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May 14, 2010

**DOCKET**  
**09-AFC-6**

DATE MAY 14 2010

RECD. MAY 14 2010

California Energy Commission  
Attn: Docket No. 09AFC6  
1516 Ninth Street, MS-4  
Sacramento, CA 95814-5512

Re: 09-AFC-6 Blythe Solar Power Plant Project

Dear Docket Clerk:

Enclosed are an original and one copy of CALIFORNIA UNIONS FOR RELIABLE ENERGY DATA REQUESTS SET ONE. Please process the document and provide us with a conformed copy in the envelope provided.

Thank you.

Sincerely,

/s/

Tanya A. Gulesserian

TAG:bh  
Enclosures

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Re: Blythe Solar Power Project (09-AFC-6)  
CURE Data Requests, Set One (Nos. 1-157)

Dear Ms. Harron and Mr. Galati:

California Unions for Reliable Energy (CURE) submits this first set of data requests to Blythe Solar I, LLC for the Blythe Solar Power Project pursuant to Title 20, section 1716(b), of the California Code of Regulations. CURE requests this information (1) to assess issues not addressed in the Applicant's responses to California Energy Commission staff's data requests, the Staff Assessment/Draft Environmental Impact Statement (SA/DEIS), Applicant's initial comments regarding the SA/DEIS (and attachments thereto) and (2) to follow-up on issues raised at the workshops.

The requested information is necessary to: (1) more fully understand the project; (2) assess whether the project will be constructed and operated in

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May 14, 2010  
Page 2

compliance with all laws, ordinances, regulations and standards; (3) assess whether the project will result in significant environmental impacts; (4) assess whether the project will be constructed and operated in a safe, efficient and reliable manner; and (5) assess potential mitigation measures.

CURE reserves the right to submit additional data requests and/or comments on any other topic that requires further information. Our reservation is based in part on matters beyond our control; principally, in response to the California Energy Commission staff's requests, the Applicant continues to file new information regarding the design of the project, potentially significant impacts in several resource areas, and the manner in which Project impacts will be mitigated.

Pursuant to section 1716(f) of the Energy Commission's regulations, written responses to these requests are due within 30 days. If you are unable to provide, or object to providing, the requested information by the due date, you must send a written notice of your objection(s) and/or inability to respond, together with a statement of reasons, to Commissioners Douglas and Weisenmiller and to CURE within 20 days.

Please contact us if you have any questions. Thank you for your cooperation with these requests.

Sincerely,

/s/

Tanya A. Gulesserian  
Elizabeth Klebaner

TAG:bh  
Enclosure

cc: Docket (09-AFC-6)  
Proof of Service List (09-AFC-6)

**STATE OF CALIFORNIA  
California Energy Commission**

In the Matter of:

The Application for Certification  
for the Blythe Solar Power Plant Project

Docket No. 09-AFC-6

**CALIFORNIA UNIONS FOR RELIABLE ENERGY  
DATA REQUESTS, SET FOUR**

May 14, 2010

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Attorneys for the CALIFORNIA UNIONS  
FOR RELIABLE ENERGY



The following data requests are submitted by California Unions for Reliable Energy. Please provide your responses as soon as possible, but no later than June 14, 2010, to each of the following people:

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Please identify the person who prepared your responses to each data request. If you have any questions concerning the meaning of any data requests, please let us know.

## CURE Data Requests Set #1

### BIOLOGICAL RESOURCES

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#### Definitions:

The Applicant defines the Biological Resources Study Area (BRSA) as the approximately 7,027 acres inside and outside the facility fence line that would be disturbed by Project construction and operation (disturbance area) plus a 1-mile buffer around the disturbance area for a total of approximately 18,998 acres. The facility footprint (area within the fence line only) would be approximately 5,952 acres.<sup>1</sup>

The Applicant describes the “action area,” or “Project action area,” as all areas to be affected directly or indirectly by full implementation of the Federal action (i.e., the Project). The action area is composed of the Project disturbance area (i.e., area of anticipated ground disturbance associated with the Project, including the 33.3-acre substation), totaling 7,076.6 acres, and a buffer area (1-mile buffer of non-linear Project elements [e.g., solar fields, power block] and a 1,000-foot buffer of linear Project elements [i.e., transmission line]).<sup>2</sup>

For clarity, these data requests will refer to the original BRSA as the “northern portion of the action area.” The data request will refer to the remainder of the action area (i.e. the transmission line, substation and buffers surrounding these facilities) as the “southern portion of the action area.”

#### Background: GENERAL WILDLIFE SURVEYS

The AFC states that “general wildlife surveys” were conducted concurrently with vegetation mapping and protocol surveys for desert tortoise and Western burrowing owl in the northern portion of the action area.<sup>3</sup> The purpose of these surveys was to “document all wildlife species observed on site and to assess the suitability of the site to support special-status wildlife species.” The Applicant suggests that incidental observations of wildlife during other surveys should qualify as a general wildlife survey. However, Energy Commission Staff (“Staff”) recently found that botanical survey results for the Imperial Valley Solar Project (formerly Solar Two) were not adequate to assess presence or absence of plant species within the project area because surveys were conducted concurrently with wildlife surveys when the focus and methods may be different.<sup>4</sup>

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<sup>1</sup> Biological Resources Technical Report, Appendix F, p. 1.

<sup>2</sup> Blythe Solar Power Project Draft Biological Assessment, p. 29.

<sup>3</sup> AFC, p. 5.3-13.

<sup>4</sup> Staff Assessment and Draft Environmental Impact Statement, SES Solar Two Project, California Energy Commission Docket No. 08-AFC-5 p. C.2-3, C.2-20.

## **Data Requests:**

1. Please indicate whether agency biologists have agreed that the concurrent survey approach used by the Applicant was appropriate to document the presence, abundance, and distribution of sensitive biological resources on the Project site and buffers, and identify the name of the biologist(s).
2. Please provide the resume of each person that performed “general wildlife surveys.”
3. Please describe how incidental observations during other protocol surveys are sufficient to document the presence, abundance, and distribution of special-status species.
4. Please provide the person-hours spent surveying, by date and biologist, for each of the following survey efforts:
  - a. vegetation community mapping;
  - b. rare plant surveys;
  - c. Desert tortoise;
  - d. Western burrowing owl (WBO) Phase II;
  - e. WBO Phase III;
  - f. Mojave fringe-toed lizard;
  - g. general wildlife surveys;
  - h. avian point count surveys;
  - i. delineation of wetlands and jurisdictional waters.

## **Background: IMPACTS TO MOJAVE FRINGE-TOED LIZARDS**

The Mojave fringe-toed lizard (MFTL) is a California Species of Special Concern. The Applicant notes that the MFTL can be found in “both large and small dunes, margins of dry lakebeds and washes, and isolated dune pockets against hillsides (Stebbins 1944, 1985; Smith 1946; Norris 1958) and generally within creosote scrub desert habitat (Norris 1958; Stebbins 1985).”<sup>5</sup>

Suitable habitat for MFTL exists on the northern portion of the action area, and surveyors note the detection of the MFTL in this area during spring 2009 surveys (prior to substation and transmission line surveys in the southern portion of the action area), yet the AFC fails to include any discussion of the abundance,

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<sup>5</sup>Streambed Alteration Agreement Application, November 25, 2009, Blythe Supplemental Biological Resources Survey Report. p. 11.



habitat suitability, impacts, or mitigation and avoidance measures for this species on the northern portion of the action area.<sup>6,7</sup>

In responses to Staff's data requests, dated January 6, 2010, the Applicant states that "Project biologists also incidentally detected Mojave MFTL" during focused DT surveys conducted in the Fall of 2009" on the southern portion of the action area.<sup>8</sup> Approximately 15 of a total of 57 MFTLs were found within the location proposed for the substation.<sup>9</sup> The Applicant's responses to Staff's data requests identify potential occupied habitat and Project impacts to the MFTL, and propose mitigation and avoidance measures to reduce impacts to the MFTL, but only in regards to the southern portion of the action area.<sup>10, 11, 12</sup>

Although resource agencies have not issued survey guidelines for the MFTL, Jones and Lovich (2009) indicate that MFTLs are most commonly detected from late spring (May) through early fall (into October).<sup>13</sup> Because MFTLs are generally difficult to detect, they are more easily detected by teams of at least two people.<sup>14</sup> The Applicant's Mitigation and Monitoring Plan states that monitoring for MFTL would follow the following protocol:

"Transects should be walked between March and September when temperatures exceed 79°F. Transects should be walked by two monitors located on either side of the focal habitat roughly 7-9 m apart to maximize potential for species observation (Stebbins 2003). All MFTL and sign of MFTL activity, such as tracks, should be noted and any problems identified during survey efforts should be addresses within the adaptive management plan."<sup>15</sup>

In the past, CDFG and FWS have required both pitfall trapping and intensive area searches to effectively survey Colorado Desert fringe-toed lizards (which have habits

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<sup>6</sup> AFC, Appendix F. (EDAW AECOM. 2009 Aug. Biological Technical Report: Blythe Solar Power Project: Riverside County, CA). Attachment 5, p. 5-1.

