.

70-01 Please see response to comment 69-17; the materials proposed for the solar field and other proposed facilities are not anticipated to generate sufficient changes in temperature that areas outside of the Project footprint would be affected. No mechanism for significant increase or decrease in temperature offsite has been identified. Therefore, no further discussion is warranted.

70-02 The environmental impacts of the proposed power lines are evaluated in Chapter 4 of the EIS. Although the proposed action does not include gen-tie lines along Eagle Mountain Road, the DEIS considered a number of alternatives to the proposed Project. The Gen-Tie Line B-1 Alternative would travel across Eagle Mountain Road, as described in Section 2.2.4 of the EIS. The Project selection and alternative screening process is described in Chapter 2.2.1 of the DEIS. The BLM's preferred alternative is the proposed action without modification. BLM will identify the alternative that it considers to be environmentally preferable in its Record of Decision (ROD), as required by NEPA. The CPUC believes the environmentally superior action alternative under CEQA is a combination of Substation A with Access Road 2, Gen-Tie GT-A-2, and either Solar Farm Layout B or C. The ultimate decision on the project will be made by the relevant agency's decision makers, taking into account each agency's statutory mission and responsibilities, and giving consideration to economic, environmental, legal, social, technical and other factors. Your concerns will be provided to the decision makers for consideration prior to making a final determination on the project.

70-03 Commenter is concerned about health-related EMF impacts. See Common Response N.4.10.

70-04 Commenter is concerned about health-related EMF impacts. See Common Response N.4.10.

70-05 Commenter is concerned about EMF interference. See Common Response N.4.10.

70-06 Commenter recommends siting the proposed Project on previously disturbed or built areas in the DEIS, see Common Response N.4.7 regarding alternatives analyzed in the Draft EIS.

70-07 Commenter expresses concerns about impacts associated with the proposed Project. As discussed in Common Response N.4.9 and N.4.10, there are no identified significant health hazards or environmental risks with the Project elements as proposed. The potential impacts to wildlife are discussed and analyzed in the Draft EIS Chapter 4.4. The potential interference to communication is discussed in Common Response N.4.10. The commenter's concerns regarding the aesthetics of the project ("eyesore") are noted, but the comment does not address the adequacy of the EIS analysis. The commenter is referred to Section 4.16 of the Draft EIS for an analysis of visual resource impacts.

Letter - 72.

72-01 Commenters express concern about gen-tie line routes and suggest that the Gen-Tie route should follow an existing right-of-way and avoid Kaiser Road. See Common Response N.4.7, part 2 regarding gen-tie line route alternatives.

Letter - 73.

73-01 Commenter suggests siting the proposed Project on previously disturbed or built areas. See Common Response N.4.7 regarding alternatives analyzed in the Draft EIS.

73-02 Ironwood Consulting conducted focused desert tortoise surveys of the Study Area during five periods per the USFWS's methods as outlined in the 2008 (including revisions made in 2009 and 2010) Field Survey Protocol Action that May Occur within the Range of the Desert Tortoise. The survey periods included March 18 and April 5, 2008; October 1 and 12,2008; October 26 and 31, 2009; March 15 through April 17, 2010; and July 7 through 12, 2010. These surveys provided full coverage of the Study Area and included zone of influence transects at 100-, 300-, 600-, 1200- and 2400-feet intervals from and parallel to the Study Area. The Study Area included areas larger than the proposed disturbance areas included in project designs proposed in 2007 through to 2010 and large survey buffers. To ensure surveys included all appropriate seasons, additional surveys are planned for fall of 2010 or spring of 2011. All data were mapped and submitted to CDFG's CNDDB and were used to evaluate presence and distribution of the tortoise throughout the Study Area and surrounding areas. The experience and qualifications of surveying biologists were reviewed and approved by BLM prior to initiation of surveys as they each demonstrated a high level of experience with desert tortoise. Thus, the BLM's review of the project and its impacts is based on a thorough survey of the Study Area and a comprehensive evaluation of desert tortoise presence and distribution.

73-03 Commenter is concerned about developer counts of desert tortoise on renewable energy projects, such as the BrightSource Ivanpah Project permitted by the California Energy Commission (CEC), but makes no comments specific to the DEIS. The staff from the CEC, BLM, USFWS, and CDFG required many of the solar developers to perform additional surveys for desert tortoise, as well as other protected plant and animal species. Projects such as the Calico Solar Project were significantly reduced in size to avoid impacts to the desert tortoise based on these supplemental surveys required by the resource and regulatory agencies. In addition, very detailed performance criteria were added to many of the standard CEC conditions of certification to address both the scope of the renewable energy projects and the difficulty of verifying preliminary survey results. Similarly, the Desert Sunlight Solar Farm project applicant began with a more than 4,000-acre study area, and, after desert tortoise surveys and other environmental studies were completed, determined that a reduced project footprint could avoid the most sensitive tortoise areas of the Project Study Area. Please also see response to comment 76-03 regarding tortoise surveys for this Project.

Letter - 74.

74-01 This letter is a duplicate of Letter 63 from the same commenter. See Response to Comments to Letter 63. Commenter sent a follow-up email dated 11.12.10 suggesting that a portion of the Gen-Tie line be underground. See Common Response N.4.7 and an updated discussion of Section 2.6 in the FEIS.

74-02 This letter is a duplicate of Letter 63. See Response to Comment to Letter 65.

74-03 This letter is a duplicate of Letter 63. See Response to Comment to Letter 65.

74-04 This letter is a duplicate of Letter 63. See Response to Comment to Letter 65.

74-05 This letter is a duplicate of Letter 63. See Response to Comment to Letter 65.

74-06 This letter is a duplicate of Letter 63. See Response to Comment to Letter 65.

74-07 This letter is a duplicate of Letter 63. See Response to Comment to Letter 65.

Letter - 75.

75-01 Commenter states that the site is described as disturbed, but provides excellent habitat for desert plants and animals. Although the Applicant has characterized the Project area as disturbed, Section 3.4 of the DEIS and FEIS use a much more conservative definition of "disturbed": Disturbed, ruderal, and non-vegetated areas are found in association with roads within the Project locations and previously developed areas around wells and associated features such as drainage basins. Disturbed areas are found on 2 acres of GT-A-1, 20 acres of GT-A-2, 2 acres of GT-B-2, and 1 acre of Red Bluff Substation A (Access Road 1). Developed and disturbed areas provide habitat for opportunistic wildlife species. House sparrows (Passer domesticus) often nest on artificial structures. Red-tailed hawks (Buteo jamaicensis) and common ravens frequently nest on the steel lattice towers of transmission lines. Coyotes may also be present. In addition, the mitigation and/or compensation are based on the total area disturbed by the Project rather than only on qualifications of habitat quality.

75-02 Commenter expresses concerns about the proximity of the proposed Project site to Joshua Tree National Park and about the potential cumulative impacts of the proposed Project and other proposed renewable energy projects. See Common Response N.4.2 regarding potential impacts to wilderness. Cumulative impacts from the Desert Sunlight Solar Farm Project as well as other past, present and reasonably foreseeable future projects presented and described in Table 3.18-2 and Table 3.18-3 in the DEIS were taken into consideration in assessing the cumulative impacts discussed in each resource/program section in Chapter 4, Environmental Consequences.

75-03 Commenter expresses concerns about impacts to wilderness experience, including fugitive dust, noise. and aesthetics. See Common Responses N.4.2 through N.4.4 regarding potential impacts to wilderness as a result of fugitive dust, noise, and aesthetics impacts.

75-04 Commenter suggests that the Draft EIS does not adequately address cumulative impacts, including the Eagle Mountain Pumped Storage Project and Eagle Mountain Landfill. The Eagle Mountain Pumped Storage Project is included in the list of cumulative projects in Table 3.18-3 of the DEIS as ID# "J". The Eagle Mountain Landfill Project is also included as ID# "AA" in Table 3.18-3. Both of these projects are also shown on Figure 3.18-2, Cumulative Projects in the Project Area.

75-05 The localized significance thresholds (LST) levels are typically used to determine the potential for ambient air quality standards to be exceeded at local sensitive receptor locations in the vicinity of the Project site. The thresholds are voluntary on the part of the lead agency. The low number of sensitive receptors near the Project site does not warrant project-specific dispersion modeling analyses to identify Project-specific localized emissions. Because there are so few sensitive receptors close to the various Project sites, and none closer than 1,175 feet, the default thresholds for the 1,640-foot distance from a five-acre emissions area have been used in the EIS to document the localized impacts to nearby sensitive receptors. Given the average distance to actual construction activity and the typical size of areas subject to significant construction activity on any single day, the default five-acre site thresholds provide a reasonable screening value for the Project. The EIS considers the distance from project activities to Joshua Tree and the short-term nature of the construction emissions. No new or modified stationary sources would occur requiring permit review aside from portable equipment used during construction and the proposed emergency-use engine-generator at the substation. Construction-related vehicle traffic emissions are documented throughout Chapter 4.2, where it is noted the emissions would be dispersed across three air basins. With mitigation and emission control measures identified in the EIS, there would be no need for additional modeling due to the limited likelihood of project-related emissions causing adverse effects on air quality or air quality related values (AQRV) in the National Park or Class I area.

75-06 Commenter expressed issues with night sky impacts. See Common Response N.4.3.

75-07 Commenter states that the site is described as disturbed, but provides excellent habitat for desert plants and animals. See Response to Comment 75-01.

75-08 Commenter notes there is active territory for nesting golden eagles two miles from the project boundary. Use of the Project area by golden eagles as foraging lands and potential nesting territories has been acknowledged in the DEIS. Implementation of Applicant Measures (AM)-BIO-1 and Mitigation Measure (MM)-BIO-2 will reduce potential impacts to golden eagle foraging habitat by acquiring suitable habitat to compensate for direct loss of foraging habitat. It is not anticipated that the nests or nesting behavior of the eagles would be impacted by the Project as the only active nest is two or more miles from any Project component or related activities. Disturbance to nesting golden eagles would be avoided or minimized with implementation of the Avian and Bat Protection Plan (AM-WIL-3), which requires buffers around active eagle nests within which no disturbance shall occur. Impacts resulting from dust will be mitigated for as addressed in Section 3.2, Air Resources. Pinto Wash may provide a regional movement corridor for wildlife as discussed in Section 3.4.5, Wildlife Corridors. Pinto Wash would not be directly impacted by the proposed Project activities. However, to ensure the area is avoided, implementation of

AM-BIO-4 would require that workers on the site are educated about the location of sensitive areas such as Pinto Wash and how and why they must be avoided and implementation of MM-BIO-1 would require that a qualified biologist be on site to monitor compliance with those avoidance measures and to ensure that construction activities are contained within the staked and flagged construction areas at all times in order to avoid off-site impacts.

75-09 The DEIS acknowledges the potential use of Pinto Wash as a regional movement corridor by wildlife, however absence of animal signs during repeated, protocol-level surveys conducted during different seasons indicates that this area is not used heavily by wildlife. Potential impacts to wildlife resulting from noise, light and dust pollution will be temporary in nature and limited in extent at any one location. These impacts, as well as those related to installation of exclusionary fencing, are discussed in Section 4.4, Wildlife, 4.10, Noise, and 4.2, Air Resources, under impact discussions for each Project component. A discussion about impacts resulting from polarized light has been added to Chapter 4.4, and the associated impacts addressed in Mitigation Measure BIO-5. Noise impacts discussed in Section 4.4 are addressed through implementation of Applicant Measure (AM)-WIL-1 and AM-WIL-2. Dust control measures as required by the SQAQMD Rule 403 will be employed and through implementation of water application during construction (e.g., use of water trucks) and AM-AIR-6 and AM-AIR-2. Noise impacts will be reduced through implementation of designated construction windows and implementation of AM-NZ-1 and AM-NZ-2 as discussed in Section 4.10, Noise. Although impacts related to installation of exclusionary fencing during construction are discussed in Section 4.4 under impact discussions for each project component, additional language has been added to Section 4.4.3 of the FEIS. Lastly, daily monitoring by a qualified biologist as required under MM-BIO-1 will ensure that these requirements are adhered to.

75-10 Glare is caused by mirrors which would create sources of bright light caused from the diffuse reflection of the sun. Rather, the proposed Project's solar panels would not use mirrors that could cause glare, but would produce polarized light pollution that could confuse insects and potentially birds. Refer to Section 4.4, Wildlife, where an impact discussion about the Project's generation of polarized light has been added to the FEIS and Mitigation Measure WIL-5 has been added to the FEIS to address potential impacts to birds resulting from the generation of polarized light.

75-11 It is noted in Section 4.3 of the DEIS that transmission line towers provide artificial perches and nest sites for ravens, which could increased predation of these species on desert tortoise. Implementation of a Raven Management Plan required in Applicant Measure WIL-3 would reduce these impacts to less than significant levels. The commenter's preference for Gen-Tie A-2 is noted, the DEIS includes an assessment of impacts to desert tortoise, including effects of increased raven, predation for this alternative.

75-12 Commenter supports the No Action Alternative. Comment on No Action Alternative noted. Commenter recommends siting the proposed Project on previously disturbed or built areas. See Common Response N.4.7 regarding analysis of alternatives in the Draft EIS.

75-13 The DEIS considers the potential for incremental impacts resulting from construction, operation and maintenance, and closure and decommissioning of the Project to cause or contribute to a cumulative effect in each of the issue areas for which the Project could cause an impact. The DEIS identifies cumulative projects and provides quantified and detailed information about them. On an issue-by-issue basis, DEIS Chapter 4 identifies the geographic and temporal scope of the cumulative impacts analysis area, provides a basis for the boundaries of each, identifies existing conditions within each cumulative impacts assessment area, identifies the direct and indirect effects of the Project and alternatives, and identifies past, present and reasonably foreseeable future actions making up the cumulative scenario. The several renewable energy (solar and wind) projects being considered by the BLM's California Desert District are identified in Table 3.18-1, including the number of projects, acreage and total megawatts under consideration in the Palm Springs, Barstow, El Centro, Needles, and Ridgecrest Field Offices. Existing projects along the I-10 corridor in eastern Riverside County are also identified in Table 3.18-2 and future foreseeable projects in this area are identified in Table 3.18-3. The DEIS's analysis of cumulative impacts is adequate.

75-14 Commenter summarizes previous comments. See responses to comments 75-1 through 75-13, above.

Letter - 76.

76-01 The Desert Tortoise Translocation Plan (required per AM-WIL-1, a draft of which was included as DEIS Appendix H) includes a detailed discussion about how the recipient sites were evaluated, including an assessment of existing tortoise densities at each site and their proximity to existing home ranges. The recipient control sites were selected based on direction from BLM, CDFG and USFWS and current research in the field of desert tortoise home range and movement. The plan is in draft format and will be reviewed, refined and approved by BLM, the USFWS and CDFG to conform to the 2010 USFWS desert tortoise relocation guidelines entitled *Translocation of Desert Tortoises (Mojave Population) From Project Sites: Plan Development Guidance Unpublished Report* dated August 2010 as required per AM-WIL-1. DEIS Section 4.4.3 has been revised in the FEIS to include information on translocation of desert tortoise and its impacts. Also, new mitigation measures have been added in the FEIS: Mitigation Measure MM-WIL-7 (alternate to long-distance translocation), Mitigation Measure MM-WIL-8 (requiring USFWS, CDFG to review plans required by Applicant Measures).

76-02 Impacts to desert tortoises from translocation are described in Section 4.4, Wildlife, and the discussion has been expanded in the Final EIS. The analysis includes disclosure of estimated mortality rates of translocated desert tortoises, including recent evidence from the Fort Irwin Land Expansion Project.

76-03 The DEIS is not claiming that the total number of live tortoises inhabiting the Project area is based on what was detected during tortoise surveys but rather using the survey information as a tool to determine presence of and areas of use by tortoises. Also, tortoises generally use more than one burrow, so the presence of more active burrows than observed tortoises is not unusual. DEIS Sections 3.4 and 4.4, Wildlife, have been revised in

the FEIS to more clearly define the numbers of desert tortoise within the various project alternative boundaries.

76-04 Refer to response to comment 76-01.

76-05 Refer to response to comment 76-02.

76-06 Refer to response to comment 76-03. Follow-up surveys are not warranted.

76-07 Compensation ratios are specified in Applicant Measure BIO-1, citing the Northeastern Colorado Desert Plan as "1:1 for creosote bush scrub, 3:1 for desert dry wash woodland, and 5:1 for impacts to the Chuckwalla DWMA and Chuckwalla CHU." The Habitat Compensation Plan has not been finalized and would be implemented only after final review and approval by BLM, CDFG and USFWS. Compensation ratios are the same for the proposed Project and alternatives. It is not necessary to identify specific parcels at this stage; rather, requiring compliance with the performance standards of compensatory mitigation (AM-BIO-1 and new measure MM-BIO-2 added in the FEIS) is sufficient to demonstrate that mitigation would be effective. MM-BIO-2 has been revised per CPUC Letter 56 comments to provide greater clarification as to what the compensation lands must be composed of with regard to habitat types. It is anticipated that sufficient private land that meets the performance standards of MM-BIO-2 is available. Compensatory mitigation would be accomplished by acquisition of mitigation land or conservation easements or by providing funding for specific land acquisition, endowment, restoration, and management actions under one of several programs including the recently approved mitigation program created by Senate Bill 34.

76-08 Refer to response to comment 76-07 for compensation land ratios by habitat type. The number of acres of compensation lands would vary depending on which alternative is implemented.

76-09 Refer to response to comment 76-07.

76-10 Concerning the suggestion that a distributed solar alternative be evaluated thoroughly in the EIS, see Common Response N.4.7 regarding analysis of alternatives.

76-11 See Common Response N.4.7 regarding analysis of alternatives.

76-12 See Common Response N.4.7 regarding analysis of alternatives.

76-13 Commenter states that BLM should not consider the purpose and need for the proposed Project with reference to the Energy Policy Act of 2005 and the Solar Energy Study Zones pursuant to Secretarial Order 3285 until completion of the Solar Programmatic EIS. See Common Response N.4.1 regarding the purpose of and need for the proposed Project.

The BLM will not consider the proposed DSSF within the draft framework of the Solar PEIS. Although the BLM generally prefers to develop programmatic NEPA documentation and, thereafter, to use it as a basis for site-specific projects, the process of

drafting, reviewing and considering the Programmatic Environmental Impact Statement for Solar Energy Development in Six Southwestern States (Solar PEIS) is not yet final.

In response to direction from Congress under Title II, Section 211 of the Energy Policy Act of 2005, as well as Executive Order 13212, Actions to Expedite Energy-Related Projects, the BLM and the DOE are collaborating to prepare the Solar PEIS pursuant to NEPA and CEQ regulations. The Solar PEIS will evaluate utility-scale solar energy development in a six-state area, including that portion of the CDCA that is open to solar energy development in accordance with the provisions of the CDCA Plan.

A Notice of Intent to Prepare the Solar PEIS was published in the Federal Register on May 29, 2008. Secretarial Order No. 3285 (SO 3285), issued March 11, 2009, and amended February 22, 2010, by the Secretary of the Interior, announced a policy goal of identifying and prioritizing specific locations best-suited for large-scale production of solar energy. In light of SO 3285, the BLM and the DOE originally postponed completion of the Draft Solar PEIS, and on June 30, 2009, published a Notice of Availability of maps that preliminarily identify 24 tracts of BLM-administered land for in-depth study. The scoping period was extended. The Draft Solar PEIS was published in December of 2010 and the public comment period on the DEIS has been extended until April 16, 2011. The schedule to complete the Final Solar PEIS or adopt the ROD is not yet known (Id.).

Because the Solar PEIS is under development, it, and any decisions the BLM's makes based on its analysis, will not govern BLM's decision-making efforts for the DSSF. The BLM has a responsibility to perform a timely environmental review in response to individual applications. For this reason, the BLM will consider the proposed DSSF pursuant to FLPMA, NEPA, and applicable planning documents, in accordance with the BLM's existing Solar Energy Development Policy (Instruction Memorandum 2007-097) (BLM 2007). Therefore, the language in the FEIS was neither removed nor qualified further in response to this comment.

76-14 The analysis in the DEIS has been supplemented in the FEIS to include additional explanation and analysis concerning the proposed CDCA Plan Amendment. See FEIS Sections 1.3 and 2.2.2.

76-15 The Solar Farm site would be constructed outside the Chuckwalla DWMA and CHU. However, the gen-tie at Red Bluff substation and ancillary facilities would disturb desert tortoise habitat in the Chuckwalla CHU and DWMA **c**ompensation for direct impacts in the CHU and DWMA would be required at a 5:1 ratio. Mitigation for indirect impacts to tortoise, including increased raven predation, would be reduced with implementation of AM-WIL-2. Appendix D of the NECO Plan, which amended the CDCA Plan, states that new surface-disturbing projects would include specific design features to minimize potential impacts to desert tortoises and their habitat. Implementation of the above-mentioned mitigation would assure consistency of the project with NECO Plan and the CDCA Plan. Lands inside DWMAs are MUC category L (Limited Use), which allows for development of solar projects pursuant to the CDCA Plan. Cumulative new surface disturbance to the federal portion of the DWMA, including the proposed Project, would

be less than the 1 percent of disturbance to federal lands that is allowable per the NECO Plan.

76-16 Concerning the CDCA Plan, see Response to Comment 76-14.

76-17 Concerning transmission and substation locations, see Response to Comment 76-14.

Letter - 77.

77-01 Commenter recommends siting the Project on previously disturbed or built areas to avoid damage to a pristine area of the desert that will not heal quickly. Concerning the alternatives evaluated in the Draft EIS, see Common Response N.4.7.

77-02 Concerning the financial viability of the Project and a distributed solar power alternative, see Common Response N.4.7, *Alternatives Analyzed*.

77-03 The commenter opposes the Project. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008), and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

77-04 Impacts to desert tortoises from translocation are described in Section 4.4, Wildlife. The analysis includes disclosure of estimated mortality rates of translocated desert tortoises, including recent evidence from the Fort Irwin Land Expansion Project. See also, Response to Comment 76-02.

77-05 The commenter does not support the project in the proposed location. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and Section 21091(d)(2)(A) of CEQA, this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

77-06 Commenter favors a solar alternative to the proposed large-scale Project in the desert. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 79.

77-07 The commenter prefers a gen-tie route through Jojoba. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

77-08 Commenter supports the Project, but only in a form that is good for all people and wildlife in the area. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

77-09 Comment on the population along the Eagle Mountain route noted.

77-10 Potential Project-related effects on local land uses and property values are discussed in Common Response N.4.8.

77-11 The commenter expresses concern regarding visual impacts of the Project. The commenter's concerns are noted, but the comment does not address the adequacy of the Draft EIS. The commenter is referred to DEIS Section 4.16 for an analysis of visual resource impacts.

Letter - 81.

81-01 As stated on DEIS page 4.15-10, lane closures required for short durations during construction of Gen-Tie Line A-1 would be completed in accordance with the guidelines of the agency that controls the affected roads, and would be managed through the implementation of AM-TRANS-1. This mitigation measure states, among other things, that Sunlight shall demonstrate compliance with Section 517 of Caltrans' Encroachment Permits Manual if lane closures are required on State Highways and identify all necessary transportation permits, including those for oversize vehicles, hazardous materials transport, haul routes, and roadway right-of-way encroachment. Reference to Chapter 600 (Utility Permits) of the Encroachment Permits Manual, and the Right of Way Manual Chapter 13, has been included in the FEIS.

81-02 The comment is noted and will be taken into consideration in the design of the Project.

81-03 Commenter suggests documenting all affected public roads, easements, and right-of-way segments prior to construction and providing documentation to Caltrans. As stated on Chapter 4.15 of the DEIS, applicant measure AM-TRANS-2 would ensure that "Sunlight shall document road conditions at the beginning and end of Project construction and decommissioning and contribute fair share cost for pavement maintenance and other needed repairs."

Letter - 82.

82-01 Commenter opposes construction of powerlines on Kaiser Road. Potential Project-related effects on local land uses and property values are discussed in Common Response N.4.8.

82-02 Commenter expresses concern about the potential health impacts of powerlines. Regarding EMF-related health concerns, see Common Response N.4.10.

82-03 The commenter opposes the Project due to the environmental sensitivity of the area. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

82-04 Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

82-05 As stated in the DEIS in Chapter 4.13, Socioeconomics and Environmental Justice, short-term Project-related employment would average between 390 and 440 jobs for construction of the Solar Farm facility. In addition, there would be a small of number of additional construction jobs for the gen-tie line (averaging 25 jobs) and a similar number of construction jobs for the Red Bluff Substation (although the substation jobs would be staffed predominantly by SCE employees given their specialized nature and very short duration). Future operation and maintenance of the Solar Farm would provide long-term employment for 10 to 15 full-time workers. These permanent jobs would be available to qualified local residents.

Letter - 83.

83-01 Commenter opposes the project traversing sacred properties, but does not make any specific comments on the traditional sacred properties discussed in DEIS Section 3.6. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

83-02 Commenter requests that the Project not be sited on sacred properties, but does not question the adequacy or accuracy of the analysis of traditional sacred properties in DEIS Section 3.6. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 84.

84-01 The BLM has been engaged in government-to-government consultation with Native American tribes since the early stages of Project planning and will continue this consultation throughout the Section 106 compliance process. BLM's tribal consultation efforts are discussed in Chapter 3.6 and in Cultural Resources Appendix K. Tribes have been invited to identify sacred sites and other properties of traditional cultural and religious importance that might be affected by the Project. Tribes have also been invited to participate in consultations to develop a Programmatic Agreement for the Project that will seek to resolve adverse effects on any properties of traditional cultural and religious importance that may be identified. As discussed in Chapter 4.6, no sacred sites, traditional cultural properties or traditional use areas have yet been identified that would be adversely affected by the proposed action.

84-02 The commenter opposes the Project. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A),this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 85.

85-01 The commenter states that the project does not recommend avoidance measures for endangered plants. Implementation of the Habitat Compensation Plan, pre-construction surveys for special-status plant species and development and implementation of a Salvage

and Restoration Plan would address impacts to sensitive and special-status plants. These impact avoidance, minimization and mitigation requirements are identified in Section 4.3 and 4.4 under AM-BIO-1, AM-BIO-3, MM-BIO-2, and MM BIO-4. It is not necessary that the plans be final at this stage; rather, requiring compliance with the performance standards of the above-mentioned measures is sufficient to demonstrate that mitigation would be effective.

85-02 The commenter states that the Project would have a drastic impact on desert wildlife. Impacts to desert tortoise from translocation are analyzed in FEIS Section 4.4, Wildlife. Concerning translocation, see also Response to Comment 76-02. As analyzed in FEIS Section 4.4, translocation poses a lesser risk to desert tortoises than leaving them on the site where they would be subject to mortality by project construction and operation. Additionally, it is the policy of the CDFG and USFWS to require translocation of desert tortoises from project sites where they otherwise would be taken. Protocol surveys for desert tortoise were conducted by qualified biologists per the USFWS's Field Survey Protocol for any Federal Action that May Occur within the Range of Desert Tortoise. The total number of live tortoises observed during surveys was used to determine presence of and areas of use by tortoises. If additional tortoises are observed during clearance surveys of the project area, qualified biologists would implement USFWS, CDFG and BLM-approved protocol provided in the project's Desert Tortoise Translocation Plan, as required per AM-WIL-1.

The analysis of wildlife movement in the DEIS has been expanded in the FEIS to include discussion of wildlife movement among the Chuckwalla DWMA and CHU and other surrounding habitat areas (see Section 4.4.3).

Impacts to special-status birds, including burrowing owl and LeConte's thrasher, are analyzed in DEIS Section 4.4. Implementation of AM-WIL-3 would reduce these impacts. See Response to Comment 75-08 regarding impacts to golden eagles. An analysis of impacts to birds from polarized light has been added to the FEIS in Section 4.4.3; accordingly, Mitigation Measure WIL-5 has been added to the FEIS to mitigate these impacts.

85-03 The commenter states that the project would impact visual resources. See Common Response N.4.4, *Adequacy of Key Observation Points (KOPs) and Simulations*.

85-04 Concerning the adequacy of the range of alternatives analyzed in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

85-05 The commenter favors a distributed solar PV alternative. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response. Nonetheless, see Common Response N.4.7, *Alternatives Analyzed*, which discusses solar energy development in the built environment.

85-06 The commenter states that projects on disturbed land are viable based on recent projects. Considering siting on previously-disturbed or built areas in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

Letter - 86.

86-01 The commenter supports the economic benefits of the Project and requests clarification on the potential impacts from light pollution. See Common Response N.4.3, *Dark Skies*.

Letter - 87.

87-01 The commenter supports the Project. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 88.

88-01 The commenter supports proposed development in the area, including the Project. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 89.

89-01 The commenter opposes environmental impacts of large-scale solar development in the desert while roof tops are available for PV projects. Concerning siting on previously-disturbed or built areas, see Common Response N.4.7, *Alternatives Analyzed*.

Letter - 90.

90-01 The commenter is concerned about local impacts of development that benefit large-load centers far from the desert. The commenter's concerns are noted. Project impacts related to visual resources are analyzed in DEIS Section 4.16, which concludes that the Project would create a strong contrast within the affected landscape from several of the KOPs. This comment does not question the adequacy or accuracy of the DEIS. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

90-02 Concerning EMF-related impacts, see Common Response N.4.10, *EMF Exposure*.

90-03 The commenter disagrees with the proposed tortoise relocation areas. See Responses to Comments 76-1 through 76-3.

Letter - 91.

91-01 The commenter supports wind energy and the Project. Pursuant Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 92.

92-01 The commenter opposes the Project due to impacts to golden eagle foraging habitat and desert tortoise. The discussion of eagle foraging and nesting in the DEIS has been expanded in FEIS Section 4.4.3. See Responses to Comments 76-1 and 76-02 regarding impacts of translocation to desert tortoise. See Response to Comment 75-08 regarding impacts to golden eagle foraging habitat. The commenter opposes the Project due to impacts to golden eagle foraging habitat and desert tortoise. See Responses to Comments 76-1 and 76-02 regarding impacts of translocation to desert tortoise. See Response to Comment 75-08 regarding impacts to golden eagle foraging habitat. Loss of foraging habitat would be considered "take" under the Bald and Golden Eagle Protection Act (50 CFR 22.3) if the loss of foraging habitat caused (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." Loss of foraging habitat from development of the proposed Project would not result in "take" according to standard, and would be mitigated with acquisition, enhancement and protection of compensatory habitat as required in AM-BIO-1 and MM-BIO-2.