<sup>7</sup> AFC, Appendix F. (EDAW AECOM. 2009 Aug. Biological Technical Report: Blythe Solar Power Project: Riverside County, CA). Blythe Solar Power Project Desert Tortoise Technical Report. p. 10

<sup>8</sup> Applicant's Responses to CEC Data Requests Set 1, Vol. A, Biological Resources, January 6, 2010, Response to DR-BIO-79.

<sup>9</sup> *Id.*

<sup>10</sup> *Id.* at Response to DR 45-97; *Id.* at Figure DR-BIO-79.

<sup>11</sup> *Id.* at Response to DR 45-97; *Id.* at Figure DR-BIO-80 Mojave Fringe-toed Lizard Survey Results Overview map, and Sheets 1 through 3.

<sup>12</sup> *Id.* at Response to DR 45-97 and Response DR-BIO 80.

<sup>13</sup> Jones LC, RE Lovich, eds. 2009. Lizards of the American Southwest: A Photographic Field Guide. Rio Nuevo Publishers, Tucson (AZ). 567 pp.

<sup>14</sup> *Id.*

<sup>15</sup> Blythe Solar Power Project Mitigation and Monitoring Plan, at p. 25.

similar to MFTL).<sup>16</sup> These surveys were to be conducted monthly between March and November.<sup>17</sup>

It appears that the Applicant does not intend to resurvey the northern portion of the Project area for MFTL. On April 22, 2010, the Applicant submitted survey protocols and methodologies, for surveys now being undertaken by the Applicant.<sup>18</sup> The spring 2010 surveys would be used to update and fully characterize the existing biological resources conditions on the Project site, as requested by the California Energy Commission and other state and federal wildlife agencies.<sup>19</sup> The Applicant submitted preliminary survey results in response to Staff's request at the April 28 Workshop, which are limited to Desert tortoise, rare plants and jurisdictional waters surveys.<sup>20</sup>

### **Data Requests:**

5. Please discuss how incidental observations are sufficient to establish baseline conditions of MFTL within the Project action area.
6. Please provide the criteria used to define potential habitat for the MFTL.
7. Please discuss whether the Applicant's approach for monitoring MFTL in the Mitigation and Monitoring Plan will be used to establish baseline conditions in the Project action area.
8. Please discuss whether the CDFG and FWS approach for surveying MFTL, including pitfall trapping and intensive area searches, will be used to establish baseline conditions in the Project action area.
9. Please describe all systematic survey methods that were used to detect MFTL in the Project action area.

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<sup>16</sup> CH2MHILL. 2002. Final Environmental Impact Report /Environmental Impact Statement. Imperial Irrigation District: Water Conservation and Transfer Project. Appendix F. Available at: [iid.com/Media/Appendix-F-General.pdf](http://iid.com/Media/Appendix-F-General.pdf).

<sup>17</sup> *Id.*

<sup>18</sup> However, the Applicant erroneously docketed the protocols for the Palen Solar Power Project, also proposed by Solar Millennium, LLC, in this proceeding. Letter from Bill Graham, AECOM to Rick York, California Energy Commission, regarding spring survey protocols for the Blythe Solar Power Project, April 22, 2010.

<sup>19</sup> *Id.*

<sup>20</sup> Letter from Bill Graham, AECOM to Susan Sanders, California Energy Commission, regarding preliminary Spring 2010 survey results for the Desert Tortoise, Rare Plants, and Jurisdictional Waters, May 7, 2010.

10. Please describe whether the habitat suitability mapping conducted for the southern portion of the action area will be conducted for the northern portion of the action area.
11. Please indicate how many acres of suitable MFTL habitat are present in the northern portion of the action area and provide the criteria that were used to define suitable habitat.
12. The exact locations of certain MFTL detections were to be provided via a shape file database, however this information has not been served.<sup>21</sup> Please provide the time, date and location of each MFTL detection during the Applicant's spring 2009 surveys of the northern portion of the action area.
13. Please provide a description of suitable MFTL habitat and proposed mitigation measures for impacts to MFTL in the northern portion of the action area.

### **Background: OTHER SPECIAL-STATUS SPECIES**

The Northern and Eastern Colorado Desert Coordinated Management (NECO) Plan contains range maps for the Colorado Valley woodrat, a species protected by the NECO Plan; the rosy boa, a BLM Sensitive species; the chuckwalla, a species covered by the NECO Plan; the vermilion flycatcher, a California Species of Special Concern; and the Yuma mountain lion, a California Species of Special Concern.<sup>22</sup> The maps show that the range of these special status species includes the proposed Project action area. With the exception of a brief mention of the mountain lion, the AFC does not address the potential occurrence of these species. The AFC does not address the project impacts or propose mitigation measures for any of these species.

### **Data Requests:**

14. Please discuss the potential for suitable habitat and occurrence of the Colorado Valley woodrat within the Project action area.
15. Please discuss the potential for suitable habitat and occurrence of the rosy boa within the Project action area.

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<sup>21</sup> Applicant's Responses to CEC Data Requests Set 1, Vol. A, Biological Resources, January 6, 2010, Response to DR-BIO-80.

<sup>22</sup> BLM and CDFG. 2002. Final Environmental Impact Statement. Proposed Northern & Eastern Colorado Desert Coordinated Management Plan. Bureau of Land Management, California Desert, Riverside, CA.

16. Please discuss the potential for suitable habitat and occurrence of the chuckwalla within the Project action area.
17. Please discuss the potential for suitable habitat and occurrence of the vermilion flycatcher within the Project action area.
18. Please provide a discussion of potential impacts to the Colorado Valley woodrat.
19. Please provide a discussion of potential impacts to the desert rosy boa.
20. Please provide a discussion of potential impacts to the chuckwalla.
21. Please provide a discussion of potential impacts to the vermilion flycatcher.
22. Please provide a discussion of potential impacts to the Yuma mountain lion.
23. Please provide a discussion of mitigation for impacts to the Colorado Valley woodrat.
24. Please provide a discussion of mitigation for impacts to the desert rosy boa.
25. Please provide a discussion of mitigation for impacts to the chuckwalla.
26. Please provide a discussion of mitigation for impacts to the vermilion flycatcher.
27. Please provide a discussion of mitigation for impacts to the Yuma mountain lion.

### **Background: POTENTIAL VERMILION FLYCATCHER DETECTION**

On an April 12, 2009 bird survey, the Applicant's consultant detected a "Dusk/Gray type Flycatcher" in Sonoran creosote bush scrub habitat, however Applicant's submittals do not address the potential for what species this could be.<sup>23</sup> The vermilion flycatcher, a California Species of Special Concern, inhabits scrub, desert, cultivated lands, and riparian woodlands. The female vermilion flycatcher is described as having grayish brown upperparts, with breast, sides, and flanks

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<sup>23</sup> AFC, Appendix F. (EDAW AECOM. 2009 Aug. Biological Technical Report: Blythe Solar Power Project: Riverside County, CA). Point Count ID: M5 at 6:41 a.m.

streaked with grayish brown, and dark grayish brown wings and tail.<sup>24</sup> The NECO Plan range map for the vermilion flycatcher shows that this species' range includes the proposed action area.<sup>25</sup> Furthermore, the AFC provides a figure showing the presence of three vermilion flycatchers several miles to the east of the BRSA.<sup>26</sup>

### **Data Requests:**

28. Please discuss the potential for the "Dusk/Gray type Flycatcher" detected on April 12, 2009 to have been a female vermilion flycatcher, including any diagnostic characteristics that were used to exclude the possibility that the bird detected was a vermilion flycatcher.

### **Background: IMPACTS TO WOODPECKERS**

Both the Gila woodpecker and the gilded flicker are endangered under CESA. However, these woodpeckers inhabit desert wash and desert riparian areas in the Colorado River Valley, of which there is at least 128 acres on the northern portion of the action area.<sup>27</sup> The AFC states that the Gila woodpecker and gilded flicker have a low potential to occur on site as residents due to the low suitability and poor quality of habitat and distance from known populations.<sup>28</sup> However, four woodpecker nest cavities were observed within the BRSA, three within the buffer and one within the proposed disturbance area.<sup>29, 30</sup> Additionally, during reconnaissance level surveys for bats, biologists observed tree cavities in the northeast of the BSPP site that, after closer inspection, were determined to probably be woodpecker cavities.<sup>31</sup>

The Applicant has not provided information regarding which woodpecker species are associated with these nest cavities. The nearest CNDDDB records of

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<sup>24</sup> Cornell Lab of Ornithology: All About Birds.

[http://www.allaboutbirds.org/guide/Vermilion\\_Flycatcher/id](http://www.allaboutbirds.org/guide/Vermilion_Flycatcher/id)

<sup>25</sup> BLM and CDFG. 2002. Final Environmental Impact Statement. Proposed Northern & Eastern Colorado Desert Coordinated Management Plan. Bureau of Land Management, California Desert, Riverside, CA.

<sup>26</sup> AFC, Figure 4, Biological Resources Regional Database.

<sup>27</sup> AFC, p. 5.3-36; California Wildlife Habitat Relationships System. California Department of Fish and Game. California Interagency Wildlife Task Group. Life history account for Gilded Flicker, by T. Kucera 1997; California Wildlife Habitat Relationships System. California Department of Fish and Game. California Interagency Wildlife Task Group. Life history account for Gila Woodpecker by M. Green.

<sup>28</sup> AFC, p. 5.3-31.

<sup>29</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, Response to DR-BIO-52.

<sup>30</sup> Streambed Alteration Agreement Application, November 25, 2009, Blythe Solar Power Project Biological Resources Technical Report. p. 68.

<sup>31</sup> Applicant's Responses to CEC Data Requests Set 1, January 6, 2010, Response to DR-BIO-45-97 and Response to DR-BIO-52.

woodpeckers in the vicinity are the Gila woodpecker and the gilded flicker.<sup>32</sup> The NECO Plan contains a range map showing the potential for the Gila woodpecker habitat to occur near or on the Project site.<sup>33</sup>

### **Data Requests:**

29. Please provide any and all documentation supporting the Applicant's conclusion that the Gila woodpecker and gilded flicker do not occur within the Project action area.
30. Please explain how the Applicant determined that the cavities found on the site do not belong to the Gila woodpecker and the gilded flicker, and please include a discussion of the techniques used and your results and conclusions.
31. Please provide the Applicant's strategy for mitigating direct and indirect Project impacts to Gila woodpeckers and gilded flickers.
32. Please state whether the Applicant consulted with any local birding experts or clubs that may have special knowledge of the presence of the Gila woodpecker or gilded flicker in the Project action area.
33. If the Applicant did consult with any local birding experts or clubs, please identify the individuals that were consulted.
34. Please provide the GPS coordinates of the nesting cavities observed within the Project action area.

### **Background: IMPACTS TO YELLOW WARBLERS**

The yellow warbler is a California Species of Special Concern. Two male yellow warblers were detected within the Project area during spring 2009 surveys.<sup>34</sup> The Applicant states that yellow warblers can be permanent or summer residents in the Colorado Desert but concludes that the detected birds are nonbreeding visitors to the site because of the absence of suitable habitat.<sup>35</sup> The March 2010 Staff Assessment Draft Environmental Impact Statement (SA/DEIS) appears to rely on

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<sup>32</sup> Department of Fish and Game, Biogeographic Data Branch. 2009. California Natural Diversity Database Quickviewer.

<sup>33</sup> BLM and CDFG. 2002. Final Environmental Impact Statement. Proposed Northern & Eastern Colorado Desert Coordinated Management Plan. Bureau of Land Management, California Desert, Riverside, CA.

<sup>34</sup>AFC, 5.3-27

<sup>35</sup> Blythe Solar Power Project Avian Point Count Technical Report, p.8.

the Applicant's conclusion of the absence of suitable nesting habitat on the Project site.<sup>36</sup>

However, yellow warblers will breed in tamarisk communities and shrub habitats of intermediate height and density.<sup>37</sup> Tamarisk and desert dry wash woodland habitat of an intermediate height and density occurs in the Project action area and will be impacted by the Project.<sup>38</sup> At the April 28 and 29 Staff Assessment Workshop, Staff requested that the Applicant submit a revised Biological Resources Technical Report that fully evaluates Project impacts to biological resources. An assessment of the potential for the yellow warbler to breed within the Project area is also relevant and reasonably necessary to determine the Project's impacts to the yellow warbler.

### **Data Requests:**

35. Please provide all information supporting the conclusion in the AFC that the yellow warblers detected within the Project area are migrants.
36. Please provide the date each yellow warbler was detected, and if possible, information on each bird's behavior.
37. Please justify conclusion that the tamarisk and desert dry wash woodland occurring within the Project area does not provide suitable breeding habitat for the yellow warbler.
38. Please provide a discussion of Project impacts on yellow warbler breeding and migratory stopover habitat.
39. Please discuss the Applicant's proposed measures for mitigating impacts to yellow warblers and their habitat.

### **Background: IMPACTS TO THE SWAINSON'S HAWK**

The AFC states that the Swainson's hawk, a CESA threatened species, was not detected but has a high potential to occur within the BRSA.<sup>39</sup> The SA/DEIS states that the "Project may provide foraging habitat for migrating [Swainson's hawk] individuals."<sup>40</sup> The Applicant includes the Swainson's hawk among the

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<sup>36</sup> Staff Assessment and Draft Environmental Impact Statement for the Blythe Solar Power Project, Applicant for Certification 09-AFC-6, March 11, 2010, Biological Resources Table 4, p. C.2-46 and p. C.2-67. ("SA/DEIS").

<sup>37</sup> Brown BT, MW Trosset. Nesting-habitat relationships of riparian birds along the Colorado River in Grand Canyon, Arizona [USA]. *Southwestern Naturalist*, v.34, n.2, 1989:260-270.

<sup>38</sup>AFC, p. 5.3-15.

<sup>39</sup>AFC, p. 5.3-26.

<sup>40</sup> SA/DEIS, Biological Resources Table 4, p. C.2-46.

raptor species that have been observed within the Project area, but does not describe the date, time, or location of the sighting(s).<sup>41</sup> The AFC does not include an analysis of Project impacts to the Swainson's hawk.

**Data Requests:**

40. Please provide location, date, time, and number of detections of the Swainson's hawk
41. Please describe potential direct, indirect, and cumulative impacts to the Swainson's hawk.
42. Please describe mitigation for impacts to the Swainson's hawk

**Background: IMPACTS TO THE PRAIRIE FALCON**

In assessing project impacts under CEQA, the agency is required to consider the project's direct physical changes to the environment as well as the reasonably foreseeable indirect physical changes caused by the Project.<sup>42</sup> An indirect physical change in the environment is not immediately related to the project but is caused indirectly by the project. The prairie falcon, a California Watch List species, is a yearlong resident and has historically bred in the NECO planning area.<sup>43, 44</sup> The SA/DEIS states that, "Prairie falcons were observed during surveys, and the entire Project Disturbance Area (7,077 acres) contains suitable foraging habitat for this species."<sup>45</sup> The SA/DEIS also states that the Project site does not contain suitable nesting habitat but that the mountains adjacent to the Project may.<sup>46</sup>

The Applicant includes the prairie falcon among the raptor species observed on the site.<sup>47</sup> However, the Applicant does not describe the date, time, or location of the sightings. Furthermore, the Applicant does not address impacts to this species. Information regarding the Project's direct and indirect impacts to the prairie falcon is relevant and reasonably necessary to determine the Project's impacts to Prairie falcons occurring within the Project action area and in its vicinity.

43. Please provide location, date, time, and number of detections of the prairie falcon.

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<sup>41</sup> Appendix F, Attachment G.

<sup>42</sup> Cal. Code Regs., tit. 14, § 15064(d).

<sup>43</sup> California Wildlife Habitat Relationships System, Range map.

<sup>44</sup> NECO Plan p. 3-18.

<sup>45</sup> SA/DEIS, Biological Resources Table 4, p. C.2-46.

<sup>46</sup> *Id.*

<sup>47</sup> Appendix F, Attachment G.



44. Please describe potential direct, indirect, and cumulative impacts to the prairie falcon.
45. Please describe mitigation for impacts to the prairie falcon.

### **Background: COLLISION AND ELECTROCUTION HAZARDS**

Avian collision with structures and power lines is a significant and ongoing problem in the United States. Collision with structures kills an estimated 550 million birds a year and power lines kill another estimated 130 million per year.<sup>48</sup> Electrocutation from power lines is known to be a mortality hazard to birds, especially birds of prey. Various raptors have been detected on the site and have the potential to occur on the site.<sup>49, 50, 51</sup> The SA/DEIS also notes a potential for electrocution risk to golden eagles as a result of the Project.<sup>52</sup> The AFC lacks a discussion of these impacts and the mitigation the Applicant will provide to minimize them.

The potential for electrocution risk depends, in part, on the design of the Applicant's proposed transmission line.<sup>53</sup> The SA/DEIS provides a description of the Applicant's proposed transmission line, citing to the AFC.<sup>54</sup> However, at the April 28 and 29 Staff Assessment workshop, representatives from the Riverside County Airport Land Use Commission (RCALUC) indicated that Applicant's proposed transmission line may have to be built partially underground to avoid obstruction of a commonly used runway in the Blythe Airport. Representatives from the RCALUC also indicated that the height of the proposed transmission line poles is inconsistent with the airport zoning requirements. These matters were scheduled to be heard by the RCALUC on May 13, 2010.

### **Data Requests:**

46. Please discuss the avian collision risk that will result from the Project.
47. Please identify the proposed design changes to the transmission line intended to reduce or eliminate conflicts with the operation and zoning requirements of the Blythe Airport and the impacts that such changes may have on the potential for avian collision risk.

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<sup>48</sup> Erickson WP, GD Johnson, and DP Young. 2005. A Summary and Comparison of Bird Mortality from Anthropogenic Causes with an Emphasis on Collisions. USDA Forest Service Gen. Tech. Rep. PSW-GTR-191.

<sup>49</sup> AFC, Appendix F, Attachment H: Avian Point Count Survey Technical Report. p. 8.

<sup>50</sup> AFC, Appendix F, Attachment G.

<sup>51</sup> AFC, Appendix F, Attachment 5.

<sup>52</sup> SA/DEIS, p. C.2-75.