92-02 The commenter opposes the proposed location of the Project and questions the adequacy of the range of alternatives analyzed. Considering siting on previously disturbed or built areas in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

92-03 The commenter states that the BLM needs to address connectivity; this discussion in the DEIS has been expanded in FEIS Section 4.4.3. Impact WIL-3, *Direct and Indirect Impacts to Wildlife Movement or Nursery Sites*, in DEIS Section 4.4.9 identifies that the project would have a considerable contribution to cumulative impacts on wildlife movement in the Chuckwalla DWMA and Chuckwalla CHU. Mitigation included in the Project's Habitat Compensation Plan and Applicant Measure BIO-1 would ensure that the Project's contribution to cumulative wildlife connectivity impacts would be reduced to less than significant levels. Concerning the adequacy of analysis in the DEIS, see Common Response N.4.6.

Letter - 93.

93-01 Concerning the breadth of the statement of BLM's Purpose and Need statement, see Common Response N.4.1, *Purpose and Need*.

93-02 Concerning the breadth of the statement of BLM's Purpose and Need statement, see Common Response N.4.1, *Purpose and Need*. Concerning the range of alternatives considered, see Common Response N.4.7, *Alternatives Analyzed*. Further, the commenter states that the BLM has misunderstood the intent of Congress in the Energy Policy Act. As stated in Section 211 of the Energy Policy Act of 2005, the Congress intended that "the Secretary of the Interior should" seek to have approved non-hydropower renewable energy projects located on the public lands with a generation capacity of at least 10,000 megawatts of electricity. The text in the FEIS has been corrected to reflect that the

approval of the stated capacity of renewable energy on federal lands is encouraged and not required.

93-03 The commenter favors Alternative C. Comment on Alternative C's preservation of habitat linkage is noted. Nonetheless, Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

93-04 The commenter considers Gen-Tie Alternative A-2 to be environmentally superior. Comment on the gen-tie alternatives is noted. See Common Response N.4.7, *Alternatives Analyzed*, regarding Gen-Tie GT-A-2.

93-05 Considering siting on private lands in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

93-06 Concerning the reasonableness of the range of alternatives considered in the DEIS and siting on previously-disturbed or in built areas, see Common Response N.4.7, *Alternatives Analyzed*.

93-07 The commenter urges the BLM to consider cumulative impacts to the desert environment. The FEIS for the DSSF identifies cumulative projects and provides quantified and detailed information relating to them in Chapter 3.18. See also Figure 3.18-2, *Cumulative Projects in the Project Area*, and Tables 3.18-2 and 3.18-3, *Existing Projects along the I-10 Corridor (Eastern Riverside County* and *Future Foreseeable Projects along the I-10 Corridor (Eastern Riverside County)*, respectively. On an issue-by-issue basis, FEIS Chapter 4 identifies the geographic and temporal scope of the cumulative impacts analysis area, provides a basis for the boundaries of each, identifies existing conditions within each cumulative impacts assessment area, identifies the direct and indirect effects of the DSSF and alternatives, and identifies past, present and reasonably foreseeable future actions making up the cumulative scenario. See, for example, FEIS Sections 4.3.9 and 4.4.9, discussion of cumulative impacts on vegetation and wildlife, respectively; Table 4.3-18, *Summary of Cumulative Impacts on Native Vegetation Communities*; and FEIS Appendix H. Additionally, the FEIS analyzes cumulative impacts of past, present and reasonably foreseeable future actions, including utility-scale renewable and other development projects, on each of the resource areas in Chapter 4, including mitigation measures to offset cumulative impacts. Cumulative impact analysis is not an exercise in determining current conditions and trends, but requires considering effects of past, present and reasonably foreseeable actions. BLM believes the scope of the analysis of cumulative impacts in the FEIS is adequate.

93-08 The commenter states that the organization of the DEIS is unconventional and hard to follow. There is no specific organizational requirement required by NEPA. This document is intended to meet the requirements of both NEPA and CEQA, and as such, the formatting is different than that usually followed by BLM. It is logical that mitigation for loss of habitat be contained in the vegetation section of the document since "habitat" consists of the physical surroundings of wildlife, which includes the vegetation. MM-BIO-2

has been added to the FEIS to provide greater clarification as to what the compensation lands must be composed of with regard to habitat types. See also Response to Comment 76-07 regarding finalization and agency review of the Habitat Compensation Plan. Additionally, see Common Response N.4.6 regarding the identification of adequate mitigation measures.

93-09 The commenter states that the cumulative analysis of impacts to biological resources on the regional scale is missing from the DEIS. The DEIS analyzes cumulative impacts to plants in Chapter 4.3, *Vegetation*, Section 4.3.9; wildlife cumulative impacts are analyzed in Chapter 4.4 *Wildlife*, Section 4.4.9. While the geographic scope for the cumulative impacts to plants and wildlife includes regional solar projects (i.e., along the I-10 corridor); however, a scope encompassing the entire eastern Riverside County region would be too large to suitably focus on the impacts contributed by the proposed project. Mitigation included as part of the project's Habitat Compensation Plan and Applicant Measures would ensure that cumulative impacts to wildlife and vegetation would be reduced to less-than-significant levels.

93-10 The commenter states that the Habitat Conservation Plan (HCP) should be directly affiliated with the environmental consequences in Chapter 4. As explained in EIS Section 2.5, the applicant (either Sunlight or SCE) proposed certain Applicant Measures (AMs) as part of the project including AM-BIO-1, which requires development of an HCP to compensate for the loss of creosote desert scrub, desert dry wash woodland and jurisdictional resources as a result of the proposed action. In certain instances, Mitigation Measures (MMs) are recommended by BLM to further reduce impacts. The DEIS identified AM-BIO-1 and MM-BIO-1 to avoid or reduce various impacts to biological resources (see Chapters 4.3 and 4.4). MM-BIO-1 would require an approved biologist to conduct construction monitoring. The FEIS includes an additional mitigation measure, MM-BIO-2, which supplements AM-BIO-1. Specifically, MM-BIO-2 identifies the specific resources for which compensation land must be acquired in HCP, including creosote desert scrub and desert dry wash woodland as well as state-jurisdictional streambeds, occupied foxtail cactus habitat, undisturbed habitat for most wildlife species (i.e., away from sources of noise or other disturbance such as highways, wind farms, etc.), occupied desert tortoise habitat, occupied chuckwalla and rosy boa habitat, suitable/occupied upland shrubland nesting habitat for migratory birds, suitable or occupied roosting habitat for special status bats, and suitable or occupied habitat for Palm Springs round-tailed ground squirrel, Colorado Valley woodrat, or American badger. The analysis in FEIS Chapters 4.3 and 4.4 has been modified to reflect this additional measure.

93-11 The commenter would like the CDCA Plan amended to protect the 19,000 acres avoided by the Project from future development. However, the comment does not question the adequacy or accuracy of the analysis in the DEIS. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response. Considering siting on previously-disturbed or built areas in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

93-12 The commenter urges the BLM to consider net impacts of habitat compensation acreage The habitat compensation requirement has been expanded in FEIS MM-BIO-2, which includes specific selection criteria of appropriate lands including that the lands must be occupied desert tortoise habitat and must provide wildlife movement value equal to that on the project site; agency review of proposed compensation lands; preparation and implementation of a management plan for the lands; as well as funding and implementing initial protection and habitat improvements and long-term maintenance and management. The FEIS describes the likely importance of Chuckwalla DWMA and CHU as movement corridors for the desert tortoise in Section 4.4, Wildlife. Implementation of Applicant Measures (AM)-BIO-2 and AM-BIO-4, as well as Mitigation Measures MM-BIO-1 and MM–BIO-2, would reduce impacts to wildlife movement corridors.

93-13 The commenter urges the BLM to focus on avoidance as the primary mitigation for impacts to desert tortoise. Comment on avoidance of desert tortoise and other biological resources and preference for Solar Farm Layout C due to its preservation of habitat connectivity is noted.

93-14 The commenter urges the BLM to fully offset any impacts to golden eagle foraging. See Response to Comments 75-08 and 92-01. The selection criteria for compensation lands are described in MM-BIO-1 and compensation land ratios are described in AM-BIO-1.

93-15 The commenter states that the DEIS does not adequately address sand transport impacts. Text has been added to FEIS Section 4.8.3, which discusses the sand transport evaluation conducted for the project. The Study Area was not found to be subject to aeolian sand migration nor was it found to be located within a sand transport corridor. The Storm Water Hydrology Report (AECOM 2010) provided in DEIS Appendix G found pre- and post-development of the Study Area would result in insignificant amounts of sediment transport. To further reduce potential impacts related to sediment transport, implementation of a Sediment Transport Monitoring and Maintenance Plan is proposed. Jurisdictional resources, such as ephemeral drainages, are discussed in Section 3.17.2; a discussion about impacts to these features, their hydrologic functions and potential sand transport erosion resulting from the project, is included in Sections 3.17 and 4.17, Water Resources. The commenter further states that the project would affect Eagle Creek and Big Wash ephemeral drainages but that the DEIS did not address impact to these drainages. In response, FEIS Section 4.17.3 has been updated to include analysis of impacts to surface water drainages. Under the CEQA significance criteria, impacts would be less than significant with mitigation incorporated.

93-16 The commenter requests additional study of natural drainages and fluvial sand transport. As discussed in DEIS Section 4.17.3 and Appendix G, the effects of Project implementation on stormwater, flood flows and sediment transport were evaluated and would result in minimal change. However, to provide further assurance that the Project would minimize such impacts, the mitigation proposed in the DEIS for stormwater and flood control has been updated in the FEIS to require an increase in flows of no more than 1 percent relative to existing conditions (see also, Response to Comment 106-11). This would ensure that impacts to stormwater, downstream flooding and associated

sediment transport would be minimized. Biological resources associated with desert wash habitat are discussed in DEIS Section 3.3; an expanded discussion is provided in FEIS Section 3.3. The DEIS's discussion of aeolian sand transport also has been expanded and is provided in FEIS Section 3.3, Vegetation.

93-17 The commenter states that the DEIS does not adequately address climate change impacts to species. The commenter is correct. See Response to Comment 93-18.

93-18 The commenter is correct. DEIS Chapter 4.5 has been updated in the FEIS to analyze additional direct and indirect effects of climate change, including potential effects of climate change on the project. Such impacts include snowpack and snowmelt period, sea level rise, dilution, water temperature, flooding/drainage/erosion, water resources availability, fisheries, habitat values/species/mitigation lands, wildfire risks, heat waves, soil moisture, and fugitive dust.

93-19 The commenter states that the DEIS needs to address the impacts of climate change on the proposed project. The analysis provided in the DEIS has been updated to do so. See Response to Comment 93-18.

93-20 The commenter requests that BLM expand the analysis of impacts of climate change from the proposed project and alternatives. Chapter 4.5, Climate Change, has been updated to analyze the effects of climate change on biological resources and habitat mitigation values.

Letter - 94.

94-01 The commenter opposes the impact that the proposed gen-tie route down Kaiser Road would have on the community. See Responses to Comments 76-1 through 76-3.

94-02 The commenter opposes Project-related impacts to their views and the desert. This comment does not question the adequacy or accuracy of the analysis in the DEIS. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response. Nonetheless, the commenter is referred to DEIS and FEIS Section 4.16 for an analysis of visual resource impacts.

Letter - 95.

95-01 The commenter supports renewable energy, and solar specifically, if the power lines are hidden underground. See Response to Comment 67-1.

Letter - 96.

96-01 This is a form letter. See Responses to Comments in Letter 28.

Letter - 97.

97-01 Commenter supports the Project. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 98.

98-01 The commenter opposes the Project and the development of human infrastructure at the expense of desert land and animals. Concerning alternative locations considered in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

Letter - 99.

99-01 Concerning alternative locations considered in the DEIS and the commenter's preference for Gen Tie GT-A-2, see Common Response N.4.7, *Alternatives Analyzed*.

99-02 The commenter is concerned about the proposed route of the gen-tie and aesthetic impacts and supports Alternative A-2 if Option B1 is not feasible due to the desert tortoise. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 100.

100-01 The commenter opposes the Project, but does not question the adequacy or accuracy of the analysis provided in the DEIS. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 101.

101-01 The commenter supports the concept of solar energy in Southern California. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

101-02 The commenter lives in Vancouver, Canada, and is concerned about power lines being located near homes. See Common Response N.4.10, *EMF Exposure*.

101-03 Water use for the proposed project is discussed in DEIS Chapter 2.0, Project Description, and in Chapter 4.17, Water Resources. As discussed in Chapter 4.17, sufficient groundwater is available to meet construction and operation period demand of the Project. To ensure that impacts to groundwater supply are minimized, Mitigation Measures (including MM-WAT-1, MM-WAT-2, and MM-WAT-3) would be required. A

Groundwater Level Monitoring, Mitigation and Reporting Plan (MM-WAT-3) would be required to detect any changes to groundwater supply levels.

Letter - 102.

102-01 The commenter supports the Project. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 103.

103-01 The commenter appears to indicate that dispersion modeling should be conducted for the Project because Project-related vehicle traffic emissions combined with on-site emissions would exceed the LST levels for nitrogen oxides, PM10, and PM2.5. The thresholds are voluntary on the part of the lead agency. However, use of LST levels or dispersion modeling to determine the potential for an air quality standard to be exceeded in the vicinity of the Project site is only appropriate for on-site emission sources, and not for off-site vehicle emissions, the majority of which would occur miles from the locations of the various sensitive receptors closest to the Project site.

103-02 The FEIS includes additional information on the windblown dust calculation methodology. Subsequent to the release of the DEIS, AECOM prepared a new wind erosion, PM10 and PM2.5 formation analysis for the project on behalf of First Solar (see FEIS Section 4.2.3 and Appendix D-6). For the entire wind erosion, PM10 and PM2.5 formation study, including all assumptions and references, see Appendix D-6.

103-03 The comment suggests that the DEIS assumes that all construction-related dust would settle in the evening. To clarify, the FEIS states that airborne dust would be greatly reduced in concentration by nighttime hours. Given that construction activities would cease prior to nighttime hours and that, on average, meteorology at night tends to be more favorable to dust settlement than average daytime meteorology, the subject statement is valid. Likewise, it is reasonable to assume that phasing construction activity at the Solar Farm site would limit the amount of disturbed area that could produce fugitive dust from. Regarding the potential for exposure to light pollution, see Common Response N.4.3, *Dark Skies.*

103-04 To minimize fugitive dust on the Project site, the speed of travel of construction vehicles would be limited, and dust palliatives would be applied to the site as described in AM-AIR-1 and AM-AIR6, and in compliance with SCAQMD Rule 403. 105-06. First Solar has confirmed to BLM that it would be feasible to apply dust palliatives to the Solar Farm Site to control operational dust emissions. See Response to Comment 103-03.

103-05 Subsequent to the release of the Draft EIS, AECOM prepared a new wind erosion, PM10, and PM2.5 formation analysis for the Project on behalf of First Solar (see Final EIS Section 4.2.3 and Appendix D-6). The new analysis incorporates wind data from Blythe and adjusts the Barstow wind data to approximate the local wind profile.

103-06 The commenter recommends the following mitigation measures: 1) provide temporary traffic controls to maintain smooth flow of traffic; 2) provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site; 3) re-route construction trucks away from congested streets and sensitive receptors; 4) appoint a construction relations officer to act as a community liaison concerning on-site construction activity including resolution of issues related to PM10 generation; 5) replace ground cover in disturbed areas as quickly as possible; 6) require utility-supplied power rather than gasoline or diesel generators; and 7) restrict construction delivery trucks to "clean" trucks, such as 2010 models or newer. With regard to items 1 through 4 and 6, Mitigation Measure MM-AIR-4 has been included in the FEIS to address this concern. With regard to item 5, Mitigation Measure MM-AIR-3 has been revised in the FEIS to address this concern. With regard to item 7, Mitigation Measures MM-AIR-1 and MM-AIR-4 have been revised in the FEIS to address this concern. See FEIS Section 4.2.2.3.

103-07 For the windblown dust calculation parameters used to the support the new wind erosion, PM10 and PM2.5 formation analysis conducted for the project (including ground, soil and vegetation types) see FEIS Appendix D-6. The SCAQMD-recommended measure has been added to the FEIS to replace MM-AIR-1.

103-08 Comment noted. First Solar intends to notify contractors of grants and incentives available from the SCAQMD.

Letter - 104.

104-01 This comment introduces and summarizes the commenter's concerns presented in greater detail in the comments that follow. The commenter's more specific comments are addressed separately, below. This comment also summarizes the commenter's policy concerns. Concerning the suggestion that the BLM's analysis fails to comply with FLPMA, see Common Response N.4.5, ***Recirculation of DEIS***. With respect to whether industrial-scale projects are appropriate for lands in this area, the purpose of the EIS is to define the impacts of developing the proposed Project. With the information contained in this EIS, BLM can evaluate the extent of impacts in comparison with the stated purpose and need. The ultimate decision presented in the Record of Decision will present the agency's conclusion.

The commenter also states that BLM has failed to explain how the Project would interface with the Solar PEIS process. As stated in the Draft Solar PEIS, which is undergoing public review at this time, existing applications for development of BLM-administered lands are not affected by the alternatives considered in the Solar PEIS. However, the proposed Project is within a proposed Solar Energy Zone.

Regarding the commenter's desire to further protect desert tortoise within the CDCA, this EIS recommends mitigation measures that would offset the potential loss of desert tortoise habitat and individuals resulting from the development of the Project. The discussions in the DEIS of desert tortoise in the Project area and impacts to desert tortoise have been expanded in FEIS Sections 3.4 (baseline) and 4.4 (impacts).

The commenter also is concerned that the consideration of the Red Bluff Substation, the Colorado River substation, and the previous EIR/EIS on the Devers Palo Verde No. 2 (DPV2) transmission line constitute piecemealing, which would threaten the "bioregional" approach in the CDCA. With respect to the Red Bluff Substation's relationship to the DPV2 project, the Red Bluff Substation was not needed or proposed or even in the planning process at the time the DPV2 EIR/EIS was completed. Therefore, it could not have been analyzed in the DPV2 EIR/EIS. Both DPV2 and the Devers Palo Verde No. 1 (DPV1) transmission line project are included on the list of existing projects along the I-10 corridor (see FEIS, Table 3.18-2) and were analyzed as part of the cumulative scenario in this EIS. Additionally, in recognition of the relationship between the Red Bluff Substation and the Desert Sunlight Project, the substation is being fully analyzed by BLM and the CPUC in conjunction with the Desert Sunlight proposal in this EIS. The Colorado River Substation is not a "connected action" to the Red Bluff Substation, the Desert Sunlight Project or the DPV2 project. All of these projects have utility independent of the Colorado River Substation and of each other. The Draft Supplemental EIR for the Colorado River Substation is now available for public review and addresses cumulative impacts of the projects in the Chuckwalla Valley. The EIS analysis includes a cumulative impact assessment that does address the regional biological effects of the multiple proposed projects in this portion of the CDCA.

104-02 The analysis in the DEIS has been supplemented in the FEIS to include additional description and analysis of the proposed CDCA Plan Amendment. See FEIS Sections 1.3 and 2.2.2. See also, Common Response N.4.5, *Recirculation of DEIS*.

As explained in Section 2.2.1 of the EIS, other alternative sites were considered but eliminated from detailed analysis under NEPA, because one or more of the criteria from the BLM NEPA Handbook H-1790-1 (BLM 2008) apply. The rationale for eliminating alternative locations from detailed consideration is described in Section 2.6 of the EIS. However, the EIS considers two alternative locations for the Red Bluff Substation: Substation A (to the east) and Substation B (to the west). Impacts associated with these alternative locations are analyzed in detail in the EIS.

Concerning the range of alternatives analyzed in the DSSF EIS generally, see Common Response N.4.7.

Desert-wide resource protection is addressed in the analysis of cumulative impacts, which considers the impact of this proposed Project along with past, present and reasonably foreseeable future projects in the NECO planning area. The cumulative scenario is defined in Section 3.18 and the cumulative impact analysis is presented in EIS Chapter 4. Aside from the NECO and the desert-wide CDCA, no other BLM plans applicable to the Chuckwalla Valley. Beyond the cumulative analysis presented in this document, neither NEPA nor CEQA require a regional analysis to be completed for a project-specific action.

104-03 The commenter states that the DEIS fails to adequately address the proposed CDCA Plan Amendment. As indicated in FEIS Sections 1.1 and 1.3.1, Table 1-4-1 and elsewhere, the BLM processes applications for commercial solar energy facilities as right-of-way

authorizations under Title V of FLPMA and Title 43, Part 2804 of the Code of Federal Regulations. The FLPMA establishes public land policy and guidelines for administration, and provides for the management, protection, development, and enhancement of public lands. In particular, the FLPMA's relevance to the proposed project is that Title V, Section 501, establishes BLM's authority to grant rights-of-way for generation, transmission and distribution of electrical energy. The BLM is processing the Applicant's application within the FLPMA framework.

NEPA procedures ensure that "high quality" environmental information is available before actions are taken (40 CFR 1500.1). A "hard look" under NEPA consists of a reasoned analysis containing quantitative or detailed qualitative information. See, BLM NEPA Handbook H-1790-1 (Jan. 30, 2008). The data and analyses provided in the FEIS about the affected environment are commensurate with the importance of the impact, with less important material summarized, consolidated or simply referenced. This is consistent with the requirements of NEPA (40 CFR 1502.15). The FEIS relies on quantitative data where possible, and detailed qualitative data under other circumstances. The proposed action's compatibility with the CDCA Plan is addressed in FEIS Section 4.9. BLM has determined that solar energy generation facilities may be allowed on Class M land after NEPA requirements are met and a Plan Amendment is approved, and that each of the action alternatives would be compatible with the CDCA. Landscape level issues, which may include desert-wide and CDCA-wide considerations, are addressed in the FEIS in the context of cumulative impacts on a resource-by-resource basis throughout Chapter 4, *Environmental Consequences*. Consistency with management objectives is not an appropriate topic of CEQA concern.

As explained in Section 2.2.1 of the EIS, alternative sites were considered but eliminated from detailed analysis under NEPA, because one or more of the criteria from the BLM NEPA Handbook H-1790-1 (BLM 2008) apply. The rationale for eliminating alternative locations from detailed consideration is described in FEIS Section 2.6. The EIS considers two alternative locations for the Red Bluff Substation: Substation A (to the east) and Substation B (to the west). Impacts associated with these alternative locations are analyzed in detail in the EIS. Concerning the range of alternatives analyzed in the DEIS generally, see Common Response N.4.7, *Alternatives Analyzed*.

104-04 The commenter states that the DEIS fails to adequately address multiple use lands in favor of a single industrial use. Concerns from the public regarding the multiple use mission of the BLM and the loss of this large section of public land to a single use are addressed in the strict enforcement of mitigation measures for habitat and other measures that ensure a one-to-one replacement of lands lost to a single use. Table ES-2, *Summary of Project Impacts by Alternative*, identifies, by alternative, the total number of acres that would be permanently disturbed within the Chuckwalla DWMA and Chuckwalla desert tortoise CHU. Figure 3.4-5 shows where this DWMA and CHU intersect with the Project locations and where the CHU overlaps with the DWMA. Figure 3.9-2 shows the Multiple Use Classes within the Project component. Neither FLPMA nor NEPA require that exact acreages, as would be determined by an actual on-the-ground survey conducted by a registered surveyor, be

provided in order to evaluate the effects of the Project. The analysis provided in the DEIS is sufficient to adequately evaluate the proposed Project impacts per FLPMA and NEPA. Further, the DEIS addresses cumulative impacts to biological resources in Sections 4.3.9 and 4.4.9, discussion of cumulative impacts on vegetation and wildlife, respectively; and in Table 4.3-18, *Summary of Cumulative Impacts on Native Vegetation Communities*. Additionally, as analyzed in FEIS Section 4.12, Recreation, the impact of the closure and rerouting of OHV trails on recreation users would be less than significant in the CEQA context. Had impacts been found to be significant to OHV users, changes to the route network would have been appropriate mitigation to reduce the severity of such impacts. However, because the impact was determined to be less than significant under CEQA, route changes are not recommended in the DEIS.

104-05 The commenter states that the DEIS fails to adequately address other ongoing planning efforts. As defined in the NEPA guidelines (40 CFR 1508.25(a)) or Section 6.5.2.1 of the BLM NEPA Handbook (p. 45), there are no "connected actions" associated with the DSSF. The DSSF consists of the solar generation facility, substation, transmission line, communication site and other ancillary facilities, all of which are addressed in the FEIS. Cumulative impacts of the DSSF are discussed in FEIS Chapter 4, *Environmental Consequences*. Concerning the Solar PEIS and the BLM's responsibility to perform a timely environmental review in response to individual applications, see Response to Comment 76-13.

104-06 The commenter states that the BLM failed to inventory the resources before making a decision on impacts to those resources. See Common Response N.4.6, Adequacy *of Analysis*.

104-07 The commenter states that the DEIS fails to provide adequate information to ensure unnecessary degradation to public lands. See Common Response N.4.6, *Adequacy of Analysis*.

104-08 The commenter states that the Purpose and Need Statement and project description are too narrowly construed; expresses concern over compliance with NEPA through the fast-track process; states that the DEIS does not address certain aspects of global climate change; and that the Project's effects on biological resources may "run contrary to an effective climate change adaptation strategy." Regarding Purpose and Need, see Common Response N.4.1. Regarding the fast-track review process, please see Response to Comment 105-13, below. Biological resources at the Project site, and the Project's impacts to habitat fragmentation, connectivity for terrestrial wildlife, predators and invasive weed species are addressed in Sections 3.4, 3.4, 4.3, and 4.4 of the DEIS and the discussion of habitat connectivity has been expanded and clarified in Sections 3.4 and 4.4 of the FEIS.

The Project's emissions of greenhouse gases are acknowledged in DEIS Section 4.5, Climate Change. Clarifying text has been added to this section in the FEIS, referencing mitigation measure in other EIS sections that are relevant to reduction of greenhouse gases. The measures presented in Section 4.2, Air Quality, are particularly relevant. Three Applicant Measures and two Mitigation Measures are presented in the Climate Change section specifically to reduce greenhouse gas emissions.

104-09 The analysis in the DEIS has been supplemented in the FEIS to include additional analysis of the proposed CDCA Plan Amendment. See FEIS Section 2.2.2. Regarding the commenter's concern that the Purpose and Need Statement is too narrow, see Common Response N.4.1, *Purpose and Need*. Concerning the reasonableness of the range of alternatives considered, see Common Response N.4.7, *Alternatives Analyzed*. Concerning the request for recirculation, see Common Response N.4.5, *Recirculation of DEIS*.

104-10 The commenter states that the DEIS does not adequately describe the environmental baseline. See Common Response N.4.6, *Adequacy of Analysis*.

104-11 The commenter states that the DEIS does not fully describe the impacts of the Project on the desert tortoise; notes that more tortoises may be found on the site than expected; that "Category 3" desert tortoise habitat may be import as habitat or connectivity; that tortoises outside the Project boundaries may use habitat within the Project site; that desert tortoise translocation may have further impacts; that compensation lands should be conserved in perpetuity; that short-term and long-term impacts to desert tortoise must be addressed; that compensation should be at a 5:1 ratio; and that the DEIS does not evaluate significance of impacts to desert tortoise.

Sections 3.4 and 4.4 of the FEIS have been clarified to include estimated numbers of desert tortoises that would be affected by each project alternative. These estimates are based on data in Appendix H. Applicant Measure BIO-1 and new Mitigation Measure MM-BIO-2 in the FEIS provide mitigation of impacts to desert tortoise habitat, using ratios based on desert tortoise density and special land use status (DWMA, CHU) rather than the "Category 3" designation. The discussions of wildlife movement and potential project impacts have been clarified and expanded in FEIS Sections 3.4 and 4.4. The Project's impacts to desert tortoise habitat, which would include tortoises found near the Solar Farm boundaries, are described in FEIS Section 4.4 and compensation requirements are described in Applicant Measure AM-BIO-1 and new Mitigation Measure MM-BIO-2. Habitat compensation ratios identified in those measures are based on desert tortoise density and special land use designations, as applicable. Short-term impacts to desert tortoise would be minimized through translocation (Applicant Measure AM-WIL-1 and Mitigation Measure MM-WIL-7 in the FEIS) while long-term impacts would be mitigated through habitat compensation, at ratios described in Applicant Measure AM-BIO-1 and Mitigation Measure MM-BIO-2. The discussion of translocation has been expanded and clarified in FEIS Section 4.4; the final translocation plan, including translocation sites, must conform to USFWS guidelines (AM-WIL-1). Significance of impacts to desert tortoise and other resources have been clarified and analyzed in FEIS Section 4.4. See revisions to DEIS included in FEIS Sections 3.4 and 4.4, and Responses to Comments76-1 through 76-3.

104-12 The commenter states that the DEIS fails to analyze the significance of the impacts of the proposed project on the desert tortoise. See Responses to Comments76-1 through 76-3.

104-13 The commenter states that the DEIS fails to consider impacts to the sand transport system in the Chuckwalla Valley. Additional discussion about this issue has been added to FEIS

Chapter 4.8. As discussed therein, the Project would interfere with sand transport across the site. However, the Project is not directly situated within the Chuckwalla Valley sand transport corridor. Therefore, although sand transport across the site would be blocked, overall reductions in sand transport within the Chuckwalla Valley would be minor, because primary sand transportation corridors would be avoided.

104-14 The commenter states that no fall botanical surveys were conducted prior to the DEIS and that this triggers a need to recirculate the DEIS. The DEIS has been revised in the FEIS to reflect the results of plant surveys conducted in November 2010 to supplement those surveys conducted in the spring. See text revisions in FEIS Sections 3.3.3 through 3.3.5. In consideration of the November surveys, plant surveys have been completed of all Project components during both the spring and fall blooming periods. These surveys provide sufficient information to complete the Project's environmental impact assessment and permitting process. No additional special status plant species were found in the fall survey, and the Project's potential impacts to special status plant species are therefore unchanged from those discussed in the DEIS, which was based on results of previous surveys, including those completed in Spring 2010.

104-15 Recirculation of the EIS is not warranted, as explained in Section N.4.5, ***Recirculation of DEIS***. The commenter states that the DEIS fails to adequately address impacts to migratory birds.

Burrowing owl occurrence on the Project site and potential Project impacts to burrowing owls are described in the DEIS in Sections 3.4 and 4.4. The Project is not expected to affect burrowing owl habitat or populations in the agricultural lands surrounding the Salton Sea, cited in the comment. Applicant Measure WIL-3 in the FEIS includes the requirement to create or enhance "at least two natural or artificial burrows per relocated owl." Burrowing owl habitat would be compensated at 13 acres per active burrow. No long-term monitoring of passively relocated burrowing owls is proposed. In addition, several thousand acres of compensation lands for impacts to vegetation and habitat as described in Applicant Measure AM-BIO-1 and Mitigation Measure MM-BIO-2 are expected to serve as suitable foraging habitat for burrowing owls.