<sup>53</sup> *See id.*

<sup>54</sup> *Id.*

48. Please state whether the Applicant intends to employ Project-specific design measures in addition to those proposed by Staff in Condition of Certification BIO-8<sup>55</sup> to mitigate potential avian collision hazards with respect to the Project structures and the proposed transmission line.
49. Please indicate whether the applicant will implement the latest Avian Protection Plan (APP) Guidelines.

### **Background: BAT SURVEY EFFORTS**

The AFC states that unidentified bats were observed foraging within the BRSA and that roosting habitat for pallid bats is present in tree cavities in the southeastern portion of the site.<sup>56</sup> The Applicant's response to CEC Data Request 52 describes reconnaissance level surveys, conducted over two days by two biologists to evaluate potential roost sites for bats. These surveys found suitable roosting habitat for bats, including in the foothills and washes with large trees within the western portions of the BSPP, and in the McCoy wash to the northeast of the Project site in the buffer, yet the Applicant concludes that there is a low potential for a maternity colony of bats to occur within the BRSA.<sup>57</sup>

The Applicant has not conducted surveys utilizing bat detectors, night vision, mist-nets, or harp traps.<sup>58</sup> Furthermore, surveyors do not appear to have been present during the three-hour period after sunset.<sup>59</sup> The Applicant recommends a preconstruction clearance survey to ensure no maternity colonies or major roost sites would be impacted.<sup>60</sup>

The SA/DEIS concludes, based on the limited information provided by the Applicant, that the Project action area contains suitable habitat for the pallid bat.<sup>61</sup> Specifically, the SA/DEIS states that, "primary suitable habitat for bats in the area includes washes with large trees within the western portions of the BRSA in the foothills and washes and in the McCoy Wash in the northeastern portion of the Project site."<sup>62</sup> The SA/DEIS does not consider direct impacts to bats as a result of

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<sup>55</sup> SA/DEIS, p. C.2-123.

<sup>56</sup> AFC, p. 5.3-28.

<sup>57</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-52.

<sup>58</sup> See Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR 45-97 and Response to DR-BIO-52.

<sup>59</sup> *Id.*

<sup>60</sup> *Id.*

<sup>61</sup> SA/DIES, Biological Resources Table, p. C.2-48.

<sup>62</sup> *Id.*

the Project. However, the SA/DEIS finds Project impacts to bats to be cumulatively significant.<sup>63</sup>

The Inventory, Mapping, and Assessment Program (IMAP) of California State Parks has developed inventory and monitoring protocols for bats. To conduct reconnaissance level surveys, the protocol calls for using bat detectors and/or night vision at predicted high use sites or along roads or trails.<sup>64</sup> To determine baseline conditions, i.e. what bat species are using the area, the protocol methods call for the use of bat detectors and/or night vision, as well as mist-net or harp traps.<sup>65</sup> A study in the Northwest Territories of Canada found that the minimum sampling time to achieve an 80% inventory of bat species is during the three-hour period immediately after sunset.<sup>66</sup>

### **Data Requests:**

50. Please describe whether surveyors used any systematic protocols to survey for bats on the BRSA.
51. Please note the time of day in which surveyors conducted reconnaissance level surveys
52. Please describe the justification for foregoing the use of bat detectors (Anabat/Sonobat) during surveys of the BRSA.
53. Please describe ability to adequately assess baseline conditions of bats without the use of bat detectors, night vision, mist-nets, or harp traps.
54. Please provide person-hours spent conducting bat surveys
55. Please indicate whether the BLM or FWS were consulted for information on the occurrence of known bat roost sites on the Project site and within the Project vicinity.
56. Please describe what methods will be used to conduct recommended preconstruction clearance survey.

### **Background: IMPACTS TO BATS**

The NECO plan contains maps that suggest the Project area is within the

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<sup>63</sup> *Id.*, p. C.2-68.

<sup>64</sup> <http://www.parks.ca.gov/pages/734/files/imap%20bats%20protocol%20table%20.pdf>.

<sup>65</sup> <http://www.parks.ca.gov/pages/734/files/imap%20bats%20protocol%20table%20.pdf>.

<sup>66</sup> Milne, D.J. et al. 2004. *Wildlife Research*. A comparison of three survey methods for collecting bat echolocation calls and species-accumulation rates from nightly Anabat recordings. 31, 57-63.

range of the California leaf-nosed bat, pallid bat, Townsend's big-eared bat, Western mastiff bat, pocketed free tailed bat, and cave myotis.<sup>67</sup>

The AFC describes the far western portion of the disturbance area, at the base of the adjacent mountains, as characterized by steep, rocky canyons, and states that the BRSA contains over 650 acres of desert dry wash woodland.<sup>68, 69</sup> However, the AFC does not address the impacts to any bat species noted here despite evidence of bat presence within the Project action area, including detections of bats during Project surveys, presence of suitable habitat for the pallid bat within the Project action area, as well as range maps showing potential presence of numerous bat species.<sup>70</sup>

The SA/DEIS considers all habitat within the Project Disturbance Area as suitable for the California leaf-nosed bat.<sup>71</sup> The Western mastiff bat, a California Species of Special Concern, will roost in crevices and shallow caves on the sides of cliffs and rock walls, and occasionally buildings.<sup>72</sup> In response to Staff's data requests, the Applicant concludes that the Western mastiff has the potential to forage but not roost within the Project area.<sup>73</sup> The pocketed free-tailed bat, a California Species of Special Concern, prefers rock crevices in cliffs as roosting sites.<sup>74</sup> The Applicant does not address the potential for pocketed free-tailed bat to occur on the Project area. However the SA/DEIS provides that individual bats of this species were detected acoustically during April 2002.<sup>75</sup>

### **Data Requests:**

57. Please explain why the steep, rocky canyon at the far western portion of the disturbance area does not provide suitable roosting habitat for the Western mastiff bat.
58. Please address the potential for the pocketed free-tailed bat to occur on this site and provide justification, with citations to scientific literature, if

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<sup>67</sup> BLM and CDFG. 2002. Final Environmental Impact Statement. Proposed Northern & Eastern Colorado Desert Coordinated Management Plan. Bureau of Land Management, California Desert, Riverside, CA.

<sup>68</sup> AFC, p. 5.3-31.

<sup>69</sup> AFC, p. 5.3-15.

<sup>70</sup> See AFC, p. 5.3-28

<sup>71</sup> SA/DEIS, Biological Resources Table 4, p. C.2-47.

<sup>72</sup> NatureServe. 2009. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: March 9, 2010).

<sup>73</sup> Applicant's Responses to CEC Data Requests Set 1, Vol. A, Biological Resources, (January 6, 2010), Response to DR-BIO-52.

<sup>74</sup> California Wildlife Habitat Relationships System. 2000. California Department of Fish and Game. California Interagency Wildlife Task Group. Life history account for Pocketed Free-tailed Bat.

<sup>75</sup> SA/DEIS, Biological Resources Table 4, p. C.2-48.

possible, for your conclusions.

59. Please describe the Project's impacts on the foraging and roosting habitat of the Western mastiff bat.
60. Please describe the Project's impacts on the foraging and roosting habitat of the pocketed free tailed bat.
61. Please describe the Project's impacts on the foraging habitat of the Townsend's big-eared bat, a California Species of Special Concern and BLM Sensitive species.
62. Please describe the Project's impacts on foraging habitat of the California leaf-nosed bat, a California Species of Special Concern and BLM Sensitive species.
63. Please describe the Project's impacts on the foraging habitat of the cave myotis, a California Species of Special Concern and BLM Sensitive species.

### **Background: IMPACTS TO COUCH'S SPADEFOOT TOAD**

The Applicant notes that the Project area occurs within the range of the Couch's spadefoot toad and that the Project area contains sufficient forage (termites and other insects) to support this species.<sup>76</sup> An essential element for this species to successfully breed on-site is artificial or temporary water catchments that would allow for ponding of water for a sufficient duration for tadpoles to metamorphose into frogs.<sup>77</sup> The length of time for metamorphosis to occur for Couch's spadefoot is dependent on temperature but can be as short as nine days.<sup>78</sup>

The Applicant states that the soils on the site have high infiltration rates, a low potential for surface ponding, and that the Applicant's consultant did not observe evidence of seasonal ponding during surveys in the 2009 season.<sup>79</sup> Based on the foregoing, the Applicant concludes that this species is not expected within the disturbance area.<sup>80</sup>

However, the Applicant notes that ponding of water may have a potential to occur where service road crossings go over channels or swales within the Project area.<sup>81</sup> Additionally, the Applicant states that the Sonoran Creosote Bush Scrub

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<sup>76</sup> Applicant's Responses to CEC Email Query, January 28, 2010.

<sup>77</sup> *Id.*

<sup>78</sup> Applicant's Responses to CEC Email Query, January 28, 2010.

<sup>79</sup> *Id.*

<sup>80</sup> *Id.*

<sup>81</sup> *Id.*

community is characterized by sandy soils with a shallow clay pan and notes the presence of a caliche burrows (a cavity eroded or excavated into a hard calcium carbonate [caliche] soils) within the BRSA.<sup>82, 83</sup> Clay pans are defined as a clay layer in the soil that restricts downward movement of water and growth of roots.<sup>84</sup> However, the Applicant does not consider the potential of the described claypan or caliche burrows to pond water. The Applicant does not provide information about whether surveys were close enough to rainfall events to detect the brief ponding that would be necessary for this species to breed.<sup>85</sup>

The breeding sites of Couch's spadefoot toads are potentially vulnerable to disturbance that alters the percolation characteristics of the substrate.<sup>86</sup> If Couch's spadefoot toads occur off-site, they may be indirectly impacted by the Applicant's proposed alterations to the local hydrology. In addition, the Applicant does not consider the home range of the toads or the potential for them to migrate onto the site for foraging while breeding in nearby ponds.

The AFC lacks information on these potential direct and indirect Project impacts to the species.

The SA/DIES does not rule out the potential for this species to occur or breed within the Project action area. The SA/DEIS states that "because surveys were not conducted during the proper season (i.e., after summer rains), the [Applicant's] lack of observations does not suggest the species is absent from the Project site."<sup>87</sup> The SA/DEIS further provides that, "in comparing site aerials to aerial photographs of a known historical location [] and from limited staff reconnaissance surveys, staff currently concludes that there is limited potential for breeding habitat at the Project site." However, more information regarding the potential for breeding ponds on or off-site would be relevant and reasonably necessary to assess Project impacts to the Couch's spadefoot toad in light of the limited information that has been provided by the Applicant.<sup>88</sup>

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<sup>82</sup> AFC, p. 5.3-30.

<sup>83</sup> AFC, p. 5.3-16.

<sup>84</sup> Webster's New World College Dictionary Copyright © 2009 by Wiley Publishing, Inc., Cleveland, Ohio.

<sup>85</sup> Additionally, records provided by the Applicant show that the site only received 66% of average precipitation from November through April. Table DR-BIO-94.

<sup>86</sup> Jennings MR, MP Hayes. 1994. Amphibian and reptile species of special concern in California. Rancho Cordova, CA: California Dept. of Fish and Game, Inland Fisheries Division.

<sup>87</sup> SA/DEIS, p. C.2-30.

<sup>88</sup> See SA/DEIS, p. C.2-31 ("the general characteristics of the soils at the site as permeable is insufficient to eliminate the possibility of suitable habitat") ("micro-site characteristics within the landscape, that may not be detectable other than by specific surveys, may allow for ponding and provide suitable breeding habitat") ("if breeding ponds occur off-site within adult dispersal distance, adults could occur on the Project site wherever there are friable soils suitable for burrowing").

## Data Requests:

64. Please address the potential for the claypan present on the site to create ponding.
65. Please provide observation data of ponding potential after a rainfall event, including amount of rain and how long after the rainfall the site was visited.
66. Please state whether caliche burrows will pond water.
67. Please state whether low rainfall in 2009 could have affected the lack of observed pooling.
68. Please describe the home range of Couch's Spadefoot toad and its migration potential.
69. Please provide the methods that were used to identify any artificial or temporary water catchments that could serve as breeding pools for Couch's spadefoot toad, including the criteria that were used to identify potential breeding pools.
70. Please provide a map identifying the specific locations that were visually inspected for Couch's spadefoot breeding pools.

## Background: IMPACTS TO ALVERSON'S FOXTAIL CACTUS (*CORYPHANTHA ALVERSONII*)

Alverson's foxtail cactus or foxtail cactus (*Coryphantha alversonii*) is known to occur in Sonoran desert scrub, sandy or rocky, usually granitic soils.<sup>89</sup> A reference population was visited in an area of relatively undisturbed Sonoran creosote bush scrub on granitic rock adjacent to a mining operation.<sup>90</sup> The BRSA is mostly composed of Sonoran creosote scrub and a soil type that is similar to the occurrence of the reference population.<sup>91</sup> However, the Applicant states that habitat for this species is not present within the transmission line and substation disturbance areas, and does not list the species as having the potential to occur in

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<sup>89</sup> California Native Plant Society (CNPS). 2010. Inventory of Rare and Endangered Plants (online edition, v7-10a). California Native Plant Society. Sacramento, CA. Accessed on Fri, Mar. 19, 2010 from <http://www.cnps.org/inventory>.

<sup>90</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, DR 45-97. DR-BIO-78.

<sup>91</sup> Blythe Solar Power Project Streambed Application Agreement. 11/25/2009. Attachment F: Blythe Solar Power Project Botanical Survey Report. p. 22.

the project area and buffer.<sup>92, 93</sup> The Applicant concludes that foxtail cactus is not expected within the BRSA “since the records close to the BRSA (9 miles northeast) are associated with mountainous areas in the Big Maria Mountains.”<sup>94</sup> Applicant’s vegetation survey track logs also show a disproportionate focus on desert wash riparian areas, areas that are not the ideal habitat for this species.<sup>95</sup>

### **Data Requests:**

71. Please provide justification that no habitat is present on the transmission and substation site despite similar habitat and soil type.
72. Please explain the conclusion that because the nearest reference population is found at the base of the Santa Maria Mountain range that foxtail cactus would not occur in the BRSA, which is at the base of the McCoy Mountain range.
73. Please explain how vegetation surveys, which focused in riparian wash areas, would have been able to detect foxtail cactus in drier and rockier areas of the BRSA.

### **Background: IMPACTS TO ANGEL TRUMPETS**

Angel trumpets are a CNPS List 2.3 species known to inhabit Sonoran desert scrub habitat and carbonate soils.<sup>96</sup> The AFC states that this species is not expected to appear on this site due to lack of appropriate soils for this species.<sup>97</sup> However, the AFC describes the occurrence of calcium carbonate [caliche] soils during the detection of a desert tortoise.<sup>98</sup>

The Applicant’s survey methodology calls for a description of reference site(s) visited and phenological development of the target special status plants, with an assessment of any conditions differing from the Project site that may affect their

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<sup>92</sup> Applicant’s Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR 45-97; *id.* at Table DR-BIO-81-1.

<sup>93</sup> Applicant’s Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR 45-97; *id.* at Table DR-BIO-95.

<sup>94</sup> Applicant’s Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR 45-97. Draft Blythe Solar Power Project Special Status Plant Species Avoidance and Mitigation Plan, p. 5.

<sup>95</sup> Applicant’s Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR 45-97, Figure DR-BIO-76.

<sup>96</sup> California Native Plant Society (CNPS). 2010. Inventory of Rare and Endangered Plants (online edition, v7-10a). California Native Plant Society. Sacramento, CA. Accessed on Fri, Mar. 19, 2010 from <http://www.cnps.org/inventory>.

<sup>97</sup> AFC, p. 5.3-19.

<sup>98</sup> AFC, p. 5.3-30.



identification.<sup>99</sup> However, the Applicant does not describe a visit to a reference site for angel trumpets before surveys.<sup>100</sup>

### **Data Requests:**

74. Please justify the conclusion that Angel Trumpets are not expected to be present on the site despite the observation of calcium carbonate soils.
75. Please note whether a reference population was visited for this species, and whether future botanical surveys will include a visit to a reference site for this species.
76. If a reference site was visited, please provide a description of the visited site.

### **Background: PRESENCE OF DWARF GERMANDER (*Teucrium cubense* ssp. *depressum*)**

Dwarf germander, a CNPS List 2.2 species, occurs in areas of desert dunes, playa margins, and Sonoran desert scrub, and has a blooming period from March to May.<sup>101</sup> The AFC states that the dwarf germander has a high potential to occur on the Project site because the soil conditions and elevation of the BRSA are in the range for this species. The Applicant later notes that the dwarf germander has low potential to occur within the transmission line and substation disturbance areas due to marginal suitable habitat.<sup>102, 103</sup> However, the transmission line and substation habitats are classified as Sonoran Creosote bush scrub, and stabilized and partially stabilized desert dunes.

The Applicant's survey methodology calls for a description of reference site(s) visited and phenological development of the target special status plants, with an assessment of any conditions differing from the Project site that may affect their

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<sup>99</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR –BIO- 81.

<sup>100</sup> *Id.* at Response to DR-BIO-78.

<sup>101</sup> California Native Plant Society (CNPS). 2010. Inventory of Rare and Endangered Plants (online edition, v7-10a). California Native Plant Society. Sacramento, CA. Accessed on Sat, Mar. 20, 2010 from <http://www.cnps.org/inventory>.

<sup>102</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-81.

<sup>103</sup> AFC, p. 5.3-22, Table 5.3-6.

identification.<sup>104</sup> However, the Applicant does not describe a visit to a reference site for dwarf germander before surveys.<sup>105</sup>

In response to Staff's request at the April 28 and 29 Staff Assessment workshop, the Applicant provided preliminary results of ongoing rare plant surveys. The preliminary results do not provide any additional information on the Dwarf germander.<sup>106</sup>

### **Data Requests:**

77. Please provide reference site visits conducted in preparation for survey of the dwarf germander.
78. If no visit was made, please justify the decision to forego a reference site visit.
79. Please explain the conclusion in the AFC that the dwarf germander has a low potential to occur on the substation and transmission line areas.