104-16 The commenter states that the DEIS fails to analyze impacts to the golden eagle under the Bald and Golden Eagle Protection Act. See Responses to Comments 75-8 and 92-01.

104-17 The commenter states that the project could impact badger territories. Occurrence of American badgers within the Study Area is discussed in Chapter 3.4. Potential impacts to this species are discussed in Chapter 4.4. FEIS Section 4.4.3 has been revised to include Mitigation Measure MM-WIL-1, American Badger Protection Plan.

104-18 The desert kit fox is not State or federally listed at this time; however, Appendix B of the Biological Resources Technical Report prepared by Ironwood Consultants (report found in DEIS Appendix H) lists the desert kit fox as a species of which they found sign. Surveys were conducted to determine whether any special status species were found during surveys of the Project sites. According to the wildlife list table found in their report, a desert kit

fox burrow was observed. As the report focused on special status species, the desert kit fox was not discussed; rather, its presence on the site was documented in the table. All species, common and special status, were documented during all surveys. While the desert kit fox is not listed as a special-status species by the State of California or the USFWS, it is protected from trapping and hunting under Title 14 California Code of Regulations Section 460. These activities are not proposed. However mitigation measure WIL-1 has been added to the FEIS and would include pre-construction surveys and requirements for actions to be taken if dens are found.

104-19 The commenter is correct that cryptobiotic soils are not specifically mentioned in the DEIS. However, such soils are known to occur on older alluvial fan surfaces, along with desert pavement. Both cryptobiotic soils and desert pavement are indicators of older desert soils that have not been flooded by desert washes in thousands of years. Cryptobiotic soils can be expected to overlie older alluvial fan surfaces, indicated by all units other than Qw (modern washes) and Qa3 (late Holocene Alluvium). The likelihood that cryptobiotic soils are present generally increases with the age of the alluvial fan. Additional discussion of cryptobiotic soil crusts has been added in FEIS Chapter 4.8, Geology and Soil Resources. Mitigation measure GEO-2 would minimize potential impacts associated with the loss of cryptobiotic soil crusts.

104-20 The commenter states that the DEIS fails to address insects on the project site. Biological surveys to support NEPA and CEQA analyses usually focus on special-status species and are not intended to be exhaustive inventories of all animals in a project area. Overall, data and analyses in the DEIS covered a broad range of plant and animal taxa, but did not evaluate insects without special conservation status. There are no special-status insect species documented from the vicinity of the Project site (as tracked in the CNDDB). NEPA and CEQA analyses need not address every species or group of species. Nevertheless, the DEIS identified mitigation measures that also would reduce impacts to insects by avoiding or minimizing adverse impacts to their habitat, by setting aside compensation habitat; by revegetating disturbed habitat; or by minimizing adverse habitat impacts by managing potential erosion, water quality, and other impacts.

104-21 Potential impacts to rosy boa are discussed in DEIS Section 4.4. Construction monitoring as required per Mitigation Measure BIO-1 would ensure that these other special status wildlife species are actively or passively relocated if found within the construction areas. Although translocation of rosy boa out of harm's way may result in altered behavior or reduced survivorship, the translocation would reduce potential impacts of substation construction as described in the Section 4.4 of the DEIS and FEIS.

104-22 In the FEIS, a new mitigation measure has been added: MM-BIO-4, *Salvage and Restoration Plan Performance Standards*. This measure supplements Applicant Measure BIO-5, in which the applicant committed to prepare and implement a Vegetation Salvage and Restoration Plan. See also Response to Comment 108-4.

104-23 The discussion in the DEIS of potential wildlife movement in the upper Chuckwalla Valley has been expanded and clarified in FEIS Section 3.4.5, and now includes a description of

the California Essential Habitat Connectivity Project and other biological connectivity modeling pertinent to the area. Description of the Project's potential impacts to wildlife movement in Section 4.4.3 has also been expanded and clarified in the FEIS.

104-24 The commenter states that late summer/early fall surveys for rare plants must be performed. Floristic surveys were conducted between March 15 and April 9, 2010 and November 8th through November 12, 2010, within the Project Study Area and thus all of the Project areas currently under consideration have been fully surveyed. These surveys were conducted at a time that did not allow the findings to be included in the DEIS. No additional special-status species were observed from those identified in the DEIS. Section 3.3.2 in the FEIS has been amended to reflect that these surveys were conducted. The survey information has also been added to Appendix H.

104-25 The commenter states that the DEIS failed to adequately identify appropriate mitigation measures. See Common Response N.4.6, *Adequacy of Analysis*.

104-26 The commenter states that the DEIS failed to evaluate impacts to Waters of the State. EIS Table 4.3-5 summarizes the direct impacts of each alternative on CDFG jurisdictional resources (also known as waters of the State). The effects of the Project on these resources are defined in FEIS Section 4.4.3 under the heading *Jurisdictional Resources*.

104-27 The commenter states that the DEIS should have addressed federal reserved water rights. See Response to Comment 129-8. The Project is not anticipated to interfere with federal water rights associated with the Colorado River. Public Water Reserve 107 would not apply to the proposed Project. No springs or water holes would be appropriated or precluded from use for public use by the proposed Project.

104-28 The commenter suggests that the analysis of cumulative impacts in the DEIS as it relates to GHG emissions is inadequate. Mitigation for GHG emissions are contained in DEIS Chapter 4.5, Climate Change. Specifically, measures AM-AIR-3 and AM-AIR-4 would minimize GHG emissions from grading and other onsite construction activity; AM-AIR-5 would reduce GHG emissions from construction worker driving trips; MM-AIR-1 would support the use of newer, more efficient construction machinery; and MM-AIR-2 would reduce hauling trips required during construction. Additionally, the Project as a whole would result in a net reduction in GHG emissions, as compared to current power grid suppliers that use fossil fuels, which the Project would displace. Therefore, consideration of additional alternatives or additional mitigation for GHG emissions is not warranted.

104-29 See Response to Comment 104-10.

104-30 The commenter questions the adequacy of the alternatives analysis in the DEIS based on the statement of Purpose and Need. See Common Response N.4.1, *Purpose and Need*, and Common Response N.4.7, *Alternatives Analyzed*.

Letter - 105.

105-01 The commenter is concerned about impacts related to the decommissioning of the renewable energy projects in the desert. As stated in FEIS Section 2.4.3, a Decommissioning Plan would be prepared as part of the proposed action and put into effect when permanent closure occurs. As described, the procedures provided in the Decommissioning Plan would be developed to ensure compliance with applicable laws, ordinances, regulations, and standards, and to ensure public health and safety and protection of the environment. Given that decommissioning would not be expected to occur within the next 30 to 40 years, it would be speculative at this time to guess what precise provisions would be included. Also as indicated in FEIS Section 2.4.3, the Decommissioning Plan would be developed in coordination with the BLM and require BLM approval prior to implementation. The Decommissioning Plan would address decommissioning and reclamation measures for the DSSF and associated facilities; activities necessary for site restoration/re-vegetation if removal of equipment and facilities is needed; procedures for reuse, recycling or disposal of facility components, collection and disposal of hazardous wastes and use or disposal of unused chemicals; and conformance with applicable LORS, and BLM review and approval would be required before the plan would be implemented. In the event the decommissioning plan differs from the expectations stated in the FEIS in a way that would cause new or more intense impacts than would result from a plan reflecting the expectations in this FEIS, subsequent environmental review would be required.

With regard to infrastructure damage, a geotechnical investigation for the proposed Project would be completed before final design and construction of the Project. The geotechnical investigation would be required to comply with current building code standards that would ensure that poles and all infrastructure components are designed and constructed accordingly. Furthermore, as discussed in DEIS Section 2.4, routine maintenance would include equipment testing, equipment monitoring and repair, as well as emergency and routine procedures for reliability and preventive maintenance. These activities would ensure project infrastructure is properly maintained and repaired/replaced if necessary.

105-02 The commenter is concerned about the disposition of hazardous materials once the Project no longer is operational. First Solar set up its recycling program in 2005 and, consistent with the program, all recycled materials would be used for new products including new panels. See also Common Response N.4.9, *Cadmium Exposure.*

105-03 Potential project-related effects on local land uses and property values are discussed in Common Response N.4.8, *Property Value*.

105-04 As described in FEIS Section 4.10.3, Operations and Maintenance for Solar Farm Layout B, transformers at the power converter stations (PCS) would produce low levels of noise during facility operations; however, this noise would be limited to daytime hours when the solar arrays would be generating electricity. Each of the 550 PCSs would have one transformer mounted on a concrete pad that is estimated to generate noise at 65 dBA at a distance of 10 feet. This noise level would be reduced to a 50 dBA at a distance of 56 feet,

to 40 dBA at a distance of 178 feet, and to 35 dBA at a distance of 312 feet. The PCS stations would generate little audible noise beyond the solar farm boundary line during daytime hours and would not be a source of noise during nighttime hours. Therefore, there is no need for mitigation to protect the public from PCS station transformer noise.

105-05 The comment raises a concern about dust impacts to jojoba during pollination times and resulting impacts to the local economy. First Solar has confirmed to BLM that it would be feasible to apply dust palliatives to the Solar Farm Site to control operational dust emissions. Dust control would address the commenter's concern.

105-06 The commenter is concerned about dust-related impacts to plants. First Solar has confirmed to BLM that it would be feasible to apply dust palliatives to the Solar Farm Site to control operational dust emissions. FEIS Section 4.2.3, Alternative 1- Proposed Action, has been revised under the discussion of Operation and Maintenance for Solar Farm Layout B to reflect this commitment.

105-07 The commenter is concerned about EMF impacts to residences/farms, flora and fauna. As indicated in FEIS Chapter 3.11, measurable EMFs are not present except in the vicinity of existing power lines corridors. Where possible, proposed and alternative gen-tie lines would be placed in these existing transmission corridors. With regard to EMF impacts to agricultural uses, as discussed in DEIS Section 4.9, transmission line infrastructure would not result in a significant impact because transmission lines generally are consistent with agricultural uses with the exception of dairy operations; however, no dairy operations occur in the vicinity of the project. See also Common Response N.4.10, *EMF Exposure*.

105-08 The commenter is concerned about the creation of a micro-climate with elevated temperatures in the Project area. See Responses to Comments 69-17 and 70-1. Microclimate temperature effects outside of the boundary of the Project site are not anticipated, and no mechanism for the creation of such a change has been identified.

105-09 Applicant Measure(AM)-BIO-2 would be implemented to reduce the potential for introduction of invasive plant species as discussed in DEIS Section 4.3. AM-BIO-2 requires an Integrated Weed Management Plan (IWMP) (Ironwood Consulting 2010b) to be prepared pursuant to BLM's Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States (BLM 2007) and the National Invasive Species Management Plan (The National Invasive Species Council 2008), and would be implemented by the Applicant to reduce the potential for the introduction of invasive species during construction, operation and maintenance, and decommissioning of the Project. The draft plan is provided in DEIS Appendix H and would be reviewed and approved by the BLM. See also Response to Comment 28-09.

105-10 The commenter is concerned about the creation of noxious weed impacts on disturbed lands See Response to Comment 105-9.

105-11 The commenter is concerned about water use impacts of the Project. BLM acknowledges the commenter's concerns. Additional mitigation has been added to FEIS Chapter 4.17, under the Applicant Measures and Mitigation Measures subsection in regard to the solar

array field. The additional measures would address the potential effects of the Project on nearby groundwater wells.

105-12 Concerning the reasonableness of the range of alternatives, see Common Response N.4.7.

105-13 The commenter requests clarification of the relationship between agency compliance with NEPA/CEQA and the fast-track process. In response to this comment, the following definition has been added to the Glossary: "Fast-track projects are those where the companies involved have demonstrated to the BLM that they have made sufficient progress to formally start the environmental review and public participation process. These projects are advanced enough in the permitting process that they could potentially meet deadlines for economic stimulus funding under the American Recovery and Reinvestment Act of 2009. The fast-track process is about focusing BLM staff and resources on the most promising renewable energy projects, not about cutting corners, especially when it comes to environmental analyses or opportunities for public participation."

105-14 Concerning the reasonableness of the range of alternatives, see Common Response N.4.7.

105-15 The commenter expresses regional environmental justice concerns. The comment is largely beyond the scope of the DEIS's environmental justice analysis. The DEIS's environmental justice analysis is limited to evaluating the potential Project-related impacts to minority and low-income populations within the project's vicinity. Out of region residents are beyond the appropriate affected environment for the analysis of impacts of the proposed Project.

105-16 The commenter is concerned over the lack of KOPs on private properties. See Common Response N.4.4, *Adequacy of Key Observation Points (KOPs) and Simulations.*

105-17 The commenter is concerned about cultural resource impacts and consultation with Native Americans. Chemeheuvi, Serrano, Mojave, and Cahuilla tribes have been invited to participate in consultations on all issues of concern to them pertaining to the proposed action. The BLM welcomes and will consider the views of Native American tribes regarding the evaluation and treatment of cultural resources and disposition of archaeological materials recovered during testing and data recovery. BLM will seek to accommodate the wishes of tribes with regard to the curation of recovered materials to the extent they are consistent with the requirements of the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act, and Title 36 Code of Federal Regulations Part 79.

105-18 The commenter is concerned about impacts to local wells from development of a Project well or use of a local commercial well. There is no evidence that the volume of water proposed by the Applicant for use during construction is unreasonable or understated. The analysis in DEIS Section 4.17.3 evaluates water models and well data, concluding that the proposed water use, including construction use, would not affect other users of the aquifer. An evaluation and impact assessment regarding the volume of water that would be consumed during Project construction and operation is presented in DEIS Chapter 4.17, Water Resources. Anticipated groundwater budgets, as well as results from modeling analyses that were completed for the Project, are shown in Tables 4.17-1 and 4.17-2,

respectively. Associated levels of impact to groundwater are discussed for direct and cumulative impacts are discussed in Chapter 4.17. In terms of rainwater percolation, implementation of the Project is not expected to substantially reduce percolation of rainwater into groundwater. The proposed solar panels would be elevated above the ground surface. Rain falling on the panels would run off the bottom edge of the panels and fall to the ground. Sediments at the ground's surface around the solar arrays would be decompacted, as discussed in Chapter 4.17. As discussed in the DEIS, decompaction would support infiltration on site and would reduce impacts to groundwater recharge and runoff. Proposed roadways, buildings, and other impervious surfaces would be limited in extent. As discussed in Chapter 4.17, total surface runoff from the Project site would be increased by only minimally (1.2 percent for the 100-year storm, and by 2.8 percent for the 10-year storm). To further reduce stormwater runoff and support infiltration, Project mitigation has been updated to require the increases in runoff are maintained at less than a 1 percent increase, for 100-year and 10-year events (MM-WAT-7 in Section 4.17). Finally, stormwater discharge from the Project site would be released to downstream areas. The proposed Project would not alter the capacity of desert soils in downstream areas to infiltrate water. Therefore, no reduction in infiltration downstream of the Project site is anticipated, and, as discussed in DEIS Chapter 4.17, potential reductions in groundwater recharge would be minimal. In regard to other proposed projects, a cumulative analysis of all reasonably foreseeable and relevant projects in the vicinity of the Project is contained in the cumulative analysis in Chapter 4.17.

105-19 The commenter is concerned over the denuding of the desert. A discussion of existing vegetation resources in contained in DEIS Chapter 3.3, Vegetation Resources. As discussed therein, only select plant species rely on a continuous connection to groundwater for survival. Therefore, the denuded situation indicated by the commenter is not anticipated, and associated arsenic exposure is not anticipated. Potential effects of drawing down the groundwater basin on ironwood and other plants that do rely on groundwater are discussed in Chapter 4.3, Vegetation Resources. As indicated, these communities are unlikely to be substantially impacted as a result of the projected drawdown that would occur, as a direct result of implementing the proposed Project. See also Response to Comment 112-22.

105-20 The commenter would like the CDCA Plan Amendment to protect the 19,000 acres avoided by the proposed Project.

As discussed in the DEIS Chapter 1, the Applicant established a Project Study Area of over 19,000 acres to evaluate a reasonable range of alternatives. Once the Study Area was chosen, the Applicant conducted preliminary biological, cultural, hydrological and geological reviews to evaluate site conditions and eliminate areas of the Project Study Area considered unsuitable for development of Project facilities. Based on the preliminary studies, more thorough and detailed biological, cultural, hydrological, and geological studies were conducted on those portions of the Project Study Area considered suitable for development which resulted in the alternatives analyzed in the DEIS. Since the remaining portions of the Project Study Area were determined unsuitable for development

of the DSSF, it is unlikely that they would be considered suitable for development of another solar facility using today's technology.

Note also that the alternative suggested in this comment is within the range of alternatives already analyzed in the EIS. Specifically, No Action Alternative 5 is similar to the suggestion made in this comment. As defined in Section 2.2.2, this alternative would result in:

> No Issuance of a Right-of-Way Grant with Land Use Plan Amendment to Identify the Area as Unsuitable for Solar Energy Development – The CDCA Plan of 1980, as amended, would be amended to identify the Project application area as unsuitable for any type of solar energy development, and the Project would not be approved.

Therefore, the FEIS evaluates an alternative that addresses the commenter's concerns, and so no further analysis is required.

105-21 The commenter is concerned about impacts to the golden eagle in the Project area. See Responses to Comments 75-8 and 92-01. Mitigation Measure BIO-2 has been revised to include mitigation for loss of golden eagle foraging habitat. AM_BIO-1 requires that golden eagle foraging habitat of equal or greater value is preserved and/or created and managed to ensure the Project does not jeopardize golden eagle existence or adversely modify its critical habitat. The fulfillment of mitigation measure BIO-2 and AM-BIO-1 would be reviewed and approved by USFWS.

105-22 The commenter is concerned over local mining impacts related to obtaining gravel for the Project and about impacts to housing from the proposed Project. It is unclear to which portion of the DEIS the commenter is referring with respect to gravel potentially being obtained on site. Chapter 2, Project Description, indicates that earth moving and grading would be managed so that required fill materials are obtained on site. The same chapter also indicates that, "existing sand and gravel are expected to support construction traffic." However, this refers to naturally existing gravels that occur along the gen-tie line alignment, not to gravel that would be excavated or imported. The Project would not quarry gravel on site.

105-23 See Common Response N.4.11, *Construction Employment*.

105-24 The commenter is concerned about impacts to law enforcement with the influx of construction workers. Construction activities would be temporary and are not expected to be a significant impact to law enforcement resources. Further, workers would go through extensive training to minimize impacts to the local wilderness areas from illegal off-road travel.

105-25 The commenter is concerned with impacts to emergency services providers due to the remote nature of the Project. Concerning the distance and capacities of first responder fire services, as discussed in DEIS Section 4.13, the fire prevention plan that would be in place during construction of the Project would minimize the demand that this construction would place on the California Department of Forestry and Fire Protection. Further,

mitigation measure AM-HAZ-9 would require all Project facilities to be designed, constructed and operated in accordance with applicable fire protection and other environmental, health and safety requirements. In compliance with County of Riverside requirements, a project-specific fire prevention plan for both construction and operation of the substation would be required of SCE prior to initiation of construction. This plan would provide detailed information in the event of an emergency such as a facility fire. All elements of the proposed facility would be constructed in accordance with electrical building code requirements which include safety measures to minimize the potential for accidental fires. In addition, the solar panel modules are constructed primarily of glass and do not contain much in the way of flammable materials. The melting point of CdTe is 1,041 degrees Celsius which would require a substantial sustained fire to volatilize the CdTe that is encapsulated within the modules. The Applicant and SCE would use the CPUC General Order 95 and 165, as related to fire-safe design and maintenance practices for transmission lines, to establish minimum requirements for the Project including inspection, condition rating, scheduling and performance of corrective action, record keeping and reporting, in order to ensure a safe and high-quality electrical service.

105-26 Sale of the Project to a different company in the future would require that the new owner comply with all mitigation measures, applicant measures, and permit conditions as would apply to the initial applicant. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 106.

106-01 Concerning the reasonableness of the range of alternatives considered in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

106-1A Commenter expresses concern about the Project's potential direct and indirect impacts to desert dry wash woodlands, site hydrology, desert tortoise, air quality, groundwater, and cumulative effects of numerous large-scale solar projects in the Chuckwalla Valley. The comment is acknowledged, and the commenter is referred to FEIS Sections 4.3, 4.17, 4.4, 4.2, 4.17, and Chapter 4, respectively, where the EIS identifies impacts to each identified resource that are substantially reduced through implementation of mitigation measures. In particular, mitigation measures to protect desert dry wash woodland and desert tortoise, and surface and groundwater resources have been clarified and enhanced to ensure protection of resources. As this EIS may serve in lieu of an EIR for the purpose of State and local agency decision-making, impact significance was also evaluated against CEQA thresholds: Impacts to desert dry wash woodland, desert tortoise, surface hydrology, groundwater, and most cumulative impacts would be reduced to a less-than-significant level with implementation of these clarified and enhanced mitigation measures. Impacts to air quality would remain substantial (significant under CEQA) despite implementation of mitigation.

106-02 The commenter urges the BLM to adopt Reduced Acreage Alternative 3 to protect desert tortoise. See Common Response N.4.7, *Alternatives Analyzed*. Note also that the Applicant has proposed certain Project modifications, one of which is to reduce the footprint of the Solar Farm Layout B by approximately 330 acres. This and other proposed modifications are described in FEIS Chapter 2. Impacts associated with the modifications are analyzed in FEIS Chapter 4, Environmental Consequences.

106-03 The commenter is concerned about the Project's potential to increase erosion. BLM recognizes EPA's concerns regarding the potential of the Project to result in disruption to natural drainages upstream and downstream of the Project. In regard to the proposed soil de-compaction technique, Chapter 4.17 of the DEIS provides an evaluation of this technique and its efficacy in minimizing additional stormwater discharges from the Project site. BLM recognizes that even with implementation of such measures, additional erosion and stormwater impacts may be anticipated. Therefore, additional mitigation has been added to the DEIS, including construction and operation period stormwater and stormwater quality control measures including, but not limited to, deployment of water quality Best Management Practices (BMPs), additional measures to minimize stormwater flows, sizing and design requirements to ensure that flood control facilities are capable of handling flood conditions without causing erosion or other deleterious effects, and various operation period water quality control measures. These additional measures would ensure protection of onsite and offsite water quality from erosion, sedimentation, and other pollution during Project construction and operation. Additional measures, such as maintaining natural vegetation underneath the solar panels, are still under feasibility review by the Project Applicant. However, the current suite of mitigation would ensure that potential effects on erosion, sedimentation, and water quality are minimized during construction and operation.

106-04 The commenter suggests that the FEIS should quantify potential impacts to Waters of the U.S. Recently-approved delineations indicate that no Waters of the U.S. are present on the Project site. Chapter 4.17 of the DEIS has been updated in the FEIS accordingly. To address potential water quality degradation in the absence of NPDES permitting requirements, additional mitigation measures have been added to FEIS Chapter 4.17 that would restrict and minimize water quality discharges during construction and operation. See also Response to Comment 106-3.

106-05 The commenter suggests that the BLM and Applicant work with the USFWS to identify habitat compensation lands. The text of the DEIS has been revised in the FEIS to include new Applicant and Mitigation Measures that require protection, management, restoration and salvage plans that meet the requirements of the federal and State ESA. The revised text can be found in FEIS Section 4.3.3 and Section 4.4.3. See especially Mitigation Measure BIO-2, which addresses processes and requirements related to identification and acquisition of compensation lands. New MM BIO-2 (Off-site compensation) defines procedures for coordination with USFWS and CDFG in the definition of appropriate compensation lands.

The commenter also requests additional analysis of indirect and cumulative impacts to biological resources, groundwater and air quality. These issues are fully addressed in Chapter 4 for each discipline. The biological resources analysis is particularly detailed, with consideration of past, present and reasonably foreseeable future projects evaluated in the region. Additional analysis is not warranted.

106-06 The commenter recommends requiring more stringent air quality mitigation measures, phased construction, and coordination among multiple renewable energy project construction schedules to minimize adverse air quality impacts in the region. In response, mitigation measures for air quality have been designed to minimize air quality impacts to the maximum extent feasible (see FEIS Section 4.2.) Phased construction already is planned for the Project, and air emissions would be spread roughly evenly over a 26-month construction timeline (see AM-AIR-2). It is unclear how coordinating multiple construction schedules would benefit to air quality. Only substantial slowdowns in construction timelines would substantially benefit air quality; however, such slowdowns would be expected to render the proposed renewable energy projects economically infeasible.

106-07 The commenter is concerned about the lack of disturbed or private land alternatives. See Common Response N.4.7, *Alternatives Analyzed*.

106-08 The commenter recommends that the FEIS address the need for a Clean Water Act Section 404 permit. Based on completed consultation with the U.S. Army Corps of Engineers, the Project would not require a Section 404 permit. Text has been added in the FEIS to reflect the results of this recent determination. Additional mitigation also has been added. See Response to Comments 106-3 and 106-4.

106-09 The commenter recommends that the Project avoid, minimize and/or mitigate impacts to Waters of the U.S. See response to Comment 106-8.

106-10 The commenter recommends that the Project avoid, minimize and/or mitigate impacts to aquatic features that are not waters of the U.S. and that the BLM consider availability of compensation lands within the Chuckwalla Valley. Regarding the first subject, see Response to Comments 106-3 and 106-4. Please also note that the USACE has determined that there are no waters of the Unites States within the Project area (see FEIS Section 3.3.7. Regarding the location of available compensation lands and preference for a Chuckwalla Valley location, MM-BIO-2 has been revised in the FEIS. Compensation lands must be located within the NECO planning area and within the Eastern Colorado Desert Tortoise Recovery Unit (designated in the USFWS Desert Tortoise Recovery Plan).

106-11 The commenter is concerned about the effectiveness of proposed drainage control features. The DEIS evaluated the effectiveness of the proposed stormwater/drainage control features in Chapter 4.17, Water Resources, under the Drainage and Surface Water subheader of Section 4.17.3 and in Appendix G. Additionally, to ensure that sufficient mitigation is included in the Project design to minimize hydrologic change, the implementation of applicant measures and mitigation measures (including MM-WAT-7)

has been updated in the FEIS to specify that 10-year and 100-year flows shall be reduced to a magnitude of no greater than 1 percent of existing conditions.

106-12 The commenter recommends that the FEIS quantify the acreage that would not require clearing and grading. This is discussed in FEIS Chapter 2. The Applicant has proposed a different grading methodology that would reduce potential impacts. The methodology is described in detail in FEIS Chapter 2 and analyzed in Chapter 4.8, Geology and Soils.

106-13 The commenter suggests that the FEIS should include the results of the final hydrology report. The DEIS contains an evaluation of the effects of the proposed components on site hydrology in Section 4.17.3, concerning water resources, with additional details contained in DEIS Appendix G. Additional mitigation measures have been applied, as discussed in Response to Comment 106-11. Erosion and sedimentation is not expected to occur off-site as a result of construction or operation; discharge points for retention basins would be determined during final engineering, and would comply with all applicable County, State and Federal water quality regulations.

106-14 The commenter recommends that more detail be provided on the proposed fencing plan. Impacts of perimeter fencing are discussed in FEIS Section 4.4, Wildlife. Mitigation Measure WAT-5 (in Section 4.17.3) has been revised to ensure protection of desert tortoise and other wildlife by requiring that the fencing not be installed in major drainages or washes. Consequently, the fencing also would not to interfere with stormwater, flood or sediment flows.

106-15 The commenter requests additional data and analysis regarding water use, and states that the FEIS should confirm the approved water source. As discussed in DEIS Chapter 4.17, Water Resources, construction of the Project would rely on groundwater for water supply. Section 4.17.9, Cumulative Impacts, contains an evaluation of the potential for the Project, in combination with other projects including those mentioned by the commenter, to withdraw groundwater from the CVGB, resulting in cumulative groundwater drawdown. As discussed therein, the Project would cause drawdown only during the construction period, and would contribute only toward 6.5 percent of the drawdown, and so would not contribute a cumulatively considerable reduction in groundwater levels in the basin. No further analysis is warranted. See revised Section 4.3, Vegetation, for discussion of groundwater dependent plants: MM-BIO-5 would establish groundwater monitoring and pumping limits. With regard to the comment on wildlife movement, the DEIS discussion has been expanded in FEIS Section 4.4.3.

106-16 The comment states concerns about impacts to groundwater basins. Additional mitigation, similar to that provided for the Palen Solar Power Project, has been incorporated into the FEIS to ensure that groundwater quality would be protected. Additional discussion of groundwater resources relevant to the Colorado River has been added to FEIS Chapter 4.17. Appendix O, *Accounting Surface Technical Memorandum*, provides further analysis of Colorado River water rights. See also, Responses to Comments 101-03 and 129-08.

106-17 The commenter recommends consultation with the USFWS, which has jurisdiction over threatened and endangered species listed under the Endangered Species Act (ESA) (16 U.S.C. Section 1531 et seq.). Formal consultation with the USFWS under Section 7 of the ESA is required for any federal action that may adversely affect a federally listed species, and is ongoing for this Project. This is stated in Section 4.3 in the analysis of alternatives. The USFWS is expected to issue a Biological Opinion (BO) that specifies mitigation measures, which must be implemented for any protected species. As design changes are often a result of the EIS review process (such as reduced or altered project footprint), the timing of the BO is such that it usually follows or runs concurrently with the EIS preparation to ensure that it addresses these changes. Per ESA Section 7, the Applicant and BLM would be required to consult with the USFWS thereby ensuring protection of special status species with the potential to occur in the Study Area. The Biological Opinion would be referenced in and attached to the Record of Decision. Each of the individual species (northern harrier, golden eagle, burrowing owl) identified in the introductory comments that precede this recommendation are addressed in the FEIS.

106-18 The commenter recommends the reduced acreage alternative and a gen-tie route that affects the least desert tortoise, selected with input from USFWS. See Responses to Comment Letter 108 (USFWS). Concerning a reduced solar farm footprint, see Common Response N.4.7. See also, Response to Comment 106-02. The comparison of alternatives is more fully presented in EIS Appendix C, Section C.2 *CEQA Comparison of Alternatives*. DEIS Section 4.4, Wildlife, has been expanded in the FEIS to provide additional data on tortoise affected by the various alternatives, and identifies that Substation B would have substantially more adverse effects on wildlife movement due to its location in a narrow area between the base on the mountains and the freeway.