### **Background: VEGETATION SURVEY ADEQUACY – CONSIDERATION OF INTERANNUAL AND INTERSEASONAL VARIABILITY**

High variability of precipitation results in high variability of vegetation production within arid and semi-arid ecosystems.<sup>107</sup> Additionally, vegetation germination and growth is dependent on a complex interaction of biotic and abiotic factors. Variable abiotic factors such as soil properties and variable temperature and rainfall can lead to different vegetation communities from year to year.<sup>108</sup> Department of Fish and Game plant survey protocols note that surveys over a number of years may be necessary if the species is an annual plant having a persistent, long-lived seed bank and is known not to germinate every year.<sup>109</sup>

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<sup>104</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR -BIO-81.

<sup>105</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-78.

<sup>106</sup> Letter from Bill Graham, AECOM to Susan Sanders, California Energy Commission, regarding preliminary Spring 2010 survey results for the Desert Tortoise, Rare Plants, and Jurisdictional Waters, May 7, 2010.

<sup>107</sup> Ludwig, J.A., 1986. Primary production variability in desert ecosystems. In: Whitford, W.G. (Ed.), Pattern and Process in Desert Ecosystems. University of New Mexico Press, Albuquerque, New Mexico, 139pp.

<sup>108</sup> Ludwig, J.A., 1986. Primary production variability in desert ecosystems. In: Whitford, W.G. (Ed.), Pattern and Process in Desert Ecosystems. University of New Mexico Press, Albuquerque, New Mexico, 139pp.

<sup>109</sup> California Department of Fish and Game. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. November 24, 2009.

According to the Applicant's plant survey protocols, the failure to detect a known special status plant during one field season does not constitute evidence that the plant no longer occurs at this location.<sup>110</sup> This is true particularly if adverse conditions are present.<sup>111</sup> The Applicant also concedes that visits to the site in more than one year increase the likelihood of detection of a special status plant especially if conditions change.<sup>112</sup> The Applicant's botanical survey protocol also states that many times multiple visits to the same site (e.g. in early, mid, and late-season for flowering plants) are necessary to capture the floristic diversity at a level necessary to determine if special status plants are present.<sup>113</sup> Additionally, the Applicant's plant survey protocols call for a description of reference site(s) visited and phenological development of the target special status plants, with an assessment of any conditions differing from the Project site that may affect their identification.<sup>114</sup>

The Applicant conducted surveys in only one field season, and based on precipitation records, the survey area received only 67% of average precipitation from November through April.<sup>115</sup> The Applicant states that the bitter hymenoxys, glandular ditaxis, Abram's spurge, California ayenia, and Dwarf Germander—all special status plant species—have a high potential to occur in the action area, yet none were detected.<sup>116, 117, 118</sup> The Applicant states that the Flat-seeded spurge, the Harwood's woollystar, the Small-flowered androstephium, the Spearleaf, the Orocopia sage, and the Jackass clover—all special status plant species—have a moderate potential to occur in the action area, yet none were detected.<sup>119, 120, 121</sup> The Applicant does not identify visits to a reference site for any of the above listed species with the exception of the Adam's spurge.<sup>122</sup>

The Applicant concludes in the Botanical Survey Report that, "...plants received adequate moisture to bloom during the 2008–2009 growing season,"<sup>123</sup> that

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<sup>110</sup> California Department of Fish and Game. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. November 24, 2009.

<sup>111</sup> *Id.*

<sup>112</sup> *Id.*

<sup>113</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response, Attachment to Response to DR-BIO-95-B, p. 4 of 7.

<sup>114</sup> *Id.* at Response to DR-BIO-81.

<sup>115</sup> *Id.* at Response to DR-BIO-94, Table.

<sup>116</sup> *Id.* at Response to DR-BIO-88, Table.

<sup>117</sup> *Id.* at Response to DR-BIO-91.

<sup>118</sup> From Streambed Alteration Agreement Application, November 25, 2009, Blythe Solar Power Project Biological Resources Technical Report, August, 20, 2009, Table 3, p. 51.

<sup>119</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-88, Table.

<sup>120</sup> *Id.* at Response to DR-BIO-91.

<sup>121</sup> From Streambed Alteration Agreement Application. November 25, 2009, Blythe Solar Power Project Biological Resources Technical Report, August 20, 2009, Table 3, p. 51.

<sup>122</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-78.

<sup>123</sup> AFC, Appendix F. Botanical Survey Report.

“[i]t is likely that sensitive species would have been highly detectable during the field survey period” and that “the Project site was adequately evaluated for general and sensitive plant species in 2009.”<sup>124</sup> These conclusions appear arbitrary, given that the Applicant’s biologists did not comply with the Applicant’s own survey protocols.

Many plant species can only be identified during blooming season, however, the blooming period chart provided in response to Staff’s data requests does not include all special status species potentially occurring on the northern extent of the Project site.<sup>125, 126</sup>

### **Data Requests:**

80. Please explain the conclusion in the AFC that, despite below-average rainfall and nearly zero rainfall in January, March, and April of 2009, sensitive plant species were highly detectable.
81. Please provide your analyses of the risk that each of the following species may not have germinated in the year that the BRSA was surveyed:
  - a. Bitter hymenoxys
  - b. Glandular ditaxis
  - c. Abram's spurge
  - d. California ayenia
  - e. Dwarf Germander
  - f. Flat-seeded spurge
  - g. Harwood's woollystar
  - h. Small-flowered androstephium
  - i. Spearleaf
  - j. Orocopia sage
  - k. Jackass clover
82. Please describe the potential for each of the following potentially occurring special status plant species to not grow to the extent to be detectable in the years in which surveys have been performed:
  - a. Bitter hymenoxys
  - b. Glandular ditaxis
  - c. Abram's spurge

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<sup>124</sup> *Id.*

<sup>125</sup> Applicant’s Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response Response to DR-BIO-81-3, Table.

<sup>126</sup> Blythe Solar Power Project Botanical Survey Report. Table 3 Special Status Plant Species Potentially Occurring within the Project.

- d. California ayenia
  - e. Dwarf Germander
  - f. Flat-seeded spurge
  - g. Harwood's woollystar
  - h. Small-flowered androstephium
  - i. Spearleaf
  - j. Orocopia sage
  - k. Jackass clover
83. Please identify by year, date and subject species all reference site visits that were conducted by the Applicant's biologists to ensure detectability of the following special status species:
- a. Bitter hymenoxys
  - b. Glandular ditaxis
  - c. California ayenia
  - d. Dwarf Germander
  - e. Flat-seeded spurge
  - f. Harwood's woollystar
  - g. Small-flowered androstephium
  - h. Spearleaf
  - i. Orocopia sage
  - j. Jackass clover
84. Please provide a chart including blooming periods for all special status plants potentially occurring within the action area.

**Background: BOTANICAL SURVEYS OF ENTIRE BRSA vs. TRANSMISSION AND SUBSTATION**

The Applicant describes the potential for eleven CNPS List 1b, 2, and 4 special status plants to occur in the project disturbance area that were not identified as target species prior to Spring 2009 surveys (Pink velvet mallow, Bitter snakewood, Winged cryptantha, Harwood's woollystar, Flat-seeded spurge, Abram's spurge, Bitter hymenoxys, Small-flowered androstephium, Spearleaf, California ayenia).<sup>127, 128</sup> Four of these are late-season blooming rare plants that were not considered as target species in Spring 2009 botanical surveys of the northern portion of the action area (i.e. the original BRSA surveys).<sup>129</sup>

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<sup>127</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR- BIO -90.

<sup>128</sup> *Id.* at Response to DR-BIO -88.

<sup>129</sup> *Id.* at Response to DR-BIO-91.

The applicant acknowledges that the Spring 2009 botanical survey did not include the entire Project action area, and describes a CEC request to conduct focused botanical surveys of the entire BRSA [i.e. entire Project action area] in Fall 2010.<sup>130</sup> The Applicant is currently undertaking spring surveys, however the Applicant's submittals do not specify whether the Applicant intends to comply with Staff's request to conduct a focused botanical survey of the entire Project action area.<sup>131</sup> The Applicant has not yet docketed the Spring 2010 survey protocols and methodologies for this Project.<sup>132</sup>

The Applicant's botanical survey protocol states that many times multiple visits to the same site (e.g. in early, mid, and late-season for flowering plants) are necessary to capture the floristic diversity at a level necessary to determine if special status plants are present.<sup>133</sup> However, the Applicant does not state whether late-season plant surveys will be conducted for the northern portion of the action area.

The Applicant notes that expert consultation was performed in December 2009, and notes that voucher collections and reference sites are to be visited and studied prior to conducting spring 2010 field surveys.<sup>134</sup> However, these consultations are noted in response to a survey plan for the substation and transmission line. The Applicant does not provide information on whether any expert consultations or voucher specimens were visited prior to the Spring 2009 surveys of the northern portion of the Project action area.

### **Data Requests:**

85. Please clarify whether Spring and Fall 2010 botanical surveys will be/are being conducted for the entire Project action area (including the northern portion of the action area).
86. Please clarify whether late season rare plant surveys will be conducted on the entire Project action area or only the southern portion of the Project action area.
87. Please provide a chart listing the timing of all botanical surveys and the

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<sup>130</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-095, Attachment; Draft Blythe Solar Power Project Special Status Plant Species Avoidance and Mitigation Plan, January 2, 2010.

<sup>131</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-81.

<sup>132</sup> However, the Applicant did docket in this proceeding Spring 2010 survey protocols for the Palen project on April 22, 2010.