106-19 Applicant Measure (AM) BIO-1 and new Mitigation Measure BIO-2 give the current detail on habitat compensation for the DSSF and further information can be found in the Habitat Compensation Plan, provided as FEIS Appendix H. The Habitat Compensation Plan must be approved by BLM, CDFG and USFWS. Based on information obtained during agency consultation, it is anticipated that sufficient compensatory mitigation lands are available in the appropriate areas to fulfill habitat acquisition requirements even after the Palen, Blythe, Genesis and other projects have satisfied their mitigation requirements. Further, sufficient controls and criteria are included in the mitigation measure to ensure that appropriate habitat is found. The percentage of development within the Chuckwalla DWMA is specified for each alternative in DEIS Section 4.4.9, Impact WIL-5 Wildlife Management Areas and Critical Habitat.

The selection criteria and funding options for compensation lands are fully disclosed in MM-BIO-2, which has been added in the FEIS. In accordance with the requirements of MM-BIO-2, lands must be protected in perpetuity. BIO-2 also requires that management plans for acquired parcels would be developed, implemented and approved by appropriate resource and land management agencies.

BLM's current land management policy does not allow exclusion of the non-developed portion of the ROW as project-specific mitigation, as this land is still BLM-administered

land that would have to be evaluated for development potential. In order for BLM to protect this land from future development, a separate proposal, with its own NEPA analysis, would have to be considered. Such an action is not within the scope of this EIS or the proposed action currently being considered.

106-20 The fourth, sixth, and seventh bullets of the suggested mitigation have been incorporated into Mitigation Measure MM-AIR-4, with slight revisions in some cases to insure feasibility and to provide flexibility in implementation. The intent of the first two bullets of the suggested mitigation are covered by applicant measure AM-Trans-1 (see FEIS Section 4.15). The third and fifth suggested mitigation bullets are not applicable to the Project given the Project's remote location and the specifications of the proposed construction plan.

106-21 The commenter has provided additional mitigation recommendations for fugitive dust. The recommended mitigation measure has been included in the FEIS to replace DEIS Mitigation Measure MM-AIR-1.

106-22 The commenter recommends that the FEIS discuss cumulative air quality impacts. Additional explanation of the likelihood of overlapping cumulative project effects has been added to the DEIS in FEIS Section 4.2.9. The Geographic Extent also is identified in Section 4.2.9 and found to be most pronounced within 0.5 mile of sites, which greatly reduces the potential for impact overlap during the various construction activities.

106-23 The commenter requests that the FEIS address impacts of climate change on the Project. DEIS Chapter 4.5, Climate Change, has been updated in the FEIS to analyze such effects as relevant to mitigation habitat values and vegetation and wildlife resources. A brief discussion regarding reclamation and restoration efforts is included with the discussion of the effects of climate change on plant and wildlife resources, as relevant to the Project. No further analysis is warranted.

106-24 The commenter suggests that the FEIS should reflect a purpose and need statement broad enough for analysis of a wide range of alternatives. Concerning the purpose and need statement in the DEIS, see Common Response N.4.1. Concerning a reasonable range of alternatives in the DEIS, see Common Response N.4.7.

BLM's authority relating to rights-of-way is derived from Title V of the Federal Land Policy and Management Act (FLPMA) of 1976 (43 U.S.C. 1761-1771) and the implementing regulations at 43 CFR 2800. BLM policy requires that upon the filing of an application, the Applicant must be notified whether the (1) application is complete and the estimated time required for processing; (2) the application is incomplete and requires additional information; or (3) the application is denied.

BLM may deny an application if: (1) the proposed use is inconsistent with the purpose for which BLM manages the public lands described in the application; (2) the proposed use would not be in the public interest; (3) the applicant is not qualified to hold a grant; (4) issuing the grant would be inconsistent with FLPMA, other laws, or the implementing or other regulations; (5) the applicant does not have or cannot demonstrate the technical or

financial capability to construct the project or operate facilities within the right-of-way; or (6) the applicant does not adequately comply with a deficiency notice or with any BLM requests for additional information needed to process the application (43 CFR 2804.26).

BLM also may modify a proposal or impose terms and conditions necessary to: (a) carry out the purposes of FLPMA and the rules and regulations issued there under; minimize damage to scenic and esthetic values and fish and wildlife habitat and otherwise protect the environment; require compliance with applicable air and water quality standards established by or pursuant to applicable Federal or State law; and require compliance with State standards for public health and safety, environmental protection, and siting, construction, operation and maintenance of rights-of-way for similar purposes if those standards are more stringent than applicable Federal standards; and (b) protect Federal property and economic interests to; manage efficiently the lands that would be subject to the ROW or adjacent thereto and protect the other lawful users of the lands adjacent to or traversed by the ROW; protect lives and property; protect the interests of individuals living in the general area traversed by the ROW who rely on the fish, wildlife, and other biotic resources of the area for subsistence purposes; require location of the ROW along a route that will cause the least damage to the environment, taking into consideration feasibility and other relevant factors; and otherwise protect the public interest in the lands traversed by the right-of-way or adjacent thereto. 43 USC 1765.

Individual ROW applications are considered separately; thus, two applications submitted by the same applicant or its corporate owner would be considered independently based on the independent merit of each. A decision whether to grant one of the applications would be made independently of whether to grant the other.

The BLM will weigh its decision on DSSF based on feasibility and environmental considerations consistent with its role in managing the public lands in accordance with FLPMA, NEPA and other applicable statutes and authorities as identified in Table 1.4-1. NEPA does not require the completion of a quantified lifecycle cost analysis in order to evaluate relative impacts and the BLM does not require the preparation of a cost benefit analysis or a fiscal impact statement. These are more typically done by the applicants prior to considering the use of public lands for projects. Additionally, reviewing such information would not affect the size and scope of the project, or its impacts, nor would it improve the analysis of the alternatives in such a manner as to make one more feasible than another.

As indicated in FEIS Section 1.2.1, BLM's actions in response to the Project include consideration of amending the CDCA Plan of 1980, as amended. The CDCA Plan, while recognizing the potential compatibility of solar generating facilities on public lands, requires that all sites associated with power generation not identified in the plan be considered through the land use plan amendment process. Amendments to the CDCA Plan can be site-specific or global, depending on the nature of the amendment. The CDCA Plan has been amended numerous times since it was first approved either as a result of site-specific need or development of other land use plans. The NECO Plan amended the CDCA plan in 2002 to make it compatible with desert tortoise conservation and recovery efforts. The NECO Plan

is a landscape-scale planning effort that covers most of the California portion of the Sonoran Desert ecosystem, including over five million acres and two desert tortoise recovery units. No NECO Plan amendment is proposed as part of this action.

106-25 The commenter suggests that the FEIS discuss how the concerns of the tribes have been addressed. Sections 3.6 and 4.6 state that tribes have not identified any sacred sites or other places of traditional cultural or religious importance that would be affected by the proposed action. Consultation with tribes is ongoing, and tribes will continue to have opportunities to express concerns during the NEPA and Section 106 compliance processes. The extent to which tribes participate in the Section 106 consultation under the PA will determine whether resolution of adverse effects is satisfactory to the tribes; consultation will be documented as part of the Section 106 compliance process. Section 106 compliance will be completed prior to issuance of the ROD. Measures prescribed in the PA to resolve adverse effects would be adopted in the ROD.

106-26 The commenter states that the FEIS should address Executive Order 13007. Language addressing EO 13007 has been added to FEIS Section 3.6. As stated in Response to Comment 106-25, the tribes have been consulted and have not identified any sacred sites or other places of religious importance that would be affected by the proposed action. Further, mitigation measure MM-CUL-9 in section 4.6 requires BLM to continue consulting with tribes to identify sacred sites that might be affected by the Project and, if such sites are identified, to consult further with tribes to resolve access impediments or other identified impacts.

106-27 The commenter recommends that the FEIS address impacts from the influx of workers in to the project area. Potential construction employment effects on the local area are discussed in Common Response N.4.11, *Construction Employment*.

Letter - 107.

107-01 The term "Gen-Tie" or "interconnection" line has replaced the generic reference "transmission" line throughout the document, as appropriate.

107-02 The text has been updated as indicated in the comment.

107-03 The text has been updated as indicated in the comment.

107-04 Text has been added stating that the Project is "predominantly within the Riverside County's Desert Center Planning Area."

107-05 The text has been updated as indicated in the comment.

107-06 The table has been updated accordingly.

107-07 The text has been updated as indicated in the comment.

107-08 The text has been updated as indicated in the comment.

107-09 The text has been updated as indicated in the comment.

107-10 The text has been updated as indicated in the comment.

107-11 The text has been updated accordingly.

107-12 The text has been updated as indicated in the comment.

107-13 The text has been updated as indicated in the comment.

107-14 The text has been updated as indicated in the comment.

107-15 Text has been modified.

107-16 The text has been updated as indicated in the comment.

107-17 As stated in the FEIS, the PV modules would be recycled in accordance with First Solar's recycling program, which was initiated in 2005. The disposal of wastes referred to in the comment pertains to other (construction-related) wastes such as wood, concrete and miscellaneous packaging materials.

107-18 Updated figures that were previously in gallons to show acre-feet.

107-19 Comment noted and text changed as suggested.

107-20 Additional information noted in the FEIS.

107-21 Refer to Response to Comments 76-1 through 76-3.

107-22 The text has been updated as indicated in the comment.

107-23 The text has been modified to include language regarding large scale projects.

107-24 For discussion of fugitive dust emissions that would be associated with construction and operations of the Proposed Action, see FEIS Sections 4.2.3 and Appendix D-6.

107-25 The requested changes were made to the DEIS.

107-26 The requested changes were made to the DEIS.

107-27 The requested changes were made to the DEIS.

107-28 The requested changes were made to the DEIS.

107-29 All surveys for rare plants should be conducted in accordance with the standardized guidelines issued by the regulatory agencies (U.S. Fish and Wildlife Service 1996, California Department of Fish and Game 2000) and the California Native Plant Society (2001). Under these guidelines the terms "historically" and "typically" have separate connotations. Thus, the requested edit was not made.

107-30 Sentence has been deleted.

107-31 Text has been added per request.

107-32 The indicated section of the DEIS has been updated in the FEIS to more clearly disclose the extent of CDFG jurisdiction over the ephemeral desert washes in the Project area. Note that the CDFG jurisdiction is also defined in: Streambed Alteration Agreements, California Fish and Game Code, Sections 1600 – 1616. Under these sections of the Fish and Game Code, CDFG jurisdiction is determined to occur within the water body of any natural river, stream or lake. The term "stream", which includes creeks and rivers, is defined in Title 14, California Code of Regulations Section 1.72. The applicant is required to notify CDFG prior to constructing any project that would divert, obstruct or change the natural flow, bed, channel, or bank of any river, stream, or lake. Preliminary notification and project review generally occur during the environmental process. When an existing fish or wildlife resource may be substantially adversely affected, CDFG is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project.

Also, as stated in Section 3.3.2: A jurisdictional waters delineation was conducted in spring of 2010 and updated in the summer of 2010 within the Project locations to map any wetlands, desert dry washes, and desert dry wash woodlands (Ironwood Consulting and Huffman-Broadway Group 2010). The delineation determined both USACE and CDFG jurisdictions. The study was conducted in accordance with the Code of Federal Regulations definitions of jurisdictional waters, the Wetlands Delineation Manual (USACE 1987), the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0) (USACE 2008a), A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (Lichvar and McColley 2008), and supporting guidance documents, such as the current guidance from EPA and USACE (2008) regarding CWA jurisdiction after the U.S. Supreme Court's decision in ***Rapanos v. Unites States*** regarding isolated, non-navigable, intrastate waters (USACE 2008b).

107-33 The text has been updated as indicated in the comment.

107-34 The text included in the DEIS in Section 3.4.1, page 3.4.1 describes the definitions included in this comment. Thus, the text was not edited.

107-35 The text was edited under Section 3.4.2, Methodology.

107-36 This revision to the DEIS has been made as the Palm Springs round-tailed ground squirrel no longer is a candidate for federal listing (Federal Register 75:69228; November 10, 2010).

107-37 Text has been updated per request.

107-38 Section 3.6 has been updated.

107-39 Language regarding NAHC contacts has been added to FEIS Section 3.6 under Native American Consultations.

107-40 The text has been revised as suggested.

107-41 The text has been revised as suggested.

107-42 The text has been revised as suggested.

107-43 The text has been revised as suggested. Additional information about present-day economic activities has not been added because the section pertains to ethnohistoric context.

107-44 The text updated as requested.

107-45 The intent of this figure and others that show similar information depict the study area of SCE Access Road 1, and not the actual road.

107-46 The recommended sentence has been added to the first paragraph of FEIS Section 3.10.

107-47 This comment provides no reason to replace Table 3.10-1 with any other table, especially since there is no identification of the source document containing the Caltrans table that is suggested as a replacement. The most identifiable Caltrans table of decibel levels (from the 1998 Caltrans Technical Noise Supplement) is a table with no documentation as to its own data sources.

The data in Table 3.10-1 have been assembled from numerous published sources, supplemented by noise studies conducted by the author over a period of 30 years. Published sources of data used in Table 3.10-1 include, but are not limited to, the following (in alphabetical order):

- AOSafety. 2003. Life Can Be Loud.
- California Department of Transportation. 1998. Technical Noise Supplement.
- Cavanaugh, W. J. and G. C. Tocci. 1998. Environmental Noise: The Invisible Pollutant.
- Cowan, James P. 1994. Handbook of Environmental Acoustics.
- Federal Highway Administration. 2006. Roadway Construction Noise Model User's Guide.
- Federal Railroad Administration. 2005. High Speed Ground Transportation Noise and Vibration Impact Assessment.
- US Council on Environmental Quality. 1970. First Annual Report of the Council on Environmental Quality.
- US Environmental Protection Agency. 1971. Noise from Construction Equipment and Operations.
- US Environmental Protection Agency. 1980. Construction Noise Control Technology Initiatives.

- US Environmental Protection Agency. 1981. Noise in America: The Extent of the Noise Problem.

Very few of the references noted above provide any documentation regarding the source of the data included in their decibel level tables.

107-48 Although the referenced list includes facilities and activities that are not directly applicable to the Project, the disclosure of the complete Riverside County noise ordinance exemption list is appropriate so that the reviewer can clearly determine whether or not the Project would comply with dBA levels in the ordinance.

107-49 Reference to the remote nature of the Project locations has been added to the first paragraph of FEIS Section 3.10.2 to further support the ambient noise level estimates. However, because the subject paragraph provides information related to ambient noise levels, reference in the paragraph to sensitive receptors would not be on point. For information associated with sensitive receptors, refer to the second paragraph of FEIS Section 3.10.2, which follows the subject ambient noise levels paragraph.

107-50 Text has been added to the second paragraph of FEIS Section 3.10.2 to describe the distances between the closest sensitive receptors and the project site boundary.

107-51 The third paragraph of FEIS Section 3.10.2 has been revised to refer to noise- and vibration-sensitive "land uses" instead of "locations."

107-52 The DEIS evaluated a worst-case scenario as the Project assumes a potential for UXOs throughout the entire Project footprint. Therefore, the entire site was evaluated for the potential for UXOs and covers any potential historic military reservation overlaps.

107-53 After reviewing the Phase I EDR database report in the appendix of the Phase I, the Iron Mountain pumping station was correctly identified as a RCRA waste generator. A correction was made to identify the Iron Mountain site as also the location of an UST instead of Eagle Mountain, according to the EDR report.

107-54 Text in the DEIS has been modified.

107-55 A reference to Chuckwalla SWMA has been added to refer the reader to FEIS Section 3.4.6, Wildlife.

107-56 The subheading has been removed.

107-57 Public access, in and of itself, was not identified as an issue by the public or the BLM during scoping; therefore, it was not specifically addressed in the DEIS. The Traffic and Transportation subsection of Section 3.15.2, Existing Conditions, discusses the total transportation "system" in the vicinity of the Project, including a discussion of roads, traffic, off-highway vehicle routes, airports, railways, scenic routes, bicycle facilities, and public transportation. For clarity, both Sections 3.15 and 4.15 have been renamed to "Transportation and Traffic".

107-58 The text has been updated as indicated in the comment.

107-59 The suggested revisions are not considered necessary or appropriate. While it may be true that local plans and policies would be modified in the future to reflect the importance of the County's solar resource, the information relevant to the analysis in this FEIS are the policies that are currently in place. Discussion of how policies may change in the future would be speculative. Should policies have changed by the time local jurisdictions make a decision on portions of the Project under their jurisdiction, those are the policies that would be used to inform decision-making.

107-60 VRM classes vis-à-vis the Project boundaries are described in text (see DEIS Page 3.16-6). Further, the location of the Project in the figure can be determined by comparing it with other figures, such as Figure 4.16-1.

107-61 Text added per request.

107-62 Text added per request.

107-63 Text added per request.

107-64 Text added per request.

107-65 Text updated per request.

107-66 Text added per request.

107-67 The reference has been updated.

107-68 Text added per request.

107-69 The text has been modified as suggested.

107-70 The text has been modified as suggested.

107-71 The DEIS considers the potential for incremental impacts resulting from construction, operation and maintenance, and closure and decommissioning of the Project to cause or contribute to a cumulative effect in each of the issue areas for which the Project could cause an impact. The DEIS identifies cumulative projects and provides quantified and detailed information about them. On an issue-by-issue basis, DEIS Chapter 4 identifies the geographic and temporal scope of the cumulative impacts analysis area, provides a basis for the boundaries of each, identifies existing conditions within each cumulative impacts assessment area, identifies the direct and indirect effects of the project and alternatives, and identifies past, present and reasonably foreseeable future actions making up the cumulative scenario. Conclusions regarding whether the Project's incremental impacts are cumulatively considerable when considered in combination with past, present and reasonably foreseeable future projects are discussed in the Cumulative Impacts section at the end of each resource section.

107-72 BLM lands in the California Desert District are governed by the CDCA Plan. As used in the DEIS, the California Desert District or California Desert refers to the BLM-administered land within the CDCA.

107-73 The cumulative impacts analysis in Chapter 4 conservatively assumes that all projects within the cumulative scenario would proceed, including renewable energy projects. Any effort to further refine how many of renewable energy applications received by BLM are likely to proceed would be speculative and would not contribute to the understanding of the potential impacts of the Project on the human environment. In addition, each project in a region would have its own implementation schedule, which may or may not coincide or overlap with the proposed action's schedule. This is a consideration for short-term impacts of the Project. However, to be conservative, the cumulative analysis assumes that all projects in the cumulative scenario are built and operating during the operating lifetime of the proposed Project.

107-74 The text has been modified as suggested.

107-75 The text has been modified as suggested.

107-76 The text has been modified as suggested.

107-77 The text has been modified.

107-78 The text has been modified as suggested.

107-79 The text has been modified as suggested.

107-80 The projects listed in these tables are depicted on Figure 3.18-1. This map includes a scale that can be used to estimate distances to the Desert Sunlight site in miles.

107-81 The text in DEIS Table 3.18-2 has been updated in the FEIS to state that the existing DPV1 transmission line extends from Palo Verde (Arizona) to Devers Substation. The DPV1 500 kV line would loop into the Midpoint Substation (now called Colorado River Substation) when it is constructed by SCE.

In addition, DEIS Table 3.18-2 and Table 3.18-3 have been updated in the FEIS to elaborate on the CPUC approval of Midpoint Substation as part of the DPV2 project in November 2009, and its proposed expansion as the Colorado River Substation, which is currently under environmental review by the CPUC.

Furthermore, the NOP for a Focused Supplemental EIR for the Devers-Palo Verde No. 2 Transmission Line Project-Colorado Substation Expansion (Sept. 29, 2010) states: "In the DPV2 Final EIR/EIS, the CPUC identified the DPV2 Midpoint Substation and the Desert Southwest-Midpoint Substation as environmentally equivalent. In Decision D.09-11-007, the CPUC approved both substation locations, and determined that construction at either location did not trigger the need for additional CEQA review. The DPV2 Desert Southwest–Midpoint Substation site (now re-named as the Colorado River Substation) was

ultimately selected by SCE as the location for the CRS." Therefore, the proposed modification suggested by the commenter would not affect the analysis in the DEIS.

107-82 Corridors E and K are discussed on page 3.9-8 of the DEIS in Section 3.9.3, Existing Uses, Lands and Realty-Related Uses. These corridors also are shown on Figure 3.9-5, *Utility Corridors and Existing Transmission Facilities*, on p.3.9-10 of the DEIS. Per Kaiser Ventures LLC, the Kaiser Mine does hold operational permits.

107-83 See Response to Comment 107-73.

107-84 The text has been modified as suggested.

107-85 Portions of the Tables that were included in the DEIS but not used in the analysis do not affect the adequacy or accuracy of the analysis. The requested change has not been made in the FEIS.

107-86 The commenter requests that, to the extent requested by the SCAQMD or others, sections of the air impact analysis that refer to localized significance thresholds (LSTs) be revised to use modeling analysis in lieu of LSTs. The SCAQMD comments concerning LSTs are addressed in responses to Comments 103-01 and Comments 103-02.

107-87 The Applicant has committed to implementing applicant measures AM-AIR-1 through AM-AIR-4 to reduce construction fugitive dust emissions. Implementation of these measures would require development and implementation of a dust control plan that includes use of dust palliatives to ensure compliance with SCAQMD Rule 403, phasing of construction activities to reduce the disturbed area of the site on any single day, minimize grading and avoid the need to import fill materials or export excess spoils, and use of power screeners to obtain sand and gravel onsite so that associated haul trips would not be necessary. In addition, subsequent to the release of the Draft EIS, the Applicant has committed to several modifications (e.g., revised layout of Solar Farm facilities that reduces the Solar Farm footprint and a revised construction approach involving the use of innovative site preparation techniques that reduce the required volume of earth movement). For a discussion of the proposed modifications to the project and the associated effects on air resources, refer to Final EIS Section 4.2.3. In addition, mitigation measure MM-AIR-2 would be implemented, which would require chipped or shredded vegetation debris from the Solar Farm site to be spread on open areas of the site once construction activity has been completed on subareas to control dust.

107-88 The subject sentence in the footnote to Table 4.2-12 and similar tables have been removed from the Final EIS to clarify that emissions are based on average trips. The intent of the sentence was to emphasize that data in the table were developed by analysis of individual construction phases, not aggregated over the total construction days per year.

107-89 With regard to measures to reduce construction exhaust emissions, see FEIS Mitigation Measures MM-AIR-1 and MM-AIR-4.

107-90 Subsequent to the release of the DEIS, AECOM prepared a new wind erosion, PM10, and PM2.5 formation analysis for the project on behalf of First Solar (see FEIS Section 4.2.3 and Appendix D-6). The new analysis incorporates wind data from Blythe, and Barstow wind data were adjusted to approximate the local wind profile.

107-91 Subsequent to the release of the DEIS, minor revisions were made to air resources Table 3.2-1. However, the listed air quality standards are current and up to date.

107-92 The only Project-related emissions that would occur within the MDAQMD jurisdiction would be a portion of the emissions from Project-related vehicle traffic that would originate east of the Project area (generally either in the Blythe area or from states further to the east). Therefore, text has been added to the fifth paragraph of FEIS Section 4.2.2 to clarify that MDAQMD significance thresholds identified in Table 4.2-3 are presented for informational purposes only, and Project-related CEQA significance determinations related to regional emissions are based on comparisons to the SCAQMD standards identified in Table 4.2-2.

107-93 See Response to Comment 75-05.

107-94 The comment suggests that maximum daily construction emissions (not average daily emissions) should be compared to SCAQMD mass daily thresholds for impact determinations. However, the SCAQMD thresholds, and associated guidance materials, do not state that the thresholds are only to be compared to maximum day emissions. In fact, page 9-2 of SCAQMD's CEQA Air Quality Handbook states that the number of construction equipment hours per average day should be considered when estimating emissions that would be associated with construction equipment. This suggests that the SCAQMD daily mass significance thresholds are designed for comparison of average daily emissions. Therefore, it is appropriate to compare the average daily construction emissions that would be associated with the project to the SCAQMD thresholds for the basis of impact determinations.

107-95 As presented in the Final EIS, Tables 4.2-8 through 4.2-10, and the referenced Criterion AQ-4 discussion, onsite construction emissions associated with SF-B would not exceed the SCAQMD local impact significance criteria for nitrogen oxides, carbon monoxide, PM10, or PM2.5. It should be noted that the SCAQMD has not indicated that it is opposed to using the SCAQMD LTS levels for assessment of local impacts related to the project. However, the referenced Criterion QA-4 has been modified to clearly indicate that daily operation and maintenance fugitive dust emissions associated with SF-B would be less than significant with implementation of Mitigation Measure MM-AIR-3.

107-96 To clarify, the on-site activities for some of the project components would include phases that would overlap. Although the emissions associated with each phase would be average emissions, if the phases would overlap, the overlapped emissions would be added to account for the total emissions. Therefore, where project components would include overlapping phases, the FEIS emissions table references to "Maximum Day Totals" have been revised to "Maximum Average Daily Totals" to clarify that the emissions are

maximum averages. Where Project component phases would not overlap, the FEIS emissions table references to "Maximum Day Totals" have been revised to "Average Daily Totals."

107-97 The subject sentence in the footnote to Table 4.2-12 and similar tables have been removed from the FEIS to clarify that emissions are based on average trips. The intent of the sentence was to emphasize that data in the table were developed by analysis of individual construction phases, not aggregated over the total construction days per year.

107-98 The emissions data in the table represent maximum values because it is assumed that all of the construction phases overlap; however, the emissions data for each construction phase are daily averages. Therefore, the titles of Final EIS Tables 4.2-14 and 4.2-21 have been changed to correctly indicate that they present maximum average daily emissions.

107-99 Revisions to the DEIS have been made in the FEIS where information contained in the updated reports is relevant.

107-100 Requested revisions to the DEIS on page 4.3-2, Table 4.3-3 have been made and incorporated into the FEIS. These changes are consistent with the Biological Resources Technical Report.

107-101 The purpose of CEQA Guidelines, Appendix G is to provide a guide to satisfying individual agencies' needs and project circumstances when analyzing the significance of environmental impacts of a project. In most instances, the EIS for this Project uses the criteria outlined in Appendix G; however there may be some deviations (as pointed out in the comment) to better fit the magnitude and circumstances of the Project, and satisfy both NEPA and CEQA. The lead agency (BLM), in collaboration with the cooperating agency (CPUC), has the flexibility to determine what significance criteria should be applied to what resource. Criterion BIO-1 was developed to assess the specific impacts that the proposed action could have on native vegetation communities, including direct loss of vegetation and introduction of nonnative invasive weed species. The standard CEQA criterion requested in the comment is already set forth in EIS Section 4.4.2. Specifically, criterion WIL-5 provides that the proposed action would have a significant effect on wildlife if it would "conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan."

107-102 The requested revisions have been made.

107-103 There are areas designated as a Critical Habitat Unit (CHU) that also are located within the NECO Planning Areas such as Areas of Critical Environmental Concern (ACECs), Desert Wildlife Management Area (DWMA), Habitat Management Plans (HMPs), and Special Areas (SA). Where these areas overlap, mitigation as identified in the NECO Plan/EIS applies and must be fulfilled to compensate for impacts that occur in those designated areas. The NECO Plan/EIS identifies mitigation for impacts within Chuckwalla CHU and DWMA as 5:1 Additionally, the Applicant has committed to 5:1 mitigation ratio for impacts within the Chuckwalla CHU in the mitigation plan presented in the Applicant's

Biological Resources Technical Report (see Appendix H). The 5:1 mitigation ratio is appropriate as compensation for project impacts to either CHU or to DWMA lands. See also Response to Comment 76-15.

107-104 The Raven Management Plan and Desert Tortoise Translocation Plan would require monitoring that may require specialized training and that may continue after construction is complete. Mitigation Measure BIO-1 is intended to define the general responsibilities of an on-site monitor during construction, including authority and reporting requirements.

107-105 Mitigation Measure (MM)-BIO-2, *Off-site Compensation*, has been added to FEIS Section 4.3. The requirements of this mitigation measure are consistent with the draft Habitat Compensation Plan.

107-106 Requested revisions to the DEIS have been made in Section 4.3 of the FEIS, under Impact BIO-2, first paragraph.

107-107 The DEIS has been revised to remove the referenced text/paragraph in Section 3.4 and Section 4.4.

107-108 The DEIS has been revised to remove the referenced text/paragraph in Section 3.4 and Section 4.4.

107-109 The DEIS has been revised on page 4.3-85, under Cumulative Impact Analysis, second paragraph.

107-110 Please refer to FEIS Section 4.5, Climate Change, which expands the discussion and analysis relative to the DEIS.

107-111 Comment noted; the updated reports have been received and will be incorporated as appropriate.

107-112 DEIS Section 3.4 and Table 3.4-2 have been revised in the FEIS to reflect that the Palm Springs round-tailed ground squirrel no longer is a candidate for federal listing.

107-113 Revisions to the DEIS include a clarifying sentence on page 4.4-1.

107-114 The Habitat Compensation Plan (HCP) is developed based upon information gathered during surveys conducted for the DEIS as well as the pending BO and CDFG Section 2080.1 permit. The HCP would be reviewed and approved by BLM, the USFWS and CDFG. In addition to a complete and thorough data collection and analysis, the review process would help to ensure the accuracy of data. The FEIS presents a new Mitigation Measure, BIO-2, which lays out the requirements and detailed processes that are to be used in implementation of the HCP.

Table 4.4-3 presents the acreage for each alternative within the Chuckwalla DWMA and the Chuckwalla CHU. These figures may change slightly with final design, so they will be finalized, after approval of a particular alternative and its design determines the actual acreage of permanent disturbance. This process is defined in MM-BIO-2.

107-115 See Response to Comment 107-101.

107-116 Although a DWMA and CHU may overlap, impacts to each area and/or unit are evaluated individually for use to determine impacts as well as determine appropriate mitigation. Wildlife Areas and Critical Habitat Units differ in their function and values to certain species and as such should be evaluated independently. Regardless, a row has been added to Table 4.4-3 to indicate how many acres fall into both categories.

107-117 The Project could affect golden eagle nesting territories and foraging habitat. Discussion of historic and recent golden eagle occurrence in the general area in DEIS Section 3.4 and the Project's potential impacts to golden eagle nest sites and foraging habitat in Section 4.4 have been expanded and clarified in the FEIS to incorporate the best available scientific information. On September 15, 2010, the USFWS recommended to BLM that an Avian and Bat Protection Plan should be prepared for the Desert Sunlight project. See Response to Comment 92-01.

107-118 The DEIS's discussions of wildlife movement in the area and potential Project impacts to movement have been revised in FEIS Sections 3.4 and 4.4.