<sup>133</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-B, ATTACHMENT DR-BIO-95-B. p. 4 of 7.

<sup>134</sup> *Id.* at Response to DR-BIO-81c

areas they covered, including areas that were surveyed on multiple visits (e.g. in early, mid, and late-season).

88. If no additional surveys will be conducted on the northern portion of the Project action area, please provide evidence showing that spring 2009 surveys were adequate to detect presence of the eleven special status plant species (noted above) that were not identified as potentially occurring prior to spring 2009 surveys.
89. If no additional surveys will be conducted on the northern portion of the action area, please explain how, in the absence of reference site visits, the Applicant can know that the eleven plants identified above were detectable during survey periods.

### **Background: SPECIAL-STATUS PLANT SURVEYS**

The Applicant's biologists surveyed habitats with the "highest plant species diversity, microsites, and where special-status plant species occurred" with greater intensity than others.<sup>135</sup> Additionally, the buffer was surveyed by pedestrian transect within native habitat, but developed and agricultural vegetation were surveyed by a combination of walking transects and selecting key vantage points from existing dirt access roads.<sup>136</sup> The Applicant states that vegetation communities known or suspected to support sensitive plant populations were walked in a meandering fashion.<sup>137</sup> The portions of the disturbance area with potential to support rare plants were surveyed by pedestrian transects, with biologists walking parallel transects ranging from 10 to 100 feet apart.<sup>138</sup> Each of these descriptions shows a survey focus on particular habitats or areas known to support special status species. However, the Applicant's plant survey protocol states that that focused surveys that are limited to habitats known to support special status species or are restricted to lists of likely potential species are not considered floristic in nature and are not adequate to identify all plant taxa on site to the level necessary to determine rarity and listing status.<sup>139</sup>

The Applicant's plant survey protocols call for a description of reference site(s) visited and phenological development of the target special status plants, with an assessment of any conditions differing from the Project site that may affect their

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<sup>135</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-75.

<sup>136</sup> From Appendix F and Streambed Alteration Agreement Application: Blythe Solar Power Project Biological Resources Technical Report.

<sup>137</sup> Blythe Solar Power Project Botanical Survey Report, p. 10.

<sup>138</sup> Blythe Solar Power Project Biological Resources Technical Report, p. 26.

<sup>139</sup> California Department of Fish And Game, California Native Plant Society, and U.S. Fish And Wildlife Service Special-Status Plant Survey Protocol. Attachment DR-BIO-95-B

identification.<sup>140</sup> The Applicant describes reference visits to several plants with the potential to occur on the action area.<sup>141</sup> However, this list does not include descriptions to reference site visits of numerous special status species listed in the AFC with the potential to occur on the site. These species include: glandular ditaxis, orocopia sage, fairyduster, and dwarf germander.<sup>142</sup>

The Applicant states that most areas were visited at least three times during the 2009 surveys to detect all of the potential sensitive plant species, and some areas were surveyed four or more times where appropriate.<sup>143</sup> However, the Applicant provided a map with 80% logs of vegetation survey tracks, that show a focus on wash areas, but a notable lack of coverage in large portions of the site, particularly Sonoran creosote scrub brush habitat, which contains habitat for at least two special status plant species, bitter hymenoxys and winged cryptantha.<sup>144,</sup>  
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The survey report indicates surveys adhered to the protocols established by the California Native Plant Society (CNPS), the U.S. Fish and Wildlife Service (USFWS), and California Department of Fish and Game (CDFG).<sup>146, 147, 148</sup>

However, adherence to these protocols requires the following:

- a. use of systematic field techniques in all habitats of the site to ensure a thorough coverage of potential impact areas;
- b. surveyors should walk parallel transects spaced 10 to 20 meters apart to ensure a thorough coverage throughout the Project Disturbance Area.
- c. all habitats within the project site must be surveyed thoroughly in order to properly inventory and document the plants present.
- d. a sufficient number of visits spaced throughout the growing season to accurately determine what plants exist on the site;
- e. total person-hours spent on surveys;

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<sup>140</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-81.

<sup>141</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-78.

<sup>142</sup>AFC, Table 5.3-6.

<sup>143</sup> Blythe Solar Power Project Botanical Survey Report, p. 10.

<sup>144</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response, Response to DR-BIO-76, Figure DR-BIO-76.

<sup>145</sup> *Id.* at Response to DR-BIO-88, Figure DR-BIO-88.

<sup>146</sup> Blythe Solar Power Project Streambed Agreement Application, November 25, 2009, Attachment F: Blythe Solar Power Project Botanical Survey Report. p. 9.

<sup>147</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response DR-BIO- 81.

<sup>148</sup>Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-95-B, Attachment DR-BIO-95-B.



- f. observation of reference sites to determine whether those species are identifiable at the time of the survey and to obtain a visual image of the target species, associated habitat, and associated natural community.
- g. description of reference site(s) visited and phenological development of rare, threatened, or endangered plant(s);
- h. persons contacted, herbaria visited, and the location of voucher specimens; and
- i. "Field Survey Forms," should be provided for locations of each special status plant detected.

The AFC and accompanying survey reports lack a full treatment of these elements. For example, the survey report lists the personnel and dates of each survey but it does not identify the number of person-hours spent on each survey. Pedestrian transects were only conducted in certain focused areas and do not provide thorough coverage throughout the action area. Biologists, when conducting pedestrian transects in were spaced 10-100 feet apart instead of 10-20 meters apart. The Applicant's biologists do not provide sufficient reference site descriptions or field survey forms. Additionally, biologists conducting surveys of vegetation communities known or suspected to support sensitive plant populations by walking in a "meandering fashion" do not appear to have used systematic field techniques in all habitats of the site to ensure a thorough coverage of potential impact areas.

#### **Data Requests:**

90. Please provide a map of the roads that were driven to conduct vegetation surveys.
91. Please explain how driving and walking in a meandering fashion constitute systematic field techniques.
92. Please explain how surveys that only focused on areas known or suspected to support special status plant species complied with protocols to use systematic field techniques in all habitats of the site to ensure a thorough coverage of potential impact areas.
93. Please explain how the figure DR-BIO-76 showing 80% track logs meets the protocol requirement for walking parallel transects of 10-20m spacing.
94. Please explain how the lack of thorough survey coverage in the Sonoran creosote scrub brush habitat affected the ability to detect bitter hymenoxys
95. Please explain how the lack of thorough survey coverage in the Sonoran creosote scrub brush habitat affected the ability to detect winged cryptantha

96. Please provide field survey forms for each special status plant occurrence.
97. Please provide information on what portion of the survey area was surveyed at what date.
98. Please specify the areas within the assessment area that were surveyed more than once.
99. Please provide the total number of hours each surveyor spent surveying in the field on each date.
100. Please provide a description of the reference site(s) visited for glandular ditaxis, including phenological development of the plant, with an assessment of any conditions differing from the Project site that may affect their identification.
101. Please provide a description of the reference site(s) visited for dwarf germander, including phenological development of the plant, with an assessment of any conditions differing from the Project site that may affect their identification.
102. Please provide a description of the reference site(s) visited for orocopia sage, including phenological development of the plant, with an assessment of any conditions differing from the Project site that may affect their identification.
103. Please provide a description of the reference site(s) visited for fairyduster, including phenological development of the plant, with an assessment of any conditions differing from the Project site that may affect their identification.

## **Background: MAPPING OF CACTUS SPECIES**

The BLM requested that any varieties of California barrel cactus (*Ferocactus cylindraceus*), cottontop cactus (*Echinocactus polycephalus*), and hedgehog cactus (*Echinocereus* spp.) be mapped for future salvage when construction begins (LaPre 2009). Sixty-seven specimens of California barrel cactus (*Ferocactus cylindraceus* var. *cylindraceus*) and cottontop cactus (*Echinocactus polycephalus* var. *polycephalus*) were located within the BRSA, however the Applicant has not provided their locations.<sup>149</sup>

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<sup>149</sup> See Blythe Solar Power Project Streambed Alteration Agreement. Application, November 25, 2009, Attachment F: Blythe Solar Power Project Botanical Survey Report. p. 26.

## **Data Request:**

104. Please indicate the locations of the California barrel cactus and the cottontop cactus on Figure 4 of the Botanical Survey Report.

## **Background: WESTERN BURROWING OWL SURVEY**

The Applicant states that burrowing owl surveys were performed according to the protocol established by the California Burrowing Owl Consortium and accepted by CDFG.<sup>150</sup>

The Applicant classified 70 burrows with old sign as inactive.<sup>151</sup> However, the California Burrowing Owl Consortium protocol provides that burrowing owls exhibit high site fidelity, reusing burrows year after year and that a site should be assumed occupied if at least one burrowing owl has been observed occupying a burrow there within the last three years.<sup>152</sup> The Applicant has conducted only one set of surveys during the spring breeding season of 2009.