107-119 The information presented in the DEIS and updated in the FEIS is consistent with the Biological Resources Technical Report submitted by First Solar (DEIS Appendix H). Consistent with that report, impacts to special status mammals are described in general terms without quantifying acreages. Some mammal species, such as American badger, may be found in desert shrublands throughout the region and would be expected to use the entire Project area, whereas other species may rely on more specialized habitats. As clarified in FEIS Section 4.4.3, implementation of the Habitat Compensation Plan (AM-BIO-1) as well as Mitigation Measures BIO-2, WIL-2, and WIL-3 would reduce these impacts below a level of CEQA significance. The text regarding the proposed federal listing for the Palm Springs round-tailed ground squirrel has been removed or edited to reflect that this species no longer is a candidate for federal listing.

107-120 A summary paragraph has been added to FEIS Section 3.4 and 4.4 that provides an overall conclusion for cumulative impacts.

107-121 See Response to Comment 107-110.

107-122 The requested reference to Adams et al., 1998, has been added.

107-123 The discussion in FEIS Chapter 4.5, Climate Change, has been expanded.

107-124 DEIS Section 4.6 has been updated in the FEIS.

107-125 The geographic extent of "other projects" is discussed on the same page, under "Future Foreseeable Projects." The discussion identifies such projects as those listed in Tables 3.18-2 and 3.18-3.

107-126 Text has been added in FEIS Section 4.8.2 to incorporate conclusions regarding water erosion.

107-127 The text has been modified as suggested.

107-128 The text has been modified.

107-129 The text has been modified.

107-130 The text has been modified.

107-131 The text has been modified.

107-132 The text has been modified.

107-133 The text has been modified.

107-134 The text has been modified.

107-135 DEIS Table 4.10-1 has been modified in the FEIS as requested to show only the distances to the closest existing residences.

107-136 The values presented in Table 4.10-2 represent the estimated noise levels that would be associated with the five project construction phases. The values represent additions to the baseline, but do not represent increases above baseline or "with project" conditions because baseline levels are not included in the estimates. To clarify that the values in Table 4.10-2 do not represent expected increases above baseline conditions, the term "increments" has been removed from the table and the associated text in the FEIS.

107-137 The distance in miles to the closest sensitive receptor (i.e., 0.22 mile) has been added to the fifth paragraph of FEIS Section 4.10.3 as requested. The fifth paragraph of DEIS Section 4.10.3 has been revised in the FEIS to clarify that the closest residence is assumed to be occupied.

107-138 The premise of the comment, which is that the subject EIS paragraph notes that almost all project construction activities would occur within 2,000 feet of the nearest residence, is incorrect. In fact, the paragraph notes that for most of the 26-month construction period, construction activity would be well over 2,000 feet from the nearest residence and only a small portion of the overall construction activity would occur within half a mile of the nearest residence west of the proposed solar farm site. See the sixth paragraph of Final EIS Section 4.10.3.

107-139 As noted in the subject EIS paragraph, the referenced ambient noise levels are expressed as a range of daytime decibels, which inherently include Leq minimum and maximum levels.

107-140 Mitigation Measure MM-NOI-1, which includes language to clarify that the measure is applicable only to residences within a quarter mile of the site, has been added to the Final EIS to supersede applicant measure AM-NZ-1.

107-141 Comment noted. The text has been revised as suggested.

107-142 Comment noted. The text has been revised as suggested.

107-143 Comment noted. The text has been revised as suggested.

107-144 Comment noted. The text has been revised as suggested.

107-145 Comment noted. The text has been revised as suggested.

107-146 Comment noted. The text has been revised as suggested.

107-147 Comment noted. The text has been revised as suggested.

107-148 Comment noted. The text has been revised as suggested, although "hazardous materials" has been changed to "CdTe."

107-149 Comment noted. The text has been revised as suggested, although "hazardous materials" has been changed to "CdTe."

107-150 Comment noted. The text has been revised as suggested, although "hazardous materials" has been changed to "CdTe."

107-151 Comment noted. The text has been revised as suggested.

107-152 This statement already is made in the FEIS under the discussion of construction impacts for the substation on page 4.11-9.

107-153 Comment noted. The text has been revised as suggested.

107-154 Comment noted. The text has been revised as suggested.

107-155 Comment noted. The text has been revised as suggested.

107-156 Comment noted and text has been added for clarification; however, the level of significance determination remains at "less than significant" for the reasons stated in the text.

107-157 Impacts on recreational resources were assessed by determining the types of recreation uses in and around the proposed Project area, then determining the sensitivity of those uses to the proposed Project. As described in Section 3.12, the BLM does not have any recreation facilities, trails, or other improvements in the Project area. Although some day use of the area for hiking, photography, target shooting, and limited hunting is assumed to occur in the general area, the primary recreational use of the Project area is for OHV use. Construction and operation of the project would close and reroute portions of three OHV routes. However, the remaining open routes would provide an alternative to use of closed routes and closure would not significantly limit public travel.

107-158 See Response to Comment 107-158.

107-159 The text has been revised as suggested.

107-160 The text has been revised to reflect the relative number of visitors from only a portion of Joshua Tree Wilderness.

107-161 The sentence referring to impacts on cultural resources from construction of Kaiser Road has been deleted.

107-162 Substation B is closer to the boundary of Alligator Rock ACEC that Substation A. In either case, no cultural resources within the ACEC would be impacted by construction, operation and maintenance, or decommissioning of Substation A or Substation B.

107-163 The text was revised in Alternative 4 and Alternative 5 for clarification and consistency.

107-164 The text has been revised accordingly.

107-165 The text on the cited page of the DEIS has been revised in the FEIS to define the geographic extent of the area affected by transportation as the road network generally within the I-10 corridor.

107-166 Comment Noted. The DEIS section headers have been revised in the FEIS to more accurately reflect what is discussed in text. Headers titled "Interim Visual Management Class" have been revised to "Visual Contrast Analysis," and the headers titled "Summary of Operation and Maintenance Impacts" have been revised to "Consistency with Interim Visual Resource Management Objectives."

107-167 See Response to Comment 107-59.

107-168 See Response to Comment 107-59.

107-169 The land ownership of the proposed action and alternatives are discussed in the second paragraph on Page 4.16-1 of the Draft EIS. Some modifications to the text of the DEIS in recognition that a CEQA determination must be made for the project as a whole, regardless of land ownership (see Responses to Comments of the CPUC, Comment Letter 56).

107-170 Some modifications to the text of the DEIS in recognition that a CEQA determination must be made for the project as a whole, regardless of land ownership (see Responses to Comments of the CPUC, Comment Letter 56).

107-171 See Response to Comment 107-59.

107-172 The discussion of the geographic extent has been revised for clarity as follows: "The ROI for visual resources is defined as the viewshed, an area seen from a particular location to the visible horizon. Delineation of the viewshed from the proposed Project location must extend from the top elevation of all of the proposed facilities rising at the Project location, expanded to 5.5 feet above the ground of the visible horizon. The geographic extent of the cumulative analysis is generally coincident with the boundaries of the project viewshed, shown in Figures 4.16-8 (for the proposed action) and Figure 4.16-9 (for the alternative action alternative). Due to mountains surrounding the proposed Project site, the viewshed

is generally less than 15 miles from the proposed Project to mountain ridgelines. For analyzing cumulative impacts on visual resources, the ROI is expanded to include a larger area. The ROI for the cumulative impact analysis is approximately 15 miles on both sides of the I-10 corridor.

107-173 The suggested changes have been made in response to comments from the CPUC (see Responses to Comments in Letter 56 and revisions to the cumulative discussion in FEIS Section 4.16).

107-174 Changes to the cumulative section have been made in response to comments from the CPUC (see Responses to comments in Letter 56 and revisions to the cumulative discussion in Section 4.16). The text acknowledges that there are no additional mitigation measures that would reduce permanent adverse cumulative impacts to minor or a less-than-significant level.

107-175 Text has been revised for consistency with new information.

107-176 Text has been added as requested.

107-177 Text has been added as requested.

107-178 Text has been added as requested.

107-179 Text has been added as requested.

107-180 Text has been added as requested.

107-181 Text has been added as requested.

107-182 Text has been added as requested.

107-183 The DEIS text has been updated in the FEIS to remove the reference to the dry lakes.

107-184 The DEIS text has been updated in the FEIS to supplement the discussion of Project-specific factors, as additional information has become available.

107-185 The text has been revised as requested.

107-186 The text has been revised as requested.

Letter - 108.

108-01 Commenter refers to FLPMA's characterization of the desert environment. Pursuant to Section 6.9.2.1 of the BLM NEPA Handbook (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not a substantive comment on an environmental issue, and so does not require a specific response.

108-02 The text has been updated as requested.

108-03 The text of the FEIS has been revised for the requested consistency.

108-04 Text of the FEIS has been modified throughout the document to reflect that all ground disturbing activities (whether identified as temporary or permanent impacts in the DEIS) are now considered permanent impacts to the environment. DEIS Table 4.3-1, *Comparison of Action Alternative Features Relevant to Vegetation Impacts*, has been revised in the FEIS to present updated data. Impacts related to the revised acreage presented would be mitigated through MM-BIO-2, *Off-site Compensation*. The residual impact would remain the same as that defined in the DEIS.

108-05 So noted.

108-06 On-site grading would be minimized to the extent practicable for the installation of the proposed solar field and other facilities. Thus, excess generation of overburden would be minimized and all grading spoils would be incorporated into site design, in order to minimize haul-off and disposal requirements.

108-07 In addition to needing to be feasible, alternatives carried forward for detailed analysis need to meet the project purpose and need under NEPA or project objectives under CEQA. Other alternatives not carried forward were deemed to be technically disadvantageous or to cause greater environmental impacts than the Project alternatives.

108-08 See Noise Impacts to Wildlife discussion presented in FEIS Section 4.10.3.

108-09 Although the Solar Farm site would occur outside the Chuckwalla DWMA and CHU, the gen-tie at Red Bluff substation and ancillary facilities would disturb desert tortoise habitat in the Chuckwalla CHU and DWMA and desert tortoises in the vicinity. Acreages of impact to the DWMA and CHU under each alternative are depicted in Section 4.4, Wildlife (see, e.g., Table 4.4-3). Habitat compensation is proposed to partially mitigate the loss.

108-10 DEIS Section 4.17, Water Resources, has been updated in the FEIS to recommend mitigation measures that would minimize potential impacts to groundwater wells and groundwater levels, including groundwater monitoring.

108-11 The FEIS presents new Mitigation Measure MM-WIL-5, *Prepare and Implement a Bird Monitoring and Avoidance Plan*. Also, a new mitigation measure (MM-WIL-8) has been added to ensure that all plans prepared under Applicant Measures are subject to review by the USFWS, CDFG, BLM, and CPUC.

108-12 MM Bio-1 and other mitigation measures to address impacts to biological resources also would reduce impacts to special designation lands. See revisions to Table ES-3.

108-13 Applicant Measures have been incorporated into to DEIS Chapter 2.0 as agreed-upon measures that would be implemented as part of the Project. Table ES-3, as updated in the FEIS, lists all mitigation measures (Applicant and other) proposed or recommended for the Project.

108-14 The BLM has requested that all applicants for renewable energy projects within the CDD work toward a mutual goal of reducing the number of transmission lines associated with

planned projects. To respond to this request, the Applicant proposed a minor modification of the design configuration of the gen-tie line poles that would allow for a future unrelated project(s) to add a second circuit. The configuration of the gen-tie line poles would be modified but the gen-tie line right-of-way area and width, pole height, pole spacing, materials of construction, and surface finish as described in the DEIS would be unaffected by the proposed modification. The modification would have no effect on gen-tie line construction or operation activities or associated impacts. The modified pole design would not affect the footprint, construction or operation of either the gen-tie line or the Project as a whole. Any of the alternative gen-tie line configurations could accommodate collocation with the Eagle Crest gen-tie line, and would result in fewer overall impacts by virtue of less overall disturbance.

108-15 Additional surveys have been conducted since the DEIS was issued for review. See Response to Comment 104-13. The DEIS text has been revised in the FEIS to reflect the results of plant surveys conducted in November 2010, as a supplemental to those surveys conducted in the spring. See FEIS Sections 3.3.3 through 3.3.5 for related text revisions.

108-16 Detailed descriptions of the surveys conducted for wildlife and vegetation are included under the heading *Methodology* in FEIS Chapters 3.3 and 3.4.

108-17 The discussion of desert tortoise in DEIS Section 3.4 has been expanded in the FEIS in response to this and other comments.

108-18 Revisions to the DEIS have been made in the FEIS to ensure that species listings are up-to-date. This includes a revision to the status of the Palm Springs round-tailed ground squirrel in FEIS Chapter 3.4 and Table 3.4-2: this species no longer is proposed for federal listing.

108-19 Revisions to the discussion of Nelson's bighorn sheep movement have been added in FEIS Chapter 3.4, Wildlife, including additional data citations. Desert tortoise habitat connectivity is discussed in Response to Comment 85-02, above. The discussions of wildlife movement in the area and potential Project impacts to such movement have been revised in FEIS Sections 3.4 and 4.4.

108-20 See Response to Comment 85-02. Please also note that MM BIO-2 in the FEIS includes a habitat connectivity criterion for desert tortoise.

108-21 The text in DEIS Section 3.4.6 has been revised accordingly in FEIS.

108-22 The land designations were determined through a process of research with GIS shapefiles and personnel from both BLM and the USFWS to identify the correct DWMA and CHU boundaries in the region of the proposed project.

108-23 The total contribution of GHG emissions from the Project is evaluated in FEIS Section 4.5, Climate Change. The analysis presented therein discloses anticipated construction and operation period GHG emissions of the Project, and provides additional

discussion regarding decommissioning. Analyzing GHG emissions associated with the manufacturing of Project components is beyond the scope of the EIS.

108-24 No reasonable evidence exists to support the idea that desert biological crusts comprise a substantial carbon sink. Consequently, additional discussion is not warranted.

108-25 A reference to Chuckwalla DWMA has been added in FEIS Section 3.14 to refer the reader to Section 3.4.6, Wildlife.

108-26 The DEIS's discussion of Project impacts to desert tortoises and habitat has been expanded and clarified in FEIS Sections 3.4 and 4.4, as recommended by the commenter.

108-27 Applicant Measure WIL-2, *Contribute to a USFWS Regional Raven Management Plan*, has been added in the FEIS on page 4.4-32. The DEIS mitigation and applicant measures relevant to the raven and desert tortoise require review and approval by BLM, USFWS and CDFG. Please note that new mitigation measure MM-WIL-8 in the FEIS would ensure that all plans prepared under Applicant Measures would be subject to review by the USFWS, CDFG, BLM, and CPUC.

108-28 The Avian and Bat Protection Plan defined in the FEIS as AM-WIL-3 is in draft form. A new mitigation measure, MM WIL-3 has been prepared to clarify the requirements relating to impacts on birds, and to require that the final plan must conform to the 2010 USFWS guidelines. This measure would require that the Plan be reviewed and approved by BLM, USFWS and CDFG. WIL-5 states, "This plan shall follow the Avian Protection Plan guidelines outlined by USFWS and Avian Power Line Interaction Committee (APLIC)." The "Suggested Practices" document is included as one of the references developed by APLIC, and so would be considered in the development of the Plan. New mitigation measure MM-WIL-8 in the FEIS would ensure that all plans prepared under Applicant Measures are subject to review by the USFWS, CDFG, BLM, and CPUC.

108-29 Refer to response to comment 108-22.

108-30 Revisions to the DEIS have been made on page 4.4-12 and -27.

108-31 Existing and reasonably foreseeable future projects and related acreage impacts referred to in the comment were carried forward from the recently-approved Blythe Solar Power Project FEIS. Footnotes to Table 4.3-18 identify the source of the data. Also, see Common Response N.4.6.

108-32 The DEIS's discussion of potential impacts of desert tortoise translocation has been expanded in FEIS Section 4.4.

108-33 The DEIS's discussion of wildlife movement and potential project impacts to wildlife movement, including desert tortoise movement, has been has been expanded and clarified in FEIS Section 4.4. Please also note that MM BIO-2 in the FEIS includes a habitat connectivity criterion for desert tortoise.

108-34 See Response to Comment 107-103.

Letter - 109.

109-01 The commenter opposes the Project. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

109-02 As detailed in FEIS Section 4.2, the Project would employ a number of dust control measures such as implementation of a dust control plan, application of water and dust palliatives, phased approach to construction minimizing activity on any one day, and other measures that would significantly reduce fugitive dust emissions. See also FEIS Section 4.4 concerning potential impacts to wildlife.

109-03 See Common Response N.4.3, *Dark Skies.*

109-04 Potential construction employment-related effects on the local area are discussed in Common Response N.4.11, *Construction Employment*.

109-05 Impacts of the Project to wildlife resources are discussed and analyzed in FEIS Sections 4.3 and 4.4.

Letter - 110.

110-01 As discussed in DEIS Chapter 1, the Applicant identified a sufficiently large area to enable evaluation of a reasonable range of alternatives for the solar farm site, gen-tie line route, and Red Bluff Substation and ancillary facilities. The "Project Area" identified for study was roughly 19,000 acres in size. Should a ROW grant be issued, the grant would cover only those acres actually needed for the Project, i.e., less than 5,000 acres.

110-02 The commenter suggests that the Project is inconsistent with environmental policy. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H 1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not a substantive comment on an environmental issue, and so does not require a specific response.

110-03 Table ES-2 provides a summary of Project impacts by alternative in comparative form.

110-04 Concerning the reasonableness of the range of alternatives in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

110-05 DEIS Chapter 2 evaluates three action alternatives and three No Action/No Project alternatives. The No Action/No Project alternatives are Alternative 4, 5 and 6.

110-06 Considering siting on previously-disturbed or built areas in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

110-07 Considering siting on previously-disturbed or built areas in the DEIS, see Common Response N.4.7. *Alternatives Analyzed*.

110-08 The commenter suggests that there are many invalid applications for projects on BLM land. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

110-09 Considering siting on private lands in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

110-10 Potential Project-related effects on local land uses and property values are discussed in Common Response N.4.8, *Property Value*.

110-11 Considering siting on private lands in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

110-12 So noted.

110-13 Concerning the reasonableness of the range of alternatives considered in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

110-14 The commenter supports Alternative 5 (No Project) and recommends the Project area be designated as an ACEC. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

110-15 The Project would prepare and implement a dust control plan as indicated in Response to Comment 109-02. Implementation of this dust control plan would include measures that significantly reduce fugitive dust emissions during construction activities There are only a few rural residences within 1 mile of the Solar Farm site, and only one rural residence within 0.75 mile of the boundary of the proposed Solar Farm. Airborne dust generated from construction sites would be widely dispersed and greatly reduced in concentration by nighttime hours. Construction activity would be phased across the Solar Farm site over a 26-month period, limiting the amount of disturbed area that could produce fugitive dust from wind erosion at night. The cumulative analysis of air quality impacts is thoroughly analyzed and discussed in the DEIS and in FEIS Section 4.2.

110-16 DEIS Section 4.2, concerning air resources, concludes that the net change in wind erosion as a result of the DSSF would be minor, and would not be detectable by visual observation. The air resources section also lists both Applicant-proposed measures and mitigation measures that would minimize the amount of fugitive dust emissions associated with the DSSF (see, DEIS pp. 4.2-40 and 4.2-41). The long-term visual effect of the Project following decommissioning is discussed under the appropriate headers in DEIS Section 4.16. The discussion recognizes that it could take decades for the landscape to resemble existing conditions due to the slow pace of desert ecology.

110-17 The commenter's opinion on the applicable VRM Class is noted. Page 3.16-5 and 3.16-6 discusses in detail the visual resource inventory used to determine the VRM class applicable to the proposed action and alternatives. The inventory used the BLM's standard

assessment methodology to determine the VRM classes applicable to the Project. Further, DEIS Section 4.16 recognizes that the Project would not be consistent with VRM objectives from several of the KOPs analyzed.

110-18 See Common Response N.4.4, *Adequacy of Key Observation Points (KOPs) and Simulations*.

110-19 See Common Response N.4.3, *Dark Skies*.

110-20 See Common Response N.4.3, *Dark Skies*.

110-21 See Common Response N.4.4, *Adequacy of Key Observation Points (KOPs) and Simulations*.

110-22 Potential construction employment-related effects on the local area are discussed in Common Response N.4.11, *Construction Employment*.

110-23 See Common Response N.4.9, *Cadmium Exposure*.

110-24 Potential for the Project to alter stormwater drainage and flood potential is discussed in DEIS Section 4.17, Water Resources. As discussed therein, potential effects to groundwater recharge would be minimal. Nonetheless, additional mitigation requirements have been incorporated into the FEIS that would require that stormwater and flood flows emanating from the Project site result in no greater than a 1 percent increase relative to existing conditions. Therefore, potential impacts associated with changes to drainage and flooding would be minimized, including potential changes associated with disturbance to desert pavement.

110-25 See Response to Comment 108-10.

110-26 See Response to Comments 75-8 and 75-10. The Project is not expected to result in take of bald or golden eagles.

110-27 See Responses to Comments 75-08 and 92-01 regarding potential Project impacts to golden eagles. Compensation acreage ratios are specified in AM-BIO-1, and MM-BIO-2 has been added in the FEIS to provide greater clarification as to compensation land habitat types.

110-28 The commenter is concerned that bighorn sheep and burro deer foraging areas and habitat connectivity could be affected by the Project. The DEIS's discussion of wildlife movement has been expanded in the FEIS to address these concerns more clearly; see FEIS Section 4.4, Impact WIL-3, *Direct and Indirect Impacts to Wildlife Movement or Nursery Sites*.

110-29 The DEIS discusses Nelson's bighorn sheep in Sections 3.4 and 4.4 on pages 3.4-24 and 4.4-7. Revisions to the DEIS text in Section 3.4 on page 3.4-24 have been made to provide additional information about the sheep, their movement patterns and habitat. Impacts to this species and its habitat are discussed in FEIS Section 4.4. The DEIS has been revised in the FEIS to include MM-WIL-2, *Nelson's Bighorn Sheep Protection Plan*.

110-30 See Response to Comment 110-29. Ratios for habitat compensation are specified in AM-BIO-1. Mitigation identified in the DEIS and FEIS for impacts to Nelson's bighorn sheep also would serve to address impacts to burro deer.

110-31 Revisions to the DEIS include the addition of MM-WIL-3, *Palm Springs Round Tailed Ground Squirrel Protection Plan*. Specific compensation lands have not been identified at this time. Note that Palm Springs round-tailed ground squirrel is no longer a candidate for federal listing (Federal Register 75:69228, 10 Nov 2010).

110-32 See Response to Comment 51-1.

110-33 The DEIS and FEIS address soils in Section 3.8, Geology and Soils Resources, and flooding-related concerns in Section 3.17, Water Resources.

110-34 The DEIS and FEIS address soils in Section 3.8, Geology and Soils Resources.

110-35 See Response to Comments 85-1 and 104-13.

110-36 The commenter expresses concern about the adequacy of the Integrated Weed Management Plan in analyzing impacts that Roundup and other herbicides could have on public health, water resources and biological resources. AM- BIO-2 describes the Integrated Weed Management Plan, which was prepared in conformance with BLM's *Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States Programmatic EIS* and associated 2007 Record of Decision. It contains numerous performance standards for protection of public health, water resources and biological resources, including the following requirements: "Conduct a pretreatment survey before applying herbicides; Select herbicide that is least damaging to the environment while providing the desired results; Have licensed applicators apply herbicides; Take precautions to minimize drift by not applying herbicides when winds exceed >10 mph…or a serious rainfall event is imminent." In addition, the impacts to public health of the use of chemicals during construction, operation and decommissioning are analyzed in Section 4.11 of the EIS and performance standards for the protection of public health are included in AM-HAZ-1c and AM-HAZ-1d. Numerous Applicant Measures are presented in DEIS and FEIS Section 4.17 to protect water quality from the use of chemicals on the Project site.

110-37 The commenter suggests that the Project site be preserved as a connectivity corridor and not developed for solar energy. See Responses to Comments 85-2 and 104-11 regarding the expansion in the FEIS of the DEIS's desert tortoise analysis. Note also that the FEIS includes an expanded discussion of connectivity and wildlife movement (see Impact WIL-3, *Direct and Indirect Impacts to Wildlife Movement or Nursery Sites*).

110-38 The original ROW area evaluated by First Solar was substantially larger than any of the alternatives now under consideration, and included many more desert tortoise than currently are considered to be present for the alternatives analyzed. The Project site is occupied by desert tortoises as described in DEIS Section 3.4, which has been updated substantially in the FEIS. See also, Responses to Comments 76-03 and 104-11 for additional detail.

110-39 The commenter is concerned about relocation or translocation of desert tortoises. The DEIS's discussion of this issue has been expanded in the FEIS. See Response to Comments 104-11, and 76-1 through 76-3.

110-40 As discussed in Common Response N.4.9, *Cadmium Exposure*, inadvertent release of Cadmium telluride (CdTe) from PV modules has been the subject of various scientific studies and, according to the Brookhaven National Laboratory and the National Renewable Energy Laboratory, the only pathways by which people or wildlife might be exposed to PV compounds from a finished module are by accidently ingesting flakes or dust particles, or by inhaling dust and fumes. The thin CdTe/Cadmium (Cds) layers are stable, solid and encapsulated between thick layers of glass. Unless the module is ground to a fine dust, dust particles cannot be generated. The vapor pressure of CdTe at ambient conditions is zero. Therefore, it is impossible for any vapors or dust to be generated when using PV modules. Thus, the environmental risks from and the potential for tortoises to be exposed to CdTe PV are minimal.

According to a review of the cause of mortality and disease in tortoises, virtually nothing is known about the effects of pollutants or toxicants in populations of tortoises (Jacobson, 1994). Additionally, according to a study on *Cutaneous Dyskeratosis*, the exact cause of the disease was not determined (Jacobson, 1994). Thus, as the potential for tortoises to be exposed to a toxicant such as CdTe are minimal and it is unknown as to whether this exposure would be related to *Cutaneous Dyskeratosis,* the potential for the Project to exacerbate this disease in tortoises is also minimal.

References

Cutaneous Dyskeratosis in Free-Ranging Desert Tortoises, Gopherus Agassizii, in the Colorado Desert of Southern California. Elliot Jacobson, et al. Journal of Zoo and Wildlife Medicine, Vol. 25, No. 1 (1994).

Causes of Mortality and Diseases in Tortoises: A Review. Elliott R. Jacobson. Journal of Zoo and Wildlife Medicine, Vol. 25, No. 1, Reptile and Amphibian Issue (Mar., 1994), pp. 2-17.

110-41 The BLM does not maintain a list of parcels that could be used as compensation lands to off-set impacts. The commenter's concerns regarding adaptive management planning are noted.

110-42 Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 111.

111-01 The commenter supports the project and is providing comments for clarification and requesting additional information. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

111-02 As discussed in DEIS Chapter 1, the Applicant identified a sufficiently large area to enable evaluation of a reasonable range of alternatives for the solar farm site, gen-tie line route and Red Bluff Substation and ancillary facilities. The "Project Area" identified for study was roughly 19,000 acres in size. Should a ROW grant be issued, the grant would cover only those acres actually needed for the Project, which would be less than 5,000 acres.

111-03 Concerning the reasonableness of the range of alternatives considered in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

111-04 The text of the DEIS has been updated in the FEIS as requested in the comment.

111-05 The groundwater analysis completed in support of the DEIS was prepared to evaluate groundwater withdrawal and level concerns that are specifically relevant to the Project. Because the Project does not include substantial groundwater withdrawals during operation (as many other solar projects do that are proposed for development in the vicinity of the Project), modeling assumptions relating to operation period groundwater use are substantially different from those of other projects. In regards to model assumptions/parameters, transmissivity, storage coefficient, and saturated thickness are shown in Table 4.17-2, while groundwater budget info is contained in Table 4.17-1. Completion of a detailed evaluation of such parameters for models from other proposed projects could be intellectually interesting. However, such additional analysis would not result in a more comprehensive assessment of anticipated impacts of the Project. Therefore, such additional analysis is not warranted, and was not completed.

111-06 Cumulative groundwater impacts are discussed in DEIS Section 4.17. This discussion includes modeling and other analyses completed within the CVGB, in order to evaluate the potential for drawdown and cumulative groundwater impacts. An additional detailed, comparative review of the studies completed in the Basin could provide an interesting comparison of the methodologies used for the various analyses. However, such a detailed scientific level consideration of these studies would be unlikely to change the level of impact identified in the discussion of cumulative impacts to groundwater, and therefore is not warranted.

111-07 See Response to Comment 108-10.

111-08 The DEIS text has been corrected in the FEIS.

111-09 Text has been added acknowledging that the Eagle Mountain Mine was another major historic water user.

111-10 The text/table has been corrected.

111-11 Assessor parcel number 80717005 has been deleted from the table in response to this comment.

111-12 Review of the descriptions of the alignment for GT-A-2 and GT-A-2 in the Executive Summary and Chapter 2, *Description of the Proposed Action and Alternatives,* did not reveal significant conflicts in the description of private land. The description of the alignment for

GT-A-1 and GT-A-2 in the Executive Summary was a bit more general than that contained in Chapter 2 since the Executive Summary is intended to be a more general overview than the discussion contained in Chapter 2. The description of GT-A-1 in Chapter 2 included more specific details relating to the area just south of Oasis Road involving less than 1 mile of the entire alignment. The alignment of GT- A-1 was designed specifically to avoid the majority all private land while the alignment of GT-A-2 would cross multiple parcels of private land.

111-13 The effects of the gen-tie route alternatives were compared with the Solar Farm Site alternatives. The details of this comparison are provided in Appendix C. As described in Appendix C, none of the three combinations of alternatives defined in the Project Description (Alternatives 1 through 3) is considered the environmentally superior action alternative. In addition, the discussion in Appendix C identifies the environmentally superior action alternative and compares it with the CEQA No Project alternative (No Action alternative, identified as Alternative 4 in Chapter 2, Description of the Proposed Action and Alternatives), as required by CEQA Guidelines Section 15126.6(e)(1).

111-14 See Common Response N.4.2, *Wilderness*.

Letter - 112.

112-01 Subsequent to the release of the DEIS, AECOM prepared a new wind erosion, PM10, and PM2.5 formation analysis for the Project on behalf of First Solar (see FEIS Section 4.2.3 and Appendix D-6), which supersedes the referenced analysis presented on DEIS pages 3.2-27 through 3.2-30. The new analysis incorporates wind data from Blythe. See also Response to Comment 103-05. Concerning desert pavement, see Response to Comment 104-19.

112-02 The text relating to the DCAP was found on page 3.3-5. FEIS Chapter 3 describes the affected environment. FEIS Chapter 4 analyzes the environmental consequences of the Project. As discussed in Section 4.3, Project components were sited in consideration of DCAP 10.1 and all three alternatives are consistent with the County of Riverside's General Plan, which includes the DCAP.

112-03 The commenter suggests that transplantation is not a successful mitigation practice for desert vegetation. AM-BIO-5 requires transplantation of cacti and for special status plants for which salvage and transplantation would be feasible. For impacts to other special status plant species, off-site habitat compensation as described in the Selection Criteria listed in MM-BIO-2 would address impacts. Avoidance of special status plant occurrences within the Project site is not recommended because development of the surrounding lands would isolate the plants and cause indirect impacts such as altered hydrology, dust, and invasive weeds, which would necessitate further on-site monitoring and management.

112-04 See Response to Comment 104-19.

112-05 See Response to Comments 76-1 through 76-3.

112-06 The commenter suggests that Red Bluff Alternatives A and B would impact the Chuckwalla CHU and that development of the Project does not meet the definition of special management. While Red Bluff Alternatives A and B would be located within the Chuckwalla CHU, the impacts to desert tortoises related to these alternatives are analyzed in DEIS and FEIS Section 4.4 and were found to be significant. As such, AM-WIL-1, *Desert Tortoise Translocation Plan*; AM-WIL-2, *Raven Management Plan*; AM-BIO-1, *Habitat Compensation Plan*; AM-BIO-2, *Integrated Weed Management Plan*; AM-BIO-4, *Worker Environmental Awareness Program*; and MM-BIO-2, *Off-site compensation of habitat*, have been proposed to reduce these impacts. With implementation of these measures, impacts would be less than significant under CEQA

112-07 See Responses to Comments 76-1 through 76-3.

112-08 The commenter suggests that translocation should not be undertaken. DEIS Section 4.4.3 has been revised in the FEIS to add information on translocation of desert tortoise and its impacts. Also, new mitigation measures have been added in the FEIS to further address related effects: MM-WIL-7, alternate to long-distance translocation; and MM-WIL-8, requiring USFWS and CDFG to review plans required by Applicant Measures. The translocation plan is intended to minimize take of desert tortoises and is preferable to leaving the animals in place. Recommendations of the DRECP Science Advisors' report are under review; however, to date, these recommendations have not been adopted by the BLM, CDFG or USFWS and may be further developed or refined. To ensure that any tortoise translocation effort is consistent with up-to-date agency policy, AM-WIL-1 has been revised in the FEIS to require that "the final [translocation] plan will conform to the 2010 USFWS desert tortoise relocation guidelines … or any updated CDFG and USFWS policy that may be available as of the date of implementing the translocation."

112-09 Provisions of the Desert Tortoise Translocation Plan (AM-WIL-1) and the Raven Management Plan provide sufficient management and control measures for canid predators. The present draft version of the tortoise translocation plan (see Appendix H) addresses canid predators such as coyotes and kit foxes in potential translocation areas. The plan focuses on avoidance of areas of high concentration of these species as a way to reduce predation. The draft plan does not specifically address potential predation by feral dogs, but does propose to avoid translocations into areas where human "subsidies" (e.g., trash dumping) would support elevated predator populations. In addition, provisions for refuse management and control of water sources required in AM-WIL-2, regarding the Raven Management Plan (see Appendix H), also would minimize potential "subsidies" for canid predators on the Project site.

112-10 The commenter suggests that connective habitat for Mojave fringe-toed lizards may occur on the Project site and should be investigated in the EIS. In response, DEIS Section 3.4.4 has been supplemented in the FEIS to provide a detailed description of the potential for this species to occur on the Project site. This section explains that the Project site would not serve as a movement corridor for this species because it provides no aeolian or alluvial sand habitat linkage between suitable habitat areas.

112-11 It is not necessary to finalize the Avian and Bat Protection Plan at this stage; rather, requiring compliance with the performance standards stated in AM-WIL-3 (i.e., conformance with USFWS guidelines) is sufficient to demonstrate that the mitigation measure would be effective. Concerning golden eagles, see Responses to Comments 75-08 and 92-01.

112-12 Regarding burrowing owls, see Response to Comment 104-15.

112-13 Regarding burrowing owls, see Response to Comment 104-15.

112-14 Regarding burrowing owls, see Response to Comment 104-15.

112-15 It is not necessary to identify specific parcels at this stage; rather, requiring compliance with the performance standards of compensatory mitigation (MM-WIL-3) is sufficient to demonstrate that the mitigation measure would be effective. MM-WIL-3 has been added in the FEIS to provide greater clarification as to what the compensation lands must be composed of with regard to habitat types. It is anticipated that sufficient private land that meets the performance standards of MM-BIO-2 is available. Note that Palm Springs round-tailed ground squirrel no longer is a candidate for federal listing (Federal Register 75:69228, 10 Nov 2010).

112-16 See Response to Comment 110-29.

112-17 Mitigation measures identified in the DEIS for impacts to Nelson's bighorn sheep also would address potential impacts to burro deer. See Response to Comment 110-29. Project impacts and region-wide cumulative impacts to desert dry wash woodland are analyzed in DEIS and FEIS Section 4.4. Ironwood woodland is a subset of desert dry wash woodland, as described and analyzed in FEIS Sections 3.3 and 4.3.

112-18 The analysis of cumulative groundwater impacts includes the Palen Solar Power Project, Blythe Solar Power Project and several other projects within the vicinity of the Project, as shown on DEIS and FEIS Table 4.17-3. The cumulative effects of these projects, in combination with the incremental effect of the proposed Project, are discussed in Section 4.17, *Water Resources*. As discussed therein, substantial groundwater withdrawals for the Project would occur during construction, but not during operation. As discussed, the indicated construction-related groundwater use would not contribute significantly to the cumulatively considerable total groundwater drawdown anticipated in the cumulative scenario for the basin. As a result, the Project would not contribute a cumulatively considerable impact to any potential effects on phreatophytes. For additional discussion of potential impacts to vegetation resources, see DEIS and FEIS Section 4.3, *Vegetation*.

112-19 See Responses to Comments 75-08, 85-02, 104-23, 108-19, and 110-29.

112-20 An approved jurisdictional determination regarding the presence or absence of Waters of the US from the USACE was obtained by the Project Applicant in December, 2010. As indicated therein, all of the drainages that would be affected by implementation of the Project would occur within a closed basin with no outlet. Specifically, the jurisdictional

determination found that water features on the Project site drain entirely to the closed Palen Dry Lake basin, with no apparent connection to interstate or foreign commerce.

112-21 See Response to Comment 112-22.

112-22 A system of groundwater monitoring and mitigation has been added to DEIS Section 4.17, under the Applicant Measures and Mitigation Measures subsection. This additional mitigation would ensure that potential impacts on nearby existing wells are addressed. For a discussion of the effects of the Project on rare plants, see DEIS and FEIS Section 3.3, Vegetation.

112-23 No facilities are proposed outside or upstream of the Project site. Stormwater retention basins, which would retain stormwater generated on site, would be included in Project design, and would be located on site, as discussed in DEIS Section 4.17. As discussed, these basins would minimize potential increases in flood flows during Project operation, and so would minimize increased flooding. Also discussed in DEIS Section 4.17, flood flows originating offsite would be channeled around the Project area and released downstream of the Project site. Proposed channels would be sized so as not to impede flood flows. These channels would permit flood flows to pass around the project, but would not result in the accumulation of additional flood flows.

112-24 The panels themselves are impervious. However, as discussed in Response to Comment 105-18, the Project overall would not result in substantial increases in stormwater runoff. In order to provide further assurances regarding stormwater runoff, the proposed mitigation strategy for stormwater flows in the DEIS has been updated in the FEIS to require that 10- and 100-year stormwater flows are increased by no more than 1 percent as a result of Project implementation. For additional information, see Response to Comment 106-11.

112-25 See Common Response N.4.9, *Cadmium Exposure*.

112-26 The possible detention basin would be installed within the substation site, and as such, has been adequately considered in terms of potential environmental impact to desert tortoise and other biological resources.

112-27 At the request of permitting agencies and public concerns, additional mitigation measures have been recommended for the Project, in order to monitor and, if warranted, compensate existing well owners for drawdown affected by the Project. See FEIS Section 4.17. For a discussion of the Project's potential to impact Colorado River water, see Response to Comment 129-08.

112-28 Biological soil crusts are discussed in detail in DEIS Section 3.5, Climate Change, and in Section 4.5, Impacts on Climate Change. Regarding large scale estimates of soil crusts, such estimates would likely not be applicable to the desert ecosystems that are located at the Project site because global estimates of biological crust carbon uptake or total carbon sequestration are represent average or composite values for desert and non-desert ecosystems. No further discussion is warranted.

112-29 See Responses to Comments 85-01 and 112-15 regarding finalization of the Habitat Compensation Plan (HCP) or identification of specific parcels. The final HCP would be based on the requirements specified in AM-BIO-1 and MM-BIO-2 in FEIS Section 4.3. Habitat enhancement measures, in combination with habitat acquisition, feasibly and effectively would mitigate the Project's impacts to desert tortoises. The USFWS Desert Tortoise Recovery Plan and Draft Revised Recovery Plan describe actions in addition to land acquisition that could reduce threats to desert tortoise populations. Some of these recommended actions include habitat restoration and invasive plant control, eliminating livestock and burro grazing, fencing to exclude livestock and vehicles or reduce the incidence of road strikes, controlling tortoise predators such as ravens, feral dogs and coyotes, as well as increased law enforcement, signage and education. These enhancement measures would address specific known threats to desert tortoise as identified in the Recovery Plan and other documents, including proliferation of roads; off-highway vehicle activity; deliberate maiming, killing, or collecting; habitat invasion by non-native invasive species; and increased frequency of wildfire due to invasion of desert habitats by non-native plant species.

112-30 See Response to Comment 104-22.

112-31 The commenter supports the No Project Alternative/Plan Amendment that excludes solar development. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 114.

114-01 The Secretary of the Interior has a very wide range of duties and responsibilities spread over eight agencies within the Department of the Interior. BLM and NPS are but two of these agencies. Each has its own specific mission and legislation authorizing and guiding implementation of its respective mission. The 1916 Organic Act applies specifically to lands within the National Park System managed by the NPS; it does not apply to Federal lands managed by other Federal agencies. Although the BLM has in excess of 100 different laws with which it must comply, only those specific to processing the application for the DSSF are listed in Section 1.3.3. It would be inappropriate to list the 1916 Organic Act in Section 1.3.3 since the Act does not apply to lands outside the National Park System and is not one which directs the actions of the BLM.

114-02 See Common Response N.4.3, ***Dark Skies.***

114-03 See Common Response N.4.3, ***Dark Skies.***

114-04 See Common Response N.4.3, ***Dark Skies.***

114-05 See Common Response N.4.3, ***Dark Skies.***

114-06 See Common Response N.4.3, ***Dark Skies.***

114-07 See Common Response N.4.3, ***Dark Skies.***

114-08 See Common Response N.4.3, *Dark Skies.*

114-09 See Common Response N.4.3, *Dark Skies.*

114-10 See Common Response N.4.3, *Dark Skies.*

114-11 See Common Response N.4.3, *Dark Skies.*

114-12 The format of the document is set. Wilderness, which is designated to protect a variety of resource values is discussed in Sections 3.14 and 4.14, Special Designations. However, recreational use of the wilderness areas also is discussed and analyzed in Sections 3.12 and 4.12, Recreation, and in Sections 3.16 and 4.16, Visual Resources.

114-13 NPS Management Policies related to noise control are not applicable to the DSSF. Joshua Tree National Park, which is the closest area with NPS jurisdiction, is located approximately 1.4 miles from the southeast boundary of the site. Project-related noise levels would not be expected to be audible at Joshua Tree National Park (see Response to Comment 114-23).

114-14 Text has been added to the second paragraph of FEIS Section 3.10.2 to acknowledge that JTNP is located as close as 1.4 miles from the southeast boundary of the Project site.

114-15 The format of the document is set. Wilderness, which is designated to protect a variety of resource values, is discussed in Sections 3.14 and 4.14, Special Designations. However, the recreational use of wilderness areas also is found in Sections 3.12 and 4.12, Recreation, and in Sections 3.16 and 4.16, Visual Resources. Discussion of the Palen-McCoy Wilderness has been added in FEIS Section 3.12, Recreation, and Section 3.14, Special Designations.

114-16 The text has been revised to acknowledge the number of visitors accessing the wilderness from the Project Area is unknown, but likely to be "low" rather than "non-existent."

114-17 See Response to Comment 114-15.

114-18 The text has been revised to acknowledge that some visitors are likely to access this area.

114-19 See Common Response N.4.3, *Dark Skies.*

114-20 See Common Response N.4.3, *Dark Skies.*

114-21 See Common Response N.4.4, *Adequacy of Key Observation Points (KOPs) and Simulations.*

114-22 Subsequent to the release of the DEIS, AECOM prepared a new wind erosion, PM10, and PM2.5 formation analysis for the Project on behalf of First Solar (see FEIS Section 4.2.3 and Appendix D-6) that supersedes the referenced analysis presented in DEIS on pages 3.2-27 through 3.2-30.

114-23 As indicated in FEIS Section 4.10.3., noise from construction activity generally would be audible at locations less than 0.5 mile from the proposed solar farm site. It is highly

unlikely that noise levels associated with construction or operation of the Project would be audible at JTNP.

114-24 The text has been corrected to "Joshua Tree National Park."

114-25 The text has been changed to reflect the recommended wording.

114-26 This section has been revised to acknowledge "direct impacts" during construction, but limited to the experience of wilderness visitors within sight and sound of the project. See Common Response N.4.2, *Wilderness*.

114-27 The text has been edited to include noise, traffic and lighting as construction phase impacts.

114-28 See Common Response N.4.4, *Adequacy of Key Observation Points (KOPs) and Simulations*.

114-29 The following text has been added to the FEIS Glossary – "The U.S. Department of the Interior protects America's natural resources and heritage, honors America's cultures and tribal communities, and supplies the energy to power America's future."

Letter - 116.

116-01 Concerning the commenter's support of the Defender's of Wildlife, Natural Resources Defense Council, and Sierra Club comment letter, see Response to Comment 93. See also, Common Response N.4.1, *Purpose and Need*.

116-02 See Common Response N.4.1, *Purpose and Need*.

116-03 The commenter supports the reduction in environmental impacts analyzed in Alternative C. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

116-04 The commenter considers Gen-Tie Alternative A-2 to be environmentally superior. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

116-05 Considering siting on private lands in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

116-06 Concerning the reasonableness of the range of alternatives considered in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

116-07 Concerning the reasonableness of the range of alternatives considered in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

116-08 Concerning the reasonableness of the range of alternatives considered in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

116-09 This comment is identical to Comment 93-9. See Response to Comment 93-9.

116-10 See to Response to Comment 93-10.

116-11 The commenter recommends that the 19,000 acre area excluded from the project should be protected from future development. A 19,000 acre exclusion area would not mitigate significant impacts of the Project; mitigation measures that are not specifically tied to an adverse environmental impact of the proposed project need not be considered (CEQA Guidelines Section 15126.4(a)(3), (4)). If a ROW grant is approved for the Project, it would cover only those acres that would be disturbed by the Project, i.e., less than 5,000 acres. Creating a ROW exclusion area would require a separate CDCA Plan amendment process (including NEPA review) and is not included in the EIS process for the proposed Project.

116-12 See Responses to Comments 76-1 through 76-3.

116-13 See Responses to Comments 76-1 through 76-3.

116-14 See Responses to Comments 105-21 and 75-8.

116-15 See Response to Comment 93-15.

116-16 See Response to Comment 93-16.

116-17 This is the same comment as Comment 93-18. See Response to Comment 93-18.

116-18 This is the same comment as Comment 93-19. See Response to Comment 93-19.

116-19 This is the same comment as Comment 93-20. See Response to Comment 93-20.

Letter - 118.

118-01 The commenter supports the No Project Alternative/Plan Amendment that excludes solar development. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

118-02 The commenter states that the land would be transformed into an industrial area, off-limits to the public. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

118-03 As described in FEIS Section 4.18.2, Irreversible and Irretrievable Commitments of Resources, the Project would cause the permanent loss of approximately 4,165 acres of vegetation and habitat. Assuming that the mitigation measures recommended to address impacts to biological resources are implemented (see Sections 4.3, Vegetation, and 4.4, Wildlife), Project-induced loss of vegetation and habitat would be less than significant. While it is, indeed, likely that the vegetation and habitat on the Project site would not have the exact same ecological function it had prior to project construction, the supposition that

this would result in the site becoming permanently converted to a private industrial area is speculative and unfounded. In addition, AM-BIO-5 reflects a commitment to prepare a restoration plan that would include post-decommissioning restoration of the site, and MM-BIO-4 would require that strict performance standards be achieved for salvage and restoration. Therefore, the proposed applicant measures and mitigation measures would ensure restoration of the site to a natural state upon decommissioning.

118-04 Considering siting on previously disturbed or built areas in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

118-05 The commenter states that off-site mitigation is not physically achievable. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 119.

119-01 See Response to Comment 104-23.

119-02 See Response to Comment 104-23.

119-03 Considering siting on previously disturbed or built areas in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

119-04 The commenter supports the No Project Alternative/Plan Amendment that excludes solar development, and recommends building the Project in an urban or disturbed environment. Private land alternatives are discussed in Section 2.6.2; distributed generation alternatives are discussed in Section 2.6.8.

Letter - 121.

121-01 The commenter states that the Project is not necessary due to environmental impacts. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

121-02 Considering siting on previously disturbed or built areas in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

121-03 See Responses to Comments 76-1 through 76-3.

121-04 See Common Response N.4.4, *Adequacy of Key Observation Points (KOPs) and Simulations*.

121-05 See Responses to Comments 76-8 and 85-1.

Letter - 122.

122-01 See Common Response N.4.1, *Purpose and Need*.

122-02 As stated in Section 211 of the Energy Policy Act of 2005, Congress intended that "the Secretary of the Interior should… seek to have approved non-hydropower renewable energy projects located on the public lands with a generation capacity of at least 10,000 megawatts of electricity." The DEIS text has been corrected in the FEIS accordingly.

122-03 Concerning the reasonableness of the range of alternatives in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

122-04 Concerning the reasonableness of the range of alternatives considered in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

122-05 Under Alternatives 5 and 6, none of the Project components would be built (No Project). However, there would be an amendment to the CDCA Plan that would identify the DSSF site as either unsuitable or suitable for solar development; as such, the word "Area" in this case refers to the Project "site" itself.

122-06 Concerning the reasonableness of the range of alternatives considered in the DEIS, see Common Response N.4.7, *Alternatives Analyzed*.

122-07 The DEIS's discussions of wildlife movement in the area and potential Project impacts to such movement have been revised in FEIS Sections 3.4 and 4.4.

122-08 Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

122-09 See Responses to Comments 76-1 through 76-3.

122-10 Impacts to desert tortoise are analyzed in the DEIS. AM-WIL-2, *Contribute to a USFWS Regional Raven Management Plan*, and MM-BIO-2, *Off-site Compensation*, have been added in the FEIS. Additionally, implementation of AM-BIO-1, *Habitat Compensation Plan*, AM-WIL-1, *Desert Tortoise Translocation Plan*, and AM-BIO-4, *Worker Environmental Awareness Program*, would reduce impacts to desert tortoise.

122-11 Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

122-12 MM-WIL-2, presented in FEIS Section 4.4.3, states that loss of habitat for Nelson's bighorn sheep shall be compensated at a ratio of 1:1 as approved by CDFG.

122-13 Honey mesquite is not present in any area that would be disturbed by any of the Project components and is rare in the watershed extending from this valley. It is found much more commonly in other areas of the larger Chuckwalla region. Impacts to groundwater-dependent plants are discussed in FEIS Section 4.4. One Palm Springs round-tailed ground squirrel was recorded during surveys near the western access road to Substation A; however, the FEIS has been updated to reflect that this species no longer is a candidate for federal listing.

122-14 Cumulative impacts to the Palm Springs round-tailed ground squirrel are considered in the context of the discussion of cumulative impacts to wildlife habitat (Impact WIL-1) and special-status species (Impact WIL-2) in Section 4.4.9, *Cumulative Impacts*.

122-15 AM-WIL-3, *Avian and Bat Protection Plan*, requires specific avoidance and mitigation measures be taken with respect to burrowing owls. Avoidance of burrows during the active nesting season is specified in AM-WIL-3 and would be consistent with the limited operating period in the NECO Plan. See DEIS Section 4.4, page 4.4-31.

122-16 See Response to Comment 75-08 regarding impacts to golden eagle foraging habitat.

122-17 Ironwood Consultants performed special-status plant species surveys that covered the entire Study Area and timed to encompass the blooming periods for all target special-status plants, including Harwood's milk-vetch. Results of these surveys are detailed in the Biological Technical Report included as DEIS Appendix H. Additionally, the DEIS text has been revised in the FEIS to reflect and refer to the results of plant surveys conducted in November 2010, as a supplemental to those surveys conducted in the spring. See Section 3.3, pages 3.4-10 and 3.4-14, for these text revisions.

122-18 The commenter requests that a discussion of mitigation measures to offset impacts to Coachella Valley milkvetch, crucifixion thorn, California ditaxis, foxtail cactus, desert devil's claw (desert unicorn plant), Mojave fringe-toed lizard, chuckwalla, California leaf-nosed bat, mountain lion, prairie falcon, mountain plover, LeConte's thrasher, loggerhead shrike, and burro deer be included in the EIS. In response, impacts to foxtail cactus, crucifixion thorn, desert devil's claw (desert unicorn plant), and California ditaxis would be avoided, minimized, or compensated by implementing AM-BIO-1 and AM BIO-3 through AM-BIO-5, MM-BIO-1 and MM-BIO-2 through MM-BIO-4. Coachella Valley milk-vetch is unlikely to occur for any of the alternatives (see Table 3.3-2 in Section 3.3). Impacts to Mojave fringe-toed lizard would be mitigated through implementation of MM-WIL-4. Impacts to chuckwalla would be mitigated through implementation of MM-BIO-1. Impacts to California leaf-nosed bat would be mitigated through implementation of AM-WIL-3 and MM-WIL-8. Impacts to mountain lion would be mitigated through implementation of AM-BIO-1, AM-BIO-2, AM-BIO-4, MM-BOP-1, and MM-BIO-2. Impacts to prairie falcon foraging habitat would be mitigated through implementation of AM-BIO-1, AM-BIO-2, and MM-BIO-2. Impacts to LeConte's thrasher and loggerhead shrike foraging and nesting habitat would be mitigated through implementation of AM-BIO-1, AM-WIL-3, AM-BIO-4, and AM-BIO-2. Impacts to burro deer habitat would be mitigated through implementation of AM-BIO-1, MM-BIO-2, MM-WIL-2, MM-WIL-3, and MM-WIL-8. Impacts of all of these species would be reduced to a less-than-significant level under CEQA. The full text of these applicant measures and mitigation measures is presented in FEIS Sections 4.3 and 4.4. Mountain plover is a California species of special concern and BLM sensitive species that winters, though it does not breed, in southern California (see California Bird Species of Special Concern, Shuford and Gardall (eds.) 2008, cited in the FEIS). The Project area is outside this species' known historic or current winter range. Habitat for this species is flat lands nearly barren of vegetation. Due to geographic range and habitat requirements, the

mountain plover is not considered likely to occur and is not addressed in the Biological Resources Technical Report or in the DEIS or FEIS.

122-19 See Response to Comment 93-15.

122-20 Impacts to desert washes are analyzed in DEIS Section 4.4. Table 4.3-9 presents the acres of CDFG jurisdictional resources that would be disturbed as a result of Project construction. Additional mitigation measures have been added in FEIS Section 4.17.3 to address erosion and sedimentation, stormwater outfall from the Project site, and potential drainage issues including headcutting and channel migration. Implementation of these mitigation measures would minimize potential impacts along the desert washes that cross the proposed Project site.

122-21 The cited drawdown would occur in very close proximity to the proposed groundwater recovery well, where no groundwater dependent plants would be located. As discussed in Chapter 4.17, Water Resources, the Project would result in a drawdown of up to 1 foot at a distance of 1 mile from the Project well. Substantially less drawdown is anticipated in the vicinity of existing stands of groundwater dependent vegetation. However, in response to the comment, additional analysis has been added in the FEIS, and a new mitigation measure has been added (MM-WAT-3, *Groundwater monitoring and pumping limits*).

122-22 The potential effects of climate change on biological resources, including desert tortoise and other sensitive plant and wildlife species, would occur at the site of the Project whether or not the Project is implemented. The referenced USGS model (available at: http://pubs.usgs.gov/of/2009/1102/) does not explicitly evaluate climate change scenarios in relation to desert tortoise habitat suitability. To the contrary, the USGS model documents existing known populations of desert tortoise, and evaluates other locations where additional desert tortoise populations may be expected to occur, based on habitat, physical, and other ecosystem/landscape characteristics. As noted in the USGS model documentation, future studies could use the model to evaluate the effects of climate change on the desert tortoise, but such modeling has not been published to date. Nonetheless, additional discussion and analysis in regards to the suitability of the Project site and nearby areas to biological resources as relevant to future potential climate change is discussed, within revised text, in Section 4.5, Climate Change.

122-23 Distribution patterns of species generally are expected to shift according to regional changes in temperature and precipitation, while the location of wildlife migration corridors and the extent of invasive species also may be altered. Project impacts on habitat fragmentation, habitat linkages, and cumulative impacts of multiple projects on corridors and connectivity are analyzed in the DEIS and are only heightened in their importance by the effects of global climate change. DEIS Section 4.5, Impacts on Climate Change, has been updated in the FEIS to include a discussion of the potential indirect impacts of climate change, including effects on vegetation and wildlife.

Letter - 123.

123-01 The commenter opposes the development of the Project area. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

123-02 See Responses to Comment for 76-1 through 76-3.

Letter - 124.

124-01 See Common Response N.4.2, *Wilderness*.

124-02 Subsequent to the release of the DEIS, AECOM prepared a new wind erosion, PM10, and PM2.5 formation analysis for the Project on behalf of First Solar (see FEIS Section 4.2.3 and Appendix D-6), which supersedes the referenced analysis presented in DEIS pages 3.2-27 through 3.2-30.

124-03 See Common Response N.4.3, *Dark Skies*.

124-04 The phrase "solar farm" is a widely-used term describing solar energy generation facilities, solar plants or solar installations. The word "farm" in no way connotes or implies that these areas are synonymous with agricultural production.

124-05 Due to the irregularity of the proposed Project footprint, the inclusion of the number of miles in parenthesis next to the number of acres of a project is impracticable.

124-06 See Common Response N.4.2, *Wilderness*. The commenter's preference for Alternative 5 is noted.

Letter - 125.

125-01 Concerning the distance and capacities of first responder fire services, as discussed in DEIS Section 4.13, the fire prevention plan that would be in place during construction of the Project would minimize the demand that this construction would place on the California Department of Forestry and Fire Protection. Furthermore, AM-HAZ-9 would require all Project facilities to be designed, constructed and operated in accordance with applicable fire protection and other environmental, health and safety requirements. In compliance with County of Riverside requirements, a project-specific fire prevention plan for both construction and operation of the substation shall be completed by SCE prior to initiation of construction. This plan would provide detailed information in the event of an emergency such as a facility fire. Once constructed, the facility would require very few onsite staff and would contain a relatively low level of materials containing high fire potential, and therefore does not present a high risk of requiring response from the local Fire Department.

As discussed in DEIS section 4.11, cumulative impacts could occur despite the many safeguards implemented to both prevent and control fires, hazardous materials releases,

and injuries and accidents, because of the great distances required for a response. Although the chances that two or more alternative energy facilities would require emergency response simultaneously may be low, a response to one distant site could impede or preclude a simultaneous response to another facility, residential or commercial location, or other location in demand. Although adverse cumulative impacts theoretically are possible, the likelihood of their occurrence is considered low given the existing levels of service within the region

125-02 Comment noted; however, as stated in Response to Comment 125-1, no substantial impact to Fire Department Resources has been identified.

125-03 Comment noted.

125-04 Comment noted.

125-05 Comment noted.

125-06 Comment noted.

125-07 Comment noted. See also Response to Comment 125-1.

125-08 See Response to Comment 125-1.

125-09 The Project does not include any residential elements and would not involve construction of a commercial structure. The installation of panels that are constructed primarily of glass is not considered a high threat of fire.

125-10 The commenter suggests that flag lots would not be permitted by the fire department. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

125-11 The Applicant would be required to obtain certain permits and/or approvals from Riverside County on the portions of the Project site that occur on private lands. As part of this process, the Applicant would be required to comply with the conditions set forth, such as the one in this comment.

125-12 The commenter states that the California Fire Codes would be enforced by the Fire Chief. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 126.

126-01 The commenter does not support the proposed Gen-Tie Alternative A-1. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

126-02 The commenter does not approve of the proposed desert tortoise translocation area. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

126-03 See Common Response N.4.7, *Alternatives Analyzed*.

126-04 See Response to Comment 105-7. In addition, as stated in FEIS Chapter 3.11, "the CPUC has not implemented a general requirement that utilities include nonroutine mitigation measures or other mitigation measures that are based on numeric values of EMF exposure and has not adopted any specific limits or regulation on EMF related to electric power facilities." However, the Applicant would prepare a Field Management Plan that would specify, where feasible, "no-cost" and "low-cost" measures, to reduce exposure from the Solar Farm and Gen-Tie facilities (or Red Bluff Substation). No-cost mitigation measures would be undertaken, and low-cost options, when they meet certain guidelines for field reduction and cost, would be adopted through the project certification process and specified in a Field Management Plan.

Potential noise impacts are discussed and analyzed in FEIS Section 4.10.

The construction of electrical transmission lines must meet stringent safety standards that assume wide ranging environmental conditions. The Applicant and SCE would use CPUC General Orders 95 and 165, as related to fire-safe design and maintenance practices for transmission lines, as the basis for establishing minimum requirements for the Project regarding inspection (including maximum allowable inspection cycle lengths), condition rating, scheduling and performance of corrective action, record keeping and reporting, in order to ensure a safe and high-quality electrical service.

Furthermore, as discussed in DEIS Section 2.4, routine maintenance would include equipment testing, equipment monitoring and repair, as well as emergency and routine procedures for reliability and preventive maintenance. These activities would ensure project infrastructure is properly maintained and repaired/replaced if necessary.

126-05 See Common Response N.4.8, *Property Value*.

126-06 See Common Responses N.4.8, *Property Value*, and N.4.4, *Adequacy of Key Observation Points (KOPs) and Simulations*. See also FEIS Section 4.16 for an analysis of visual resource impacts related to the Gen-Tie Line.

Letter - 127.

127-01 Text has been added on FEIS page ES-4; however, to minimize impacts to groundwater, the proposed septic system must adhere to local and State regulations regarding septic design. Text, including this clarification, has been added in FEIS Section 4.17.3.

127-02 Text has been changed in Table ES-1.

127-03 Text has been changed on page ES-6.

127-04 Text has been changed on page ES-7.

127-05 Text has been changed on page 2-23, including the clarification detailed in Comment 127-1.

127-06 Text has been changed on page 2-34.

127-07 Text has been changed on page 2-34, including the clarification detailed in Comment 127-1.

127-08 Text has been changed on page 2-35.

127-09 Text has been changed on page 2-37.

127-10 Text has been changed on page 2.43, including the clarification detailed in Comment 127-1.

127-11 Text has been changed to Tables 2.2-5 and 2.3-9; however, Table 2.3-11 does not appear to reflect the information noted in the comment, and so was not changed.

127-12 Text has been changed to Tables 2.2-6 and 2.3-12; however Table 2.3-9 does not appear to reflect the information noted in the comment, and so was not changed.

127-13 Text has been changed on page 2-52.

127-14 Text has been changed on page 2.54.

127-15 Text has been changed on page 2.54.

127-16 Text has been changed on page 2.63.

127-17 Text has been changed in Table 2.3-16.

127-18 Text has been changed in Table 2.3-17.

127-19 Text has been changed within the document.

127-20 AM-AIR-6 is an applicant measure that SCE has committed to implementing during construction of the Red Bluff Substation to reduce fugitive dust emissions. As indicated by the measure, preparation of a written dust control plan is not a formal requirement of SCAQMD Rule 403. Therefore, this measure has not been deleted in the FEIS.

127-21 AM-AIR-7 would require submittal of a transportation plan that would describe how workers would travel to the project site. SCE has committed to implementing this measure to reduce environmental impacts and during development of the EIS, BLM considered this measure as part of the Project. Therefore, AM-AIR-7 has not been removed in the FEIS.

127-22 MM-AIR-1 has been revised per SCAQMD recommendations (see Response to Comment 103-06). The reference to construction contractor preference has been removed from MM-AIR-1.

127-23 Text has been changed within the document.

127-24 Text has been changed within the document.

127-25 Text noted was not identified within the document, and so no change was made.

127-26 Text has been changed within the document.

127-27 Ironwood's technical report states that there are 522 California ditaxis within the Study Area but does not specify whether all 522 would be impacted by Project activities. Ironwood defines the Study Areas for the Project as a larger area than the proposed disturbance area. No change was made to the EIS text.

127-28 Text has been changed within the document.

127-29 Text has been changed within the document.

127-30 Text has been changed within the document.

127-31 Text has been changed within the document.

127-32 Text has been changed within the document.

127-33 Text has been changed within the document.

127-34 Text has been changed within the document.

127-35 Text change has been incorporated into the document on page 4.6-9.

127-36 Text has been changed to clarify the mitigation measure.

127-37 The text change has been incorporated into the document on page 4.16-23.

127-38 The text change has been incorporated into the document on page 4.16-23.

127-39 The language for MM-VR-3 has been edited to reflect the following: MM-VR-3: ***Fugitive Dust Control***. To minimize fugitive dust on the Project site, there shall be limits on the speed of travel for construction vehicles, and dust palliatives shall be applied to the site, as described in AM-AIR-1 and AM-AIR6, and in compliance with SCAQMD Rule 403.

127-40 The text change has been incorporated into the document.

127-41 The text change has been incorporated into the document.

127-42 The text change has been incorporated into the document.

127-43 The text change has been incorporated into the document.

127-44 The text change has been incorporated into the document.

Letter - 128.

128-01 Text has been added on FEIS page ES-4.

128-02 Text has been added on FEIS page 2-23.

128-03 Text has been added on FEIS page 2-34.

128-04 Text has been added on FEIS page 2-43.

Letter - 129.

129-01 A review of existing water conveyance and power supply facilities, including those owned and/or operated by MWD, was completed in support of the environmental review completed for this Project. The Project would not directly interfere with any existing facilities that are owned or operated by MWD. Additional assessment is not warranted.

129-02 The Project would not include installation of facilities that would interfere with MWD's electrical transmission system. Therefore, no impact is anticipated.

129-03 The text has been revised accordingly.

129-04 MWD's private air strip is approximately 9 miles from the proposed 185-foot high SCE telecommunications tower. This tower is not expected to have any effect on navigable airspace of the air strip. However, SCE has filed a Form 7460-1 with the FAA requesting a determination of effect on navigable airspace for the proposed telecommunications tower. The DEIS requires SCE to follow the determination from FAA on this matter (AM-HAZ-7).

Regarding glare from the solar panels affecting aircraft, the type of finish on the panels would be gray/black resulting in low reflectivity, unlike systems that use parabolic troughs or mirrors. Consistent with the recommendation in the EIS, the Applicant would submit a lighting mitigation plan that shall include the treatment of surfaces to minimize glare (MM-VR-4). It has become common practice to site PV solar fields on or near airports such as the facility installed at Fresno Yosemite International Airport. In this case, the FAA found there to be no issues of compatibility.

129-05 BLM acknowledges MWD's concern regarding potential impacts on water supplies, including along the Colorado River. However, as discussed in the Response to Comment 129-8, and in updated text that has been added to the DEIS, the Project is not expected to affect Colorado River flows, due to its distance from the Palo Verde Mesa Groundwater Basin, and its relatively low water use levels, wherein most pumping would occur during the construction phase. Therefore, additional allocations or entitlements to Colorado River water are not anticipated.

129-06 See Responses to Comments 129-5 and 129-8.

129-07 See Responses to Comments 129-5 and 129-8.

129-08 An Accounting Surface Technical Memorandum was prepared to assess the static water level associated with Project-related wells and to determine the potential Project-related impacts to Colorado River water. This analysis is presented in FEIS Appendix O. The

technical memorandum concluded that the static water level beneath the Project site is nearly 200 feet above the Accounting Surface and that Project-related construction and operation activities would not utilize Colorado River water. However, FEIS Section 4.17, Water Resources, concludes that Project-related groundwater use, when combined with groundwater use associated with current and reasonably-foreseeable future projects, would lead to both short-term and long-term cumulatively considerable impacts to groundwater levels near the Project site. To reduce the potential impacts to groundwater levels near the Project site, MM-WAT-7 would require implementation of a Groundwater Level Monitoring, Mitigation, and Reporting Plan. This mitigation measure would establish existing and operational water levels in nearby wells and would provide compensation to any affected well owner.

129-09 Groundwater monitoring data and reports can be made available to MWD upon written request. Regarding the effects of the proposed septic system on water quality, as discussed in updated text in FEIS Section 4.17, the proposed septic system would comply with applicable State and local regulations regarding construction and operation of the proposed septic system. Additionally, the system would treat sanitary wastewater of the Project, and would not be used to treat any process wastewater. Therefore, potential impacts to water quality arising from the use of a septic system are anticipated to be minimal.

Letter - 130.

130-01 No wind generated power is part of the DSSF project.

Letter - 131.

131-01 A CD version of the EIS has been sent in response.

Letter - 132.

132-01 The commenter is concerned about the impacts of industrial development to property values and human health. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response. The portion of this comment concerning the impacts of the Gen-Tie on property values is addressed in Common Response N.4.8, *Property Value*.

132-02 Three inferred/concealed fault lines intersect the Project Area, as shown on DEIS Figure 3.8-1. However, as discussed in Section 4.8, Geology and Soil Resources, these faults are not considered to be active. As discussed therein, the closest active fault to the Project site would be located approximately 7.2 miles away. For additional discussion of potential faulting and associated impacts, see DEIS Section 4.8. As discussed, the risk for health and safety related to fault line rupture to the proposed Project was found to be less than significant.

132-03 The commenter requests that the Project be very carefully evaluated for impacts to humans and the environment. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-

1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 137.

137-01 The commenter states that this and other projects are located too close to wilderness areas. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

137-02 The commenter states that the Project and Gen-Tie will adversely impact the environment. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

137-03 See Responses to Comments 76-1 through 76-3.

137-04 Cumulative water impacts are discussed in DEIS and FEIS Section 4.17, Water Resources.

137-05 The commenter questions the unknown location and environmental impacts of the recycling plant. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

137-06 See Common Response N.4.9, *Cadmium Exposure*. Seismic hazards related to the Project site are discussed and analyzed in FEIS Sections 3.8 and 4.8.

137-07 See Common Response N.4.9, *Cadmium Exposure*. Seismic hazards related to the Project site are discussed and analyzed in FEIS Sections 3.8 and 4.8.

137-08 See Common Response N.4.3, *Dark Skies.*

137-09 Concerning a distributed (roof-top) solar alternative to the Project, see Common Response N.4.7, *Alternatives Analyzed.*

Letter - 138.

138-01 See FEIS Section 1.4.

138-02 DEIS and FEIS Chapters 3, *Affected Environment,* and 4, *Environmental Consequences*, describe and analyze potential impacts on land located within Riverside County rights-of-way and on private land in Riverside County.

138-03 FEIS Section 4.1 provides a detailed explanation of the ways in which the EIS meets the requirements of CEQA and NEPA, including Table 4.1-1, which identifies key differences between the requirements of these two laws. As background, EIS Chapter 1 explains that, because the Project would be located primarily on lands administered by the BLM, the Applicant filed a right-of-way (ROW) grant application with the BLM for a permit to construct and operate the Project (Case File Number CACA #48649). The decision regarding the issuance of the ROW grant will be based in part on an evaluation of the

Project's potential environmental effects through the environmental review process under NEPA and the requirements of the Federal Land Policy and Management Act of 1976 (FLPMA).

In compliance with NEPA, the BLM prepared the DEIS and this FEIS to inform the public about the proposed Project and to meet the needs of federal, state, and local permitting agencies in considering its effects on the quality of the human environment. BLM authorization of a ROW grant for the Project would require a plan amendment (PA) to the California Desert Conservation Area (CDCA) Plan of 1980, as amended. The U.S. Department of Energy (DOE) is a cooperating agency on the EIS pursuant to a Memorandum of Understanding (MOU) between DOE and BLM. DOE will consider Applicant's request for a loan guarantee under Title XVII of the Energy Policy Act of 2005 (EPAct 05), as amended by Section 406 of the American Recovery and Reinvestment Act of 2009, Public Law 111-5 (the "Recovery Act").

In order to construct the Red Bluff Substation, SCE first must obtain authorization from the CPUC, which has discretionary authority to issue a Permit to Construct (PTC) for the substation, evaluated as a portion of the Project. Pursuant to CEQA Guidelines Section 15221, the CPUC intends to rely on this FEIS to provide the environmental review required for its consideration of SCE's application under CEQA once that application is filed. The CPUC and BLM have signed an MOU that defines the relationship of the two agencies, and identifies CPUC as a cooperating agency with the BLM for preparation of this FEIS. Following preparation of the FEIS by BLM, the CPUC will determine whether it complies with CEQA and so can be used to support its decision on the substation.

The Applicant is coordinating with other federal agencies, including the USFWS and USACE, regarding other Project approvals and associated NEPA compliance requirements. The Applicant also is coordinating with California state and local agencies, including CDFG, Caltrans, Metropolitan Water District of Southern California (MWD), California Regional Water Quality Control Board (RWQCB), South Coast Air Quality Management District (SCAQMD), and Riverside County, regarding potential Project approvals and associated CEQA requirements pursuant to the procedure outlined by the CPUC as a CEQA cooperating agency.

This FEIS describes and evaluates the environmental impacts that are expected to result from construction, operation, maintenance, and decommissioning of the Project and presents recommended mitigation measures that, if adopted, would avoid, minimize, or mitigate the significant environmental impacts identified. In accordance with the requirements of NEPA and CEQA, this FEIS identifies alternatives that respond to the stated purpose and need for the proposed Project (including three No Action/No Project Alternatives) that could avoid or minimize significant environmental impacts associated with the Project as proposed by the Applicant and SCE, and evaluates the environmental impacts associated with these alternatives. Specifically, the information contained in this FEIS will be considered by the BLM in its consideration of the ROW grant application and also may be considered by other agencies with regard to their respective permits, including DOE, CPUC, and others.

138-04 Comment noted. See Response to Comment 138-3.

138-05 Executive Summary Table ES-2 summarizes impacts by alternative; Table ES-3 summarizes all measures identified by Sunlight or SCE, measures required by law, regulation, or policy, and additional measures identified by the BLM. Thus, both the description of the anticipated impact and the proposed mitigation measures already are included in the Executive Summary Mitigation Tables. Milestones to trigger mitigation compliance and the entity to determine mitigation compliance will be part of the Environmental Construction and Compliance Monitoring Program to be included in the Record of Decision. It will also be part of CPUC's Mitigation Monitoring, Compliance, and Reporting Program (MMRCP) prepared in connection with CPUC's Decision on the Red Bluff Substation.

Letter - 139.

139-01 The commenter supports solar power, but not on this site. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

139-02 The commenter states that wildlife would be endangered by the Project. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

139-03 The availability of groundwater for Project-related use is discussed in detail in DEIS Section 3.17, Water Resources. As analyzed in DEIS Section 4.17, Water Resources, there is sufficient groundwater available to satisfy the demands of the proposed Project.

139-04 The commenter states the views of the valley would be spoiled. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

139-05 The commenter questions long-term economy of the valley. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 142.

142-01 The comment is a petition in support of the Project. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 143.

143-01 The commenter opposes the Project and supports the No Project Alternative. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

143-02 The commenter states that projects such as the proposed Project amount to a clearcutting of the desert. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

143-03 See Response to Comment 69-17.

143-04 Background information and potential impacts of climate change are discussed and analyzed in DEIS Sections 3.5 and 4.5. These sections have been updated in the FEIS to include additional analysis. Please refer to these chapters for additional discussion of climate related setting and potential impacts.

143-05 As discussed in DEIS Section 3.17, Water Resources, surface water in the vicinity of the Project site occurs only intermittently, during and immediately following large storm events. Stormwater quickly evaporates and, if sufficient volume is available, percolates into the underlying groundwater table. Therefore, any potential changes in temperature of surface water flows would not affect downstream surface water resources. Minor changes in stormwater runoff temperature would not noticeably alter groundwater temperature. In regards to percolation, some reduction in percolation would occur on site, as a result of construction of compacted roads and other proposed elements. These changes would result in changes to stormwater drainage on site, as discussed in Section 4.17, Water Resources. As discussed therein, changes in stormwater flow would be mitigated via installation and use of detention basins and other stormwater control features.

143-06 See Response to Comment 112-4.

143-07 See Response to Comment 28-9.

143-08 See Common Response N.4.4, *Adequacy of Key Observation Points (KOPs) and Simulations*.

143-09 The commenter opposes issuance of the right-of-way grant for purposes of solar energy development. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

143-10 The comment suggests that specific homes should be identified to receive energy from the Project. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

143-11 The comment does not question the adequacy or accuracy of the DEIS. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

143-12 The comment does not question the adequacy or accuracy of the DEIS. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

143-13 The comment does not question the adequacy or accuracy of the DEIS. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

Letter - 144.

144-01 This is the same letter, with spelling and grammar errors corrected, as Comment Letter 124. See Responses to Comment Letter 124.

Letter - 145.

145-01 The commenter supports the Project. Pursuant to Section 6.9.2.1 of BLM NEPA Handbook H-1790-1 (Jan. 30, 2008) and CEQA Section 21091(d)(2)(A), this is not considered a substantive comment on an environmental issue, and so does not require a specific response.

145-02 See Common Response N.4.7, *Alternatives Analyzed*.

145-03 See Common Response N.4.7, *Alternatives Analyzed*.

Letter - 146.

146-01 BLM acknowledges that the Project, which is located within the CVGB, is in an area that is considered to be within the Accounting Surface area. However, the supposition that the Project would result in an effect or impact on the Colorado River has not been substantiated. An additional evaluation of the potential for the Project to interfere with Colorado River water, based on the proposed Accounting Surface, was completed by AECOM (2011). See FEIS Appendix O for this evaluation memorandum. As discussed therein, Project related withdrawals/drawdown would occur well above the upper elevation of the accounting surface. Drawdown would not occur at or below the level of the accounting surface. Therefore, as discussed in updated text in FEIS Section 4.17, Water Resources, the Project would not interfere with or impact flows of the Colorado River. Therefore, acquisition of contracts or other water sources, as indicated by MWD, would not be warranted.

146-02 BLM would like to thank MWD insofar as MWD could provide an alternative water supply in support of the Project. At this time, however, it is anticipated that the Project

would rely on groundwater for construction period demand, and for minor operation period demand, as discussed in DEIS Section 4.17, Water Resources. See also Response to Comment 146-1.

Letter - 147.

147-01 BLM acknowledges receipt of the letter from the Department of the Navy stating that the Project will have no impact on military testing or training.

Appendix O

Accounting Surface Technical Memorandum

AECOM
1220 Avenida Acaso
Camarillo, CA 93012

(805)388-3775 tel
(805)388-3577 fax

Memorandum

To	Bureau of Land Management, Palm Springs – South Coast Field Office
Subject	Desert Sunlight Solar Farm Project: Response to Public Comments Regarding Potential Relationship Between Groundwater Pumping Levels and Impacts to the Colorado River
From	Amanda Beck, First Solar
Date	January 5, 2011

Introduction

This technical memorandum provides an analysis of available groundwater level data in connection with comments on the Desert Sunlight Solar Farm Project (Project) Draft Environmental Impact Statement (DEIS) regarding the potential relationship between proposed groundwater pumping by the Project and the proposed Accounting Surface as has been defined by the United States Geological Survey (USGS) and United States Bureau of Reclamation (USBR). AECOM prepared this technical memorandum at the request of First Solar, Inc. in order to assist the Bureau of Land Management (BLM) in its further analysis of this issue and its response to comments on the DEIS.

While general concerns regarding a potential relationship between groundwater pumping and surface water levels are noted in several comments on the DEIS, including comments submitted by the U.S. Environmental Protection Agency and Metropolitan Water District of Southern California, the issue addressed in this technical memorandum is most clearly set out in the comments submitted by the Colorado River Board of California (Board), dated December 6, 2010. In those comments, the Board states that the area of the Project site, the upper Chuckwalla Valley Groundwater Basin (Basin), is within the area defined as within the “Accounting Surface” and that the Basin aquifer is hydraulically connected to the Colorado River through the Palo Verde Mesa Groundwater Basin. The Board further states that any amount of water withdrawn from the Basin aquifer is water that would be replaced by Colorado River, in total or in part, and should be considered a use of Colorado River water for which a valid contract for water use must be obtained.

This technical memorandum addresses the issue raised by the Board’s comments by explaining the background and framework of the proposed Accounting Surface Rule and then analyzing the groundwater pumping and water elevation data for the Project relative to application of the Accounting Surface Rule. This technical memorandum does not take any position regarding whether the Accounting Surface Rule, as currently proposed or as may be adopted, is an appropriate methodology for analyzing a potential hydraulic connection between groundwater pumping and the Colorado River but, instead, solely responds to the methodology as noted in the Board’s comments.

The Proposed Accounting Surface Rule

The Accounting Surface Rule (Proposed Rule) was proposed by the U.S. Bureau of Reclamation (Reclamation) in the Federal Register on July 16, 2008 (43 CFR Part 415), and has not been promulgated as a final regulation. The United States Geological Survey (USGS) Report 2008-5113 (Wiele et al 2008) updated the location and extent of the Accounting Surface in support of the Proposed Rule, and Figure 6 in the USGS document shows that the Project site is located within the areal extent of the river aquifer and that the Accounting Surface within this aquifer is predicted to be at an elevation of between 238 and 242 feet above mean sea level (msl).

The Accounting Surface is proposed to identify which groundwater wells located outside the floodplain of the Colorado River pump groundwater that will be replaced by surface water from the Colorado River and, thus, would need to be accounted for as consumptive use of Colorado River water as required under the Consolidated Decree (547 U.S.150 (2006)), (Wiele et al, 2008, page 3). The Accounting Surface is defined as the elevation and slope of the static water table in the river aquifer that would exist if the water in the raquifer were derived only from the Colorado River (Wilson and Owen-Joyce 1994, Wiele et al 2008). The river aquifer is defined as those saturated sediments that are hydraulically connected to the Colorado River, and include groundwater basins and adjacent tributary valleys that are adjacent to the River.

The static water level, which is the measured elevation of the water table not being affected by groundwater withdrawal, is used to determine whether a well is pumping water that would be replaced by Colorado River water (Wiele et al 2008). A static water level below the Accounting Surface is presumed to yield water that will be replaced by water from the Colorado River (43CFR 415.2(4), Weile et al 2008). Groundwater wells with static water levels above the Accounting Surface are presumed to yield water that will be replaced by precipitation, mountain front recharge or inflow from tributary valleys (i.e., tributary water).

Assessment of Water Elevation Data Relative to the Accounting Surface

As requested by First Solar, AECOM conducted research:

- to establish the current and historic static water level below the Project site and in the Upper Chuckwalla Valley; and,
- to determine if the static water level is above or below the proposed Accounting Surface as defined by the USGS at an elevation of between 238 and 242 feet msl (Wiele et al 2008, Figure 6).

To assess the water levels in the vicinity of the site, AECOM reviewed available information in the online National Water Information System (NWIS) USGS database and reviewed selected published reports from hydrogeologic investigation of the Upper Chuckwalla Valley (DWR 91-24, GEI 2009a and GEI 2009b). The water level data from this research is shown on Table 1, including the historic and recent elevation data from wells in the vicinity of the Project site and the difference between these elevations and the proposed Accounting Surface at 238 feet and 242 feet msl.

The well locations listed in Table 1 are also shown on Figure 1 relative to the Project site. In addition to a comparison of water level data, AECOM reviewed interpretations of the potentiometric surface in the area of the Project site from previous hydrogeologic investigations (DWR 91-24, GEI 2009a,b).

The available well data shows that the static water level elevation in the vicinity of the Project site have been measured between 469 feet and 504 feet msl (see Table1, 5S/15E-13C01, 4S/16E-19M01, 19N01, 30D01 and CW#2 and P-12). A review of cross sections and potentiometric maps from prior investigations of the Upper Chuckwalla Valley show that the water level elevation has been interpreted to be between about 500 to 540 feet msl in the area of the Project site. The difference between the static water level measurements for the wells in the vicinity of the Project site and interpreted potentiometric surface from prior investigations and the proposed Accounting Surface is between 241 and 266 feet. The range in the difference reflects the variability in the water level measurements from the wells surrounding the Project site and the lower (238 feet) and higher (242 feet) proposed accounting surface for the Basin. Most significantly, the data show that static water level is well above the proposed Accounting Surface. These water level data, either from the wells or used in the interpretation of the potentiometric surface, were collected from 1961 and 1992 (Table 1).

More recent data from a well close to the community of Desert Center (5S/16E-7P01, 7P02) and several miles south-southeast of the Desert Sunlight site show similar water level elevations to those measured in the early 1960s then show a period of water level decline in the mid-1980s due to expanded agricultural operations, where combined pumping exceeded 20,000 acre-feet per year (afy)(GEI 2009b) which is well above historic water usage for the western part of the Basin. These agricultural operations began to be curtailed in the late 1980s and water levels in the Desert Center area have recovered to levels similar to the early 1960s. The most recent water level elevation measured in Well 5S/16E-17P02 was 462 feet msl or about 220 feet above the proposed Accounting Surface (Table 1).

Another important element in the potential implications of the Accounting Surface for the Project is the proposed groundwater pumping and the predicted level of drawdown in the water supply wells from which Project water supplies are obtained. A numerical groundwater model was developed for the DEIS (Appendix G) to evaluate potential affects from Project pumping on adjacent water supply wells and on the Basin storage. Project water use during operation will be minimal (0.2 afy over a 30-year Project life for a total of only 60 acre-feet (af)). Project water use that was modeled during construction was between 1,300 and 1,400 af over a 26-month construction period. The model predicted drawdown in either a single well or two water supply wells of between about 10 and 20 feet over the construction period. Given the above water elevation data, the drawdown will be well above the proposed Accounting Surface. In addition, groundwater modeling of the cumulative impacts from the combined pumping of all proposed solar power projects within the Basin show that after 30 years the water table would drop between 20 and 50 feet (AECOM 2010, GEI 2009a). Even with this predicted decline in the water table, caused largely by other projects' water use, the static water table in the vicinity of the Desert Sunlight Project would be well above the Accounting Surface.

Conclusions

A comparison of available historic and recent groundwater level data from wells in the vicinity of the Desert Sunlight Solar Farm Project site and prior interpretations of the water level elevation below the Project site reveal that the static water level elevation is well above the proposed Accounting Surface. A buffer of more than 200 feet is indicated in the groundwater level data. The data indicate that the Project would therefore not impact the Accounting Surface as it would draw groundwater from well above the surface of what is termed "tributary" water (i.e., other than a Colorado River source, Wiele et al 2008). The "tributary" water replenishing groundwater withdrawals by the Project is therefore attributable to inflow from precipitation, mountain front recharge, Pinto Basin underflow and Hayfield Basin underflow (GEI 2009a).

In addition, a numerical groundwater model developed for the Project predicted drawdown of between only 10 to 20 feet in the Project's water supply well(s) as a result of Project pumping during the 26-month construction period. Because Sunlight is a solar photovoltaic project that does not utilize a steam cycle to generate electricity, water use during operation is negligible. Although not considered in the Proposed Accounting Surface Rule, the Project's minimal level of drawdown reinforces the conclusion that the predicted water levels would remain well above the Accounting Surface and therefore not hydraulically connected to the Colorado River.

References

AECOM 2010, Solar Millennium - Palen Solar Power Project: Groundwater Data Responses to January 14, 2010 CEC Workshop Queries Figure Soil and Water 208b(rev1), "Predicted Water Table Drawdown, Cumulative Impacts from Operational Pumping at the End of 30 Years", March 2010.

DWR, 1979. Bulletin 91-24, Sources of Power Plant Cooling Water in the Desert Area of Southern California – Reconnaissance Study: Prepared by the United States Department of Interior - Geological Survey, August.

Federal Register, 43 CFR 415 (July 16, 2008), "Regulating the Use of Lower Colorado River Water Without an Entitlement – Proposed Rule: 415.2 (4), definition of Colorado River Water.

GEI, 2009a, Eagle Mountain Pumped Storage Project No 13123 - Final License Application, Technical Appendices for Exhibit E, Volume 3 of 6 Groundwater Supply Pumping Effects – Attachment A Supplemental Alluvial Aquifer Properties, Chuckwalla Valley Groundwater Basin (April 17, 2009).

GEI, 2009b, Eagle Mountain Pumped Storage Project, Exhibit E - Applicant Prepared Environmental Impact Statement, Volume 2 of 6, Groundwater Resources, Fgures 3.3.3-1 through 3.3.3-20, Groundwater Resources Figures (June 22, 2009).

USGS 2010, National Water System Web Interface (NWIS), Groundwater Levels for California, Riverside County (http://nwis.waterdata.usgs.gov/ca/nwis/gwlevels)

Wiele, S. M., Lieke, S.A., Owen-Joyce, S.J., and McGuire, E.H., 2008, Update of the Accounting Surface Along the Lower Colorado River - Scientific Investigations Report 2008-5113 (Prepared in Cooperation with the Bureau of Reclamation): U.S Geological survey, Reston, Virginia, 16p.

Wilson, R.P., and Owen-Joyce, S.J., 1994, Method to Identify Wells that Yield Water that will be replaced by Colorado River Water in Arizona, California, Nevada and Utah: U.S. Geological Survey Water-Resources Investigations Report 94-4005, 19 plates, 36 p.

WELLS DATABASE
PROJECT BEACON

WELL DATA[1]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[2]				COMMENTS
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (op)	Lithologic Log (YES)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
02S/17E-30E01								Yes	850	624		uncased	Jan-33	325	525					
02S/17E-30E01S	002S017E30E001S																1/30/1933	7		
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Dec-54	150	931					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jun-55	154.94	926					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Sep-55	155.2	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Dec-55	155.6	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Feb-56	155.2	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Feb-56	155.1	926					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Feb-56	155	926					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-56	155	926					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			May-56	154.88	926					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jul-56	155.3	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Aug-56	155.3	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Sep-56	155.7	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			May-57	155.21	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			May-57	155.65	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jun-57	155.48	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Aug-57	155.49	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Sep-57	155.37	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Nov-57	155	926					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-58	155.1	926					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			May-58	155.4	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Sep-58	155.6	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jan-59	155.7	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-59	155.6	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jun-59	155.8	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Sep-59	155.71	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Dec-59	155.74	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-60	155.6	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jun-60	155.9	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-60	155.93	925					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jan-61	156.14	924					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-61	156.81	924					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Nov-61	157.49	923					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Nov-61	157.77	923					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Nov-62	158.79	922					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-63	159.28	921					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-63	159.34	921					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-64	159.49	921					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Nov-64	159.53	921					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-65	159.81	921					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Nov-65	160.21	920					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-66	161.95	919					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-66	162.94	918					

WELLS DATABASE
PROJECT BEACON

WELL DATA[1]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[2]				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (op)	Lithologic Log (YES)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	COMMENTS
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-67	163.38	917					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-67	163.78	917					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-69	165.06	916					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			May-70	164.86	916					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-70	166.17	914					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-71	166.54	914					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jan-72	165.04	916					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jun-72	166.67	914					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-73	166.31	914					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Sep-73	167.72	913					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Feb-74	167.72	913					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-74	167.48	913					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Apr-75	167.88	913					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Nov-75	168	913					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Mar-76	168.25	912					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Nov-76	168.91	912					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Apr-77	169	912					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-77	169.43	911					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			May-78	169.08	912					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-78	169.75	911					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Apr-79	168.65	912					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-79	170.49	910					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Apr-80	170.55	910					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-80	170.2	910					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Apr-81	170.03	911					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Oct-81	171.49	909					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Apr-82	170.89	910					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jan-83	169.73	911					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Aug-84	167.24	913					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Feb-85	166.44	914					
03S/15E-04J01S	003S015E04J001S	33.93667885	-115.4099836						1,081	575			Jun-85	166.27	914					
03S/18E-03Q01								No	1,675	17			Jun-61	13	1662					
03S/18E-11A01								No	1,580	40			Jun-61	37	1543					
04S/15E-13C01S	004S015E13C001S							Yes	683	452		220-248, 317-328	Feb-61	188	495		Feb-32	450		
04S/16E-19M01								No	610	585			Oct-61	127	483					
04S/16E-19N01								No	600	151			Apr-61	112	488					
04S/16E-21N01								No	565	39			Apr-61	--	--					
04S/16E-29R01								No	545	110			Jun-61	80	465					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Apr-61	79.95	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Sep-61	80	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Oct-61	79.93	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Nov-61	79.92	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Dec-61	79.94	460					

WELLS DATABASE
PROJECT BEACON

WELL DATA[1]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[2]				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (op)	Lithologic Log (YES)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	COMMENTS
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Jan-62	79.92	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Feb-62	79.94	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Mar-62	79.93	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Apr-62	79.86	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			May-62	79.93	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Jun-62	79.97	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Nov-62	79.96	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Mar-63	79.96	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Oct-63	80	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Mar-64	80.04	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Mar-65	80.11	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Nov-65	80.27	460					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Oct-66	79.1	461					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Mar-67	78.93	461					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			Oct-67	78.76	461					
04S/16E-29R01S	004S016E29R001S	33.7902952	-115.3202862						540	110			May-70	78.25	462					
04S/16E-30D01S	004S016E30D001S							No	603	610			Oct-61	114	489		Oct-60	5075	110	
04S/16E-30D01S	004S016E30D001S	33.8008503	-115.3347034						603	610			May-61	113.91	489		Oct-60	5075	110	
04S/16E-30D01S	004S016E30D001S	33.8008503	-115.3347034						603	610			Jun-61	114.3	489					
04S/16E-30D01S	004S016E30D001S	33.8008503	-115.3347034						603	610			May-70	118.53	484					
04S/16E-31D01S	004S016E31D001S							Yes	595	600		135-597	Jun-61	95	500		Jun-61	2328	44	
04S/16E-31R01								Yes	555	36			Apr-61	--	--					
04S/16E-32D01								Yes	555	610		265-555	Jun-61	79	476					
04S/16E-32D01S	004S016E32D001S																Oct-61	2750	80	
04S/16E-32E01								No	555	77		63-95, 245-252	Apr-61	--	--					
04S/16E-32M01								Yes	555	555			Jun-61	74	481					
04S/16E-32M01S	004S016E32M001S																Jun-61	2000		
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Apr-61	71.41	477		Jun-61	2000		
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Apr-61	71.61	476					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Jun-61	71.43	477					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Jun-61	73.46	475					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Feb-62	69.32	479					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Mar-62	70.29	478					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Apr-62	72.45	476					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			May-62	73.82	474					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Aug-62	79.95	468					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Sep-62	79.57	468					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Nov-62	77.17	471					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			May-70	77.25	471					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Apr-79	66.95	481					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Jul-80	72.87	475					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Jan-81	74.16	474					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Oct-81	86.9	461					

WELLS DATABASE
PROJECT BEACON

WELL DATA[1]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[2]				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (op)	Lithologic Log (YES)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	COMMENTS
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Apr-82	82.01	466					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Jan-83	90.29	458					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Jul-84	121.88	426					
04S/16E-32M01S	004S016E32M001S	33.7797398	-115.333592						548	555			Feb-85	120.8	427					
04S/16E-35Z01								No	470	--			Jan-17	13	457					
04S/17E-06C01								Yes	500	501			Oct-61	22	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Jan-32	22.5	478		Apr-61	106		
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				May-52	21	479					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Sep-54	21.2	479					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Oct-56	21.4	479					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				May-57	21.6	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Sep-59	21.9	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Apr-61	21.82	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Nov-61	22.4	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Jan-62	22.2	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Mar-62	22.14	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Nov-62	22.41	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Mar-63	22.22	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Oct-63	22.31	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Mar-64	22.41	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Nov-64	22.4	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Mar-65	22.51	477					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Nov-65	22.3	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Mar-66	22.5	478					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Oct-66	22.74	477					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Mar-67	22.55	477					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Oct-67	22.95	477					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Apr-68	22.8	477					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Nov-68	22.71	477					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Apr-69	25.02	475					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Oct-69	24.72	475					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Apr-70	23.15	477					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Oct-70	23.55	476					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Mar-71	23.57	476					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Apr-79	23.88	476.12					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Jul-80	24.4	476					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Jan-81	24.52	475					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Oct-81	25.23	475					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Apr-82	26.69	473					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Jan-83	25.01	475					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Jul-84	25.31	475					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Feb-85	25.42	475					
04S/17E-06C01S	004S017E06C001S	33.85918308	-115.2394237						500				Jun-85	25.65	474					

WELLS DATABASE
PROJECT BEACON

WELL DATA[1]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[2]				COMMENTS
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (op)	Lithologic Log (YES)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
05S/14E-24R01								Yes	1,072	733			Jan-33	570	502					
05S/14E-35L01								No	1,270	600		349-784	Sep-61	570	700					
05S/14E-35L01								No	1,270	641			Sep-61	571	699					
05S/14E-35L01								No	1,190	877		526-746	Sep-61	485	705					
05S/14E-35L01								Yes	1,369	501		400-501	Nov-80	Dry	--					
05S/14E-35L01								Yes	1,342	805		599-799	Nov-80	635	708					
05S/14E-35L01S	005S014E35L001S																Nov-61	2		
05S/14E-35L02S	005S014E35L002S																Nov-61	6		
05S/15E-01E01								No	645	755		215-788	Oct-61	146	499					
05S/15E-01L01								Yes	640	790			Oct-61	139	501					
05S/15E-01L01S	005S015E01L001S																Mar-61	1674	42	
05S/15E-01L01S	005S015E01L001S																Mar-60	3150		
05S/15E-02E01S	005S015E02E001S																Nov-60	3300	56	
05S/15E-12N01								Yes	688	746		--	May-61	173	515					
05S/15E-12N01S	005S015E12N001S	33.7440238	-115.3781377						671	746			Apr-61	173	498		May-61	1900		
05S/15E-12N01S	005S015E12N001S	33.7440238	-115.3781377						671	746			Jun-67	172	499					
05S/15E-12N01S	005S015E12N001S	33.7440238	-115.3781377						671	746			May-70	172	499					
05S/15E-12N01S	005S015E12N001S	33.7440238	-115.3781377						671	746			Mar-92	190	481					
05S/15E-12N01S	005S015E12N001S	33.7440238	-115.3781377						671	746			Mar-00	183	488					
05S/15E-13B01								Yes	650	788		--	Sep-61	160	490					
05S/15E-14E01								No	750	799		--	Nov-61	245	505					
05S/15E-14J01								No	710	63		--	--	--	--					
05S/15E-15E01								No	805	808		--	Nov-61	313	492					
05S/15E-23N01								No	880	409		--	Mar-61	367	513					
05S/15E-27B01								Yes	900	644		553-625	Oct-61	395	505					
05S/15E-27B01S	005S015E27B001S	33.71390794	-115.4038719						900	644			May-58	395	505					
05S/15E-27B01S	005S015E27B001S	33.71390794	-115.4038719						900	644			Mar-61	395	505					
05S/15E-27B01S	005S015E27B001S	33.71390794	-115.4038719						900	644			Jun-61	395	505					
05S/15E-27B02								No	900	--		224-705	--	--	--					
05S/15E-27H01								No	904	598		--	Mar-61	429	475					
05S/15E-29F01								No	1,046	680		--	Sep-61	366	680					
05S/15E-2E01								No	700	728		--	Oct-61	210	490					
05S/16E-05B01								No	560	114		--	Jul-61	71	489					
05S/16E-05B02								Yes	548	715		--	Oct-61	69	479					
05S/16E-05E01								No	570	124		--	--	--	--					
05S/16E-05F01S	005S016E05F001S	33.7679373	-115.3378755						544				Oct-00	79	464					
05S/16E-05F02S	005S016E05F002S	33.76787344	-115.3380088						545	250			Jun-99	81	464					
05S/16E-05F02S	005S016E05F002S	33.76787344	-115.3380088						545	250			Oct-00	80	465					
05S/16E-05F02S	005S016E05F002S	33.76787344	-115.3380088						545	250			Oct-00	80	465					
05S/16E-05M01S	005S016E05M001S	33.765729	-115.3441312						557				Oct-00	90	467					
05S/16E-06N01								Yes	604	723		228-331, 334-722	Jun-61	126	478					
05S/16E-07M01								No	614	648			Jun-61	61	553					
05S/16E-07M01								Yes	611	789		280-789	Jul-61	126	485					

WELLS DATABASE
PROJECT BEACON

WELL DATA[1]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[2]				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (op)	Lithologic Log (YES)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	COMMENTS
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Apr-61	121	483		Feb-59	1324	94	
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Apr-61	126	478		Feb-58	3634	110	
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Jun-61	125	479		Jun-61	1118	124	
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Jun-61	127	477		Apr-59	707		
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Jun-61	127	477		Apr-61	1115		
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Jun-61	126	478					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Jun-61	128	476					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Jun-61	129	475					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Aug-61	127	477					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Oct-61	124	480					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Oct-61	124	480					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Oct-61	125	479					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Oct-61	125	479					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Nov-61	127	477					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Nov-62	140	464					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Apr-70	128	476					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Oct-91	194	409					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Feb-92	189	415					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Mar-92	190	414					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Sep-92	188	415					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Apr-93	183	421					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Sep-93	182	421					
05S/16E-07M01S	005S016E07M001S	33.749171	-115.3573315						604	648			Apr-94	179	425					
05S/16E-07P01								Yes	608	347		248-296, 299-347	Apr-61	121	487					
05S/16E-07P01S	005S016E07P001S	33.74557395	-115.3533147						598	347			Sep-52	108	490					
05S/16E-07P01S	005S016E07P001S	33.74557395	-115.3533147						598	347			Jun-90	213	385					
05S/16E-07P01S	005S016E07P001S	33.74557395	-115.3533147						598	347			Oct-90	208	390					
05S/16E-07P01S	005S016E07P001S	33.74557395	-115.3533147						598	347			Mar-91	199	399					
05S/16E-07P01S	005S016E07P001S	33.74557395	-115.3533147						598	347			Feb-92	188	410					
05S/16E-07P02S	005S016E07P002S	33.7453656	-115.3535703						598	767			Oct-00	137	462					
05S/16E-08F01								Yes	560	206		103-168, 172-188	Sep-61	83	477					
05S/16E-08K01								Yes	555	212		124-162, 178-180	Jun-61	83	472					
05S/16E-09E01								No	545	--			Jun-61	--	--					
05S/16E-10Z01								No	--	76			Jun-61	74	--					
05S/16E-18M01								No	646	790			Apr-61	161	485					
05S/16E-18Q01								No	660	37			Jun-61	--	--					
05S/16E-22N01								No	653	516			Dec-61	188	465					
05S/16E-25F01								No	598	680			May-61	135	463					
05S/16E-36M01								Yes	730	357		261-357	Sep-61	274	456					
05S/17E-17F01S	005S017E17F001S	33.70807585	-115.2488671						574	698			Apr-61	108	466					
05S/17E-17F01S	005S017E17F001S	33.70807585	-115.2488671						574	698			May-70	111	463					
05S/17E-17F01S	005S017E17F001S	33.70807585	-115.2488671						574	698			Mar-92	113	461					
05S/17E-19Q01								Yes	535	760		314-758	Apr-61	76	459					

WELLS DATABASE
PROJECT BEACON

WELL DATA[1]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[2]				COMMENTS
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (op)	Lithologic Log (YES)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
05S/17E-19Q01S	005S017E19Q001S	33.71446456	-115.2472004						538	760			Apr-61	76	462					
05S/17E-19Q01S	005S017E19Q001S	33.71446456	-115.2472004						538	760			Apr-61	76	462					
05S/17E-19Q01S	005S017E19Q001S	33.71446456	-115.2472004						538	760			May-70	75	463					
05S/17E-19Q01S	005S017E19Q001S	33.71446456	-115.2472004						538	760			Feb-92	82	456					
05S/17E-20F01								No	465	10										
05S/17E-21Z01								No					Jan-17	98						
05S/17E-29E01								Yes	533	983			Apr-61	84	449					
05S/17E-29H01								Yes	495	1,025		uncased	Aug-61							
05S/17E-30F01								Yes	570	720		120-288, 314-698	Apr-61	108	462					
05S/17E-30G01S	005S017E30G001S	33.7079481	-115.2388196						543				Mar-00	116	428					
05S/17E-30P01								No	620	147			Jun-61							
05S/17E-30P01S	005S017E30P001S	33.70057607	-115.2494227						607	152			May-57	150	457					
05S/17E-33N01								Yes	597	758		266-758	Apr-61	173	424					
05S/17E-33N01S	005S017E33N001S	33.6861321	-115.2210885						592	758			Apr-61	173	419					
05S/17E-33N01S	005S017E33N001S	33.6861321	-115.2210885						592	758			Apr-61	173	419					
05S/17E-33N01S	005S017E33N001S	33.6861321	-115.2210885						592	758			Oct-61	173	419					
05S/17E-33N01S	005S017E33N001S	33.6861321	-115.2210885						592	758			Apr-70	175	417					
06S/15E-24E01S	006S015E24E001S	33.63391075	-115.3774823						1,995	22			Aug-61	17	1978					
06S/15E-24E02S	006S015E24E002S	33.63529958	-115.3794268						2,000	22			Aug-61	19	1981					
06S/15E-24E03S	006S015E24E003S	33.63279968	-115.3758156						1,995	14			May-52	10	1985					
06S/15E-30Q01S	006S015E30Q001S	33.61613324	-115.4580404						2,200	15			Aug-61	12	2188					
06S/17E-03M01								Yes	565	818			Apr-61	190	375					
06S/17E-03M01S	006S017E03M001S	33.67641019	-115.2035878						566	818			Apr-61	190	376					
06S/17E-03M01S	006S017E03M001S	33.67641019	-115.2035878						566	818			Apr-61	190	376					
06S/19E-28R01S	006S019E28R001S	33.6130791	-114.9955244						354				Sep-90	81	273					
06S/19E-28R01S	006S019E28R001S	33.6130791	-114.9955244						354				Sep-90	82	272					
06S/19E-28R01S	006S019E28R001S	33.6130791	-114.9955244						354				Feb-92	81	273					
06S/19E-32K01S	006S019E32K001S	33.60406264	-115.0196002						390				Feb-92	104	286					
06S/19E-32K01S	006S019E32K001S	33.60406264	-115.0196002						390				Mar-00	97	293					
06S/19E-32K02S	006S019E32K002S	33.6041904	-115.0196919						390				Feb-92	110	280					
06S/20E-33C01S	006S020E33C001S	33.61002386	-114.9013548						392				Sep-90	134	258					
06S/20E-33C01S	006S020E33C001S	33.61002386	-114.9013548						392				Feb-92	135	257					
06S/20E-33L01S	006S020E33L001S	33.60465735	-114.9017964						388	800			Feb-02	125	262					
07S/18E-14F01S	007S018E14F001S	33.56214983	-115.073652						563	1,000			Dec-82	300	263					
07S/18E-14F01S	007S018E14F001S	33.56214983	-115.073652						563	1,000			Feb-92	270	292					
07S/18E-14F01S	007S018E14F001S	33.56214983	-115.073652						563	1,000			Mar-00	270	293					
07S/18E-14H01S	007S018E14H001S	33.56226096	-115.0650739						546	985			Jan-83	270	276					
07S/18E-14H01S	007S018E14H001S	33.56226096	-115.0650739						546	985			Feb-92	258	288					
07S/18E-14H01S	007S018E14H001S	33.56226096	-115.0650739						546	985			Mar-00	257	289					
07S/19E-04R01S	007S019E04R001S	33.5849549	-114.9955658						424				Sep-90	144	280					
07S/19E-04R01S	007S019E04R001S	33.5849549	-114.9955658						424				Mar-00	144	279					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Jun-61	152	266					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Oct-61	151	267					

WELLS DATABASE
PROJECT BEACON

WELL DATA[1]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[2]				COMMENTS
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (op)	Lithologic Log (YES)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Nov-61	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Jan-62	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Mar-62	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Apr-62	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				May-62	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Oct-62	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Mar-63	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Oct-63	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Mar-64	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Nov-64	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Mar-65	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Nov-65	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Mar-66	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Oct-66	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Mar-67	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Oct-67	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Oct-69	151	267					
07S/20E-04R01S	007S020E04R001S	33.5839135	-114.8910764						418				Apr-70	151	267					
07S/20E-16M01S	007S020E16M001S	33.5591308	-114.9053349						456	1,200			Jun-05	202	254					
07S/20E-16M01S	007S020E16M001S	33.5591308	-114.9053349						456	1,200			Sep-90	206	250					
07S/20E-16M01S	007S020E16M001S	33.5591308	-114.9053349						456	1,200			Feb-92	207	249					
07S/20E-16M01S	007S020E16M001S	33.5591308	-114.9053349						456	1,200			Feb-92	206	250					
07S/20E-17C01S	007S020E17C001S	33.56891386	-114.9166326						433				Feb-92	174	259					
07S/20E-17G01S	007S020E17G001S	33.5644973	-114.9155269						444	1,200			Dec-87	203	241					
07S/20E-17G01S	007S020E17G001S	33.5644973	-114.9155269						444	1,200			Sep-90	189	254					
07S/20E-17G01S	007S020E17G001S	33.5644973	-114.9155269						444	1,200			Feb-92	186	257					
07S/20E-17G01S	007S020E17G001S	33.5644973	-114.9155269						444	1,200			Feb-92	188	256					
07S/20E-17G01S	007S020E17G001S	33.5644973	-114.9155269						444	1,200			Mar-00	199	244					
07S/20E-17K01S	007S020E17K001S	33.55918915	-114.9121462						457	1,200			Dec-87	205	252					
07S/20E-17K01S	007S020E17K001S	33.55918915	-114.9121462						457	1,200			Feb-92	201	256					
07S/20E-17K01S	007S020E17K001S	33.55918915	-114.9121462						457	1,200			Feb-92	199	257					
07S/20E-17K01S	007S020E17K001S	33.55918915	-114.9121462						457	1,200			Feb-92	200	257					
07S/20E-17L01S	007S020E17L001S	33.55882247	-114.9202159						458	1,200			Oct-92	213	245					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Apr-61	168	275					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Apr-70	172	271					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Jul-79	173	269					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Jul-80	169	274					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Jan-81	169	274					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Sep-81	169	274					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Mar-82	170	273					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Jan-83	171	272					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Jul-84	171	272					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Feb-85	171	272					

WELLS DATABASE
PROJECT BEACON

WELL DATA[1]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[2]				
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (op)	Lithologic Log (YES)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	COMMENTS
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Jun-85	173	270					
07S/20E-18H01S	007S020E18H001S	33.5625251	-114.926355						443	1,139			Feb-92	183	259					
07S/20E-18K01S	007S020E18K001S	33.5600363	-114.9319802						449	1,200			Oct-92	193	256					
07S/20E-18R01S	007S020E18R001S	33.5573475	-114.9270467						454	1,160			Oct-92	202	252					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Mar-82	248	258					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Feb-92	232	273					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Mar-00	235	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Oct-00	235	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jan-01	235	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Feb-01	234	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Apr-01	235	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Apr-01	235	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jul-01	235	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Nov-01	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Nov-01	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Apr-02	235	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Apr-02	235	271					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Oct-02	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Oct-02	236	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jun-03	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jun-03	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Nov-03	236	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Nov-03	236	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Mar-04	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Mar-04	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Aug-04	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Dec-04	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Apr-05	235	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Aug-05	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Aug-05	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Feb-06	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Feb-06	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			May-06	236	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			May-06	236	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Aug-06	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Aug-06	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Dec-06	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Dec-06	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Feb-07	236	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Feb-07	236	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			May-07	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			May-07	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Sep-07	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Sep-07	237	269					

WELLS DATABASE
PROJECT BEACON

WELL DATA[1]									WELL COMPLETION DATA				GROUNDWATER LEVELS			WELL PERFORMANCE DATA[2]				COMMENTS
STATE WELL NUMBER (DWR)	STATE WELL NUMBER (USGS)	LATITUDE	LONGITUDE	Well Owner	Published Use	Year	Status (op)	Lithologic Log (YES)	Ground Surface Elevation	Total Depth	Well Diameter	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation	Pump Model	Pumping Test Date	Pumping Rate	Specific Capacity	
		NAD 83	NAD 83						feet-msl	feet-bgs	inches		Date	feet-bgs	feet-msl	(Hp)	Mo/Yr	gpm	gpm/ft	
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Sep-07	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Dec-07	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Dec-07	237	269					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Mar-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Mar-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Mar-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jun-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jun-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Sep-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Sep-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Sep-08	236	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jan-09	235	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Jan-09	235	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Apr-09	235	270					
07S/20E-28C01S	007S020E28C001S	33.53725089	-114.8991372						506	830			Apr-09	235	270					
07S/20E-28C02S	007S020E28C002S	33.5372481	-114.8989955						505	1,100			Nov-89	234	271					

NOTES

1	Data as provided in the USGS National Water Information System Database - http//:nwis/waterdata.usgs.gov/ and the Department of Water Resources Database - http://wdl.water.ca.gov/gw/
2	Data obtained by historical documents

DEFINITIONS

NAD-83	North American Datum 1983
feet-msl	feet above mean sea level
feet-bgs	feet below ground surface
Mo	month
gpm	gallons per minute
gpm/ft	gallons per minute per foot of drawdown
--	data not provided or available in USGS or DWR database.

TABLE 1
SUMMARY OF AVAILABLE WATER LEVEL DATA FOR WELLS
WITHIN CLOSE PROXIMITY TO THE DESERT SUNLIGHT SOLAR POWER PROJECT
RIVERSIDE COUNTY, CALIFORNIA

STATE WELL NUMBER (DWR)[1]	STATE WELL NUMBER (USGS)	Ground Surface Elevation	Total Depth	Perforation Interval(s)	Depth to Groundwater		Groundwater Elevation[6]	ACCOUNTING SURFACE 238 ft msl[7]	ACCOUNTING SURFACE 242 ft msl[7]
		feet-msl	feet-bgs		Date	feet-bgs	feet-msl	DIFFERENCE	DIFFERENCE
								feet	feet
04S/16E-19M01	**--**	610	585	--	Oct-61	127	**483**	245	241
04S/16E-30D01S	**004S016E30D001S**	603	610	--	Oct-61	114	489	251	247
04S/16E-30D01S	**004S016E30D001S**	603	610	--	May-70	118.53	**484**	246	242
04S/15E-13C01S	**004S015E13C001S**	683	452	220-248, 317-328	Feb-61	188	**495**	257	253
04S/16E-19N01	**--**	600	151	--	Apr-61	112	**488**	250	246
05S/16E-07P01[2]	**005S016E07P001S**	608	347	248-296, 299-347	Apr-61	121	487	249	245
05S/16E-07P01[2]	**005S016E07P001S**	598	347	--	Sep-52	108	490	252	248
05S/16E-07P01[2]	**005S016E07P001S**	598	347	--	Jun-90	213	385	147	143
05S/16E-07P01[2]	**005S016E07P001S**	598	347	--	Oct-90	208	390	152	148
05S/16E-07P01[2]	**005S016E07P001S**	598	347	--	Mar-91	199	399	161	157
05S/16E-07P01[2]	**005S016E07P001S**	598	347	--	Feb-92	188	**410**	172	168
05S/16E-07P02[2]	**005S016E07P002S**	598	767	--	Oct-00	137	**462**	224	220
CW#2[3]	**--**	--	--	--	Jul-92	--	**469**	231	227
P-12[3]	**--**	--	--	--	Jul-92	--	**504**	266	262
GEI (2009b) Cross Section C-C'[4]		NA	NA	NA	NA	NA	540	302	302
DWR 91-24 (1979)[5]		NA	NA	NA	NA	NA	520	282	282

Notes

1	Well locations are shown on Figure -1. Information shown was take from the USGS NWIS database.
2	Water elevation data from the NWIS database. Time-series graph of Wells 5S/16E-7P01 and 5S/16E-7P02 as shown on GEI Figure 3.3.3-7 (GEI 2009b). Decline in water levels during the mid-1980's and through the early 1990's is from expanded pumping in support of agriculture (upwards of 20,000 afy). Since the mid-1990's agriculture has been in decline as evidenced by the recovery in the water levels.
3	Water elevation data as shown on Figure 3.3.3-11, "Groundwater Contours Near the Project Site - July 15, 1992 (GEI 2009b). Water level data posted for those wells that are the most proximal to the Project Site (see Figure 1).
4	Estimate of water elevation based on water level surface plotted onto cross section C-C' (GEI, 2009a Figure 5) in the area of well 5S/16E-13C001 and Kaiser Well CW#4. Water level data interpreted was from 1961 and 1964.
5	Estimate of water elevation based on water level elevation map as shown on GEI Figure 3.3.3-10 (GEI 2009b). Figure references modificaiton after DWR 91-24 (1979). Water level data used in development of the contours was from 1974.
6	Values in BOLD, are shown on Figure-1 "Site Plan Showing Recent Water Level Data for Wells Adjacent to the Project Site".
7	Proposed Accounting Surface elevation after USGS 2008-5113 (Weile et al, 2008), Figure 6, "Map showing the accouting surface in the Parker, Palo Verde and Cibola Valleys and adjacent tribuary areas in California and Arizona".
--	Information not present in the USGS NWIS database.
NA	Not applicable. Water elevation data interpreted using graphical data (i.e., cross section and water level maps). No specific well completion, depth to water or elevation data included on the referenced figures.
CW	Chuckwalla Basin Water Supply Well (Kaiser Mine).
P	Piezometer (Kaiser Mine).

References

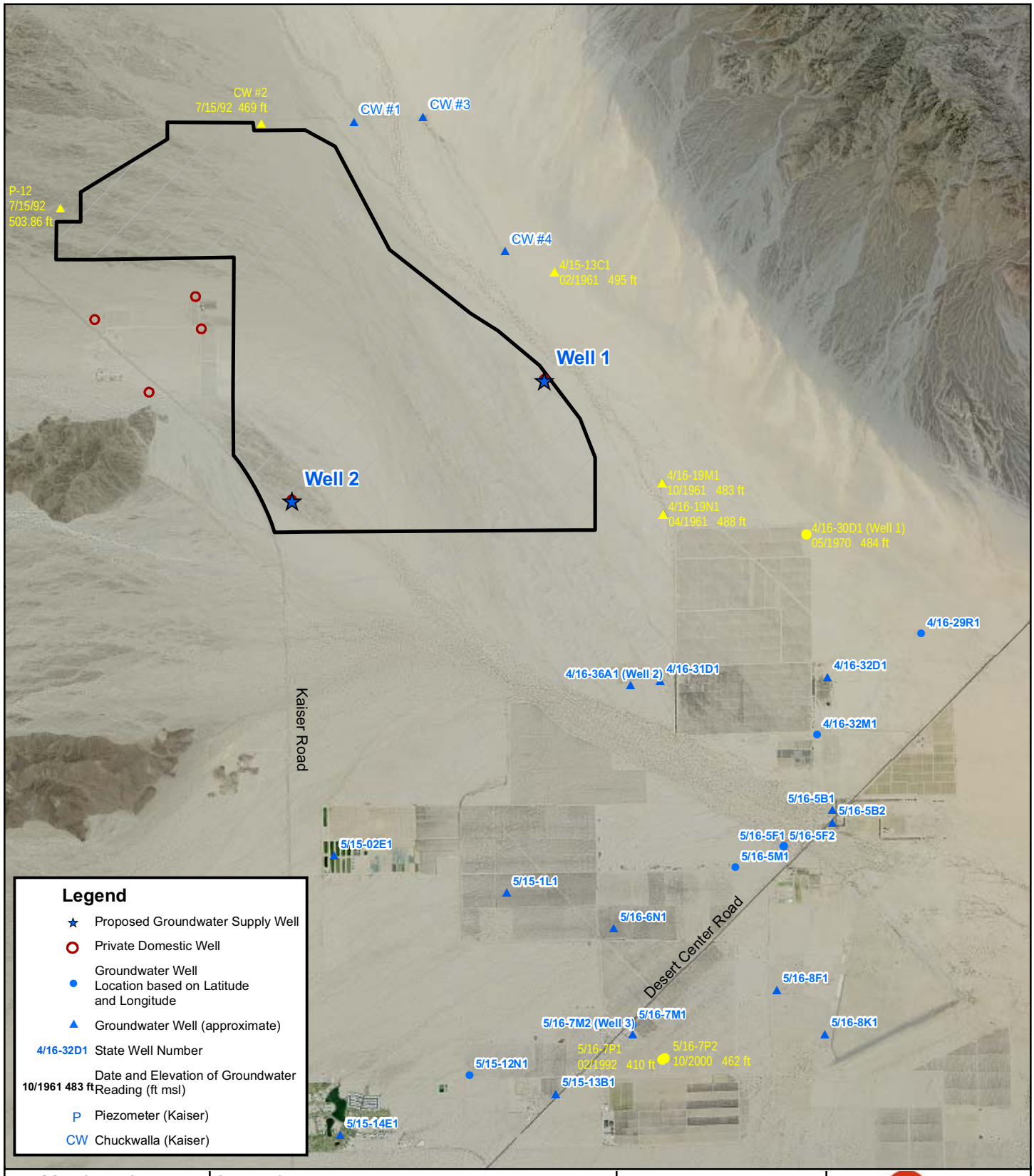
DWR 91-24, Department of Water Resources, 1979, Sources of Power Plant Cooling Water in the Desert Area of Southern California – Reconnaissance Study: Prepared by the United States Department of Interior - Geological Survey, August.

GEI, 2009a, Eagle Mountain Pumped Storage Project No 13123 - Final License Application, Technical Appendices for Exhibit E, Volume 3 of 6 Groundwater Supply Pumping Effects – Attachment A Supplemental Alluvial Aquifer Properties, Chuckwalla Valley Groundwater Basin. April 17, 2009 (GEI Project No. 080473) Figure 5 - Cross Section C-C', April 2009.

GEI, 2009b, Eagle Mountain Pumped Storage Project, Exhibit E - Applicant Prepared Environmental Impact Statement, Volume 2 of 6, Groundwater Resources, Figures 3.3.3-1 through 3.3.3-20, Groundwater Resources Figures (June 22, 2009).

USGS 2010, National Water System Web Interface (NWIS), Groundwater Levels for California, Riverside County. Accessed at: http://nwis.waterdata.usgs.gov/ca/nwis/gwlevels?county_cd=06029&format=station_list&sort_key=station_nm&group_key=county_cd&sitefile_output_format=html_table&column_name=well_depth_va&begin_date=&end_date=&TZoutput=0&date_format=YYYY-MM DD&rdb_compression=file&list_of_search_criteria=county_cd

Wiele, S. M., Lieke, S.A., Owen-Joyce, S.J., and McGuire, E.H., 2008, Update of the Accounting Surface Along the Lower Colorado River - Scientific Investigations Report 2008-5113 (Prepared in Cooperation with the Bureau of Reclamation): U.S Geological survey, Reston, Virginia, 16p.



Map Location

Legend

Proposed Solar Farm Site (Approximate)

1 in = 1 miles

0 1 2 Miles

N W E S

Desert Sunlight Solar Farm Project

Figure 1
Water Level Data
In Vicinity of Project

First Solar

AECOM

Project: 60139386.012
Date: December 2010

J:\GIS\Projects\12414-First_Solar\011-Desert Sunlight\mxd\GWmodel\July2010\fig5-drawdown122210.mxd