In evaluating potentially occupied burrows, the Applicant often obscured (i.e., moving or removing) old sign and returned for subsequent visits at later dates to identify any new sign that would indicate recent use by burrowing owl.<sup>153</sup> The Applicant does not describe this process in detail or how it was tracked over numerous burrows. Additionally, the Applicant does not consider whether other animals could move these sign, or the potential for burrowing owls to move around these repositioned sign. Finally, the Applicant does not appear to be following CBOC protocols to minimize disturbance near occupied burrows during all seasons.<sup>154</sup>

The Applicant notes that owl abundance and patterns of use in the disturbance area during the non-breeding season cannot be determined from these survey results.<sup>155</sup> As such, results of these surveys may be inadequate for mitigation planning because the numbers of owls and their pattern of distribution may change during winter and nesting seasons.<sup>156</sup> Additionally, the Applicant

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<sup>150</sup>Appendix F. Blythe Solar Power Project Western Burrowing Owl Technical Report. p5.

<sup>151</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-50.

<sup>152</sup> Rich 1984 & Feeney 1992, as cited in Burrowing Owl Survey Protocol And Mitigation Guidelines, prepared by The California Burrowing Owl Consortium. April 1993.

<sup>153</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-50.

<sup>154</sup> Compare Burrowing Owl Survey Protocol And Mitigation Guidelines, prepared by The California Burrowing Owl Consortium. April 1993. p.2.

<sup>155</sup> Blythe Solar Power Project Biological Resources Technical Report. Page 33

<sup>156</sup> Burrowing Owl Survey Protocol And Mitigation Guidelines, prepared by The California Burrowing Owl Consortium. April 1993. p.3.

states that nesting populations may have been initiated prior to 2009 survey, meaning that burrowing owl abundance estimates during breeding season may not be adequate.

Based on the information provided by the Applicant, the SA/DEIS concludes that “at least two burrowing owls have been confirmed within the Project area during 2009 surveys.”<sup>157</sup> The SA/DEIS requires the Applicant to acquire a minimum of 39 acres of off-site suitable nesting and foraging habitat to mitigate for the displacement of the two owls.<sup>158</sup> Additional information regarding the Applicant’s survey efforts would be relevant and reasonably necessary to determine the Project’s anticipated level of direct impact to Western burrowing owls.

### **Data Requests:**

105. Please describe the process in which old owl sign was removed or moved in evaluating whether a burrow was in use by a burrowing owl.
106. Please describe the Applicant’s biologists’ method for tracking sign that had been obscured.
107. Please provide justification for the Applicant’s reliance on one survey year to estimate burrowing owl abundance.
108. Please provide a scientific evaluation of how a lack of winter surveys and early spring surveys could impact the abundance estimates of Western burrowing owl in the Project action area.

### **Background: IMPACTS TO NELSON’S BIGHORN SHEEP**

The Applicant states that the intermountain valley floor within the project site may serve as an important movement corridor for bighorn sheep attempting to move between the McCoy Mountains and the Big and Little Maria Mountains during seasonal migration or dispersal.<sup>159</sup> During botanical surveys in the spring of 2009, the Applicant’s biologist Art Davenport discovered potential Nelson’s bighorn sheep scat and tracks in a wash on the western side of the BSPP.<sup>160</sup> However, the Applicant believes that based on the samples collected and a review of photographs online and within wildlife tracking books, it is difficult to reliably differentiate between mule deer and bighorn sheep scat.<sup>161</sup> Elsewhere, however, the Applicant

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<sup>157</sup> SA/DEIS, p. C.2-64.

<sup>158</sup> *Id.*, p. C.2-64.

<sup>159</sup> DR-BIO-54

<sup>160</sup> DR-BIO-53

<sup>161</sup> Page DR-BIO-49.

indicates that “mule deer were noticeably absent from the washes and neither tracks nor scat was detected.”<sup>162</sup>

According to public documents CURE received from the California Department of Fish and Game, anecdotal events suggests that Nelson’s bighorn sheep may be found in the Project vicinity. Dr. John Wehausen found sign of sheep in the Little Maria Mountains on December 9 and 10, 2009. Also, a CDFG game warden responded to a call recently in the Big Maria Mountains about a dead bighorn sheep found by the public.<sup>163</sup>

Bighorn sheep movement across the Project site would be eliminated by construction of the perimeter fence. However, the Applicant states that this impediment is not expected to adversely impact movement and/or population dispersal because similar desert habitat outside of the perimeter fence would likely provide adequate movement opportunities for foraging and dispersal. However, the Applicant does not address cumulative impacts specifically associated with other projects, which show a near complete separation between the McCoy Mountains and the Big and Little Maria Mountains.<sup>164</sup>

The Applicant states that bighorn sheep use of the Project action area is not well understood based on available research and Project survey data.<sup>165</sup> The Applicant recommends that local or regional bighorn sheep experts be contacted to discuss their knowledge of bighorn sheep use in the area.<sup>166</sup> Bighorn sheep experts could offer input and advice about bighorn sheep movement patterns, areas of seasonal use, known water holes, dispersal corridors, and how these may be affected and impacted by the Project.

The Applicant states that the implementation of the impact avoidance, minimization, and mitigation measures, described in Section 5.3.4 of the AFC, would reduce the level of impact to home range movement below a level of significance.<sup>167</sup> However, the Applicant does not specifically address mitigation for the bighorn sheep in Section 5.3.4 and appears to believe that mitigation is not legally required.<sup>168</sup>

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<sup>162</sup> Page DR-BIO-79.

<sup>163</sup> CDFG email communication, January 19, 2010.

<sup>164</sup> See Blythe Solar Power Project Biological Technical Report. Figure 14. Location of Cumulative Projects Relative to DETO Critical Habitat

<sup>165</sup> Applicant’s Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-54.

<sup>166</sup> Applicant’s Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-54.

<sup>167</sup> Applicant’s Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-54.

<sup>168</sup> AFC, p. 5.3-48-68; Palo Verde Solar 1, LLC’s Initial Comments on the SA/DEIS, April 19, 2010, pp. 39-40.

## **Data Requests:**

109. Please identify the experts that have been or will be contacted for input about Nelson's bighorn sheep movement patterns, areas of seasonal use, known water holes, dispersal corridors, and how these may be affected and impacted by the Project.

## **Background: IMPACTS TO WILDLIFE MOVEMENT CORRIDORS**

The Applicant states that the project will likely cause significant permanent impacts to wildlife corridors despite reduced impact through mitigation.<sup>169</sup> In response to Staff's requests for information about potential wildlife use of desert washes as movement corridors, the Applicant provided information based on reconnaissance level surveys that were limited by recent rainstorms that passed through the site that likely washed away many tracks that were present. The Applicant concludes that a movement study conducted throughout the course of an entire year would be necessary to determine the extent of wildlife movement within the washes versus the uplands.<sup>170</sup> However, the Applicant does not provide any information about the methodology of such a survey, and commits only to make note of wildlife sign in washes during subsequent visits.

The Applicant notes that the Project would impact movement by large mammals such as coyote, kit fox, mule deer, bobcat, American badger, and mountain lion.<sup>171</sup> However, the Applicant fails to provide information about impacts to the Mojave fringe toed lizard, Couch's spadefoot toad, invertebrates, small mammals, and the impacts to these and other special status species at both individual and intergenerational movement levels (i.e., will the linkages support metapopulations of smaller, less mobile species).

There are a variety of techniques that can be used to estimate movement patterns in addition to a long-term study. These include use of remote cameras, modeling, and review of genetic differences among populations. For example, modeling was conducted for the previously proposed Carrizo Solar Energy Farm project to determine impacts on habitat connectivity for focal species.<sup>172</sup>

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<sup>169</sup> AFC, p. 5.3-51.

<sup>170</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-70.

<sup>171</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-70.

<sup>172</sup> See Application for Certification of the Carrizo Solar Energy Farm and project documents available at <http://www.energy.ca.gov/sitingcases/carrizo/index.html>.

CEC siting guidelines require information on the distribution of wildlife corridors at the proposed project area and related facilities.<sup>173</sup> Furthermore, the CEC's Best Management Practices and Guidance Manual for Desert Renewable Energy Projects states solar energy facilities should be located and/or designed to minimize or mitigate for disruptions to wildlife movement.<sup>174</sup> The Applicant states that McCoy Wash may be an important movement corridor leading to the Little Maria Mountains, and that wildlife using the wash may cross the area that would be occupied by the Project.<sup>175</sup> The Applicant plans to construct drainage channels to divert desert wash flows through and around the Project site.<sup>176</sup> The Applicant further states that the design of the proposed channels may impede wildlife movement due to minimal vegetative cover, the visibility of man-made structures which would deter wildlife, and the lack of habitat in the channels.<sup>177</sup> In addition, the Applicant states that the channels on the site may present a risk to wildlife, and Desert tortoise in particular, which may become entrapped in the channel.<sup>178, 179</sup> The Applicant states that the channels cannot be widened any further than 150 feet.<sup>180</sup>

#### **Data Requests:**

110. Please state whether the Applicant intends to conduct any additional surveys to identify what wildlife species may be using the washes and the Project area as a movement corridor.
111. Please state whether the Applicant believes that the Project will impede wildlife movement.
112. Please define what survey methodology would be used to assess wash areas and/or the Project site as dispersal and movement corridors.
113. Please indicate how the Project, and the redesigned drainage channels will

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<sup>173</sup> Cal. Code Regs., tit. 20, Appendix B. Also see the updated Appendix B from July 2008 at <http://www.energy.ca.gov/2008publications/CEC-140-2008-003/CEC-140-2008-003.PDF>

<sup>174</sup> California Energy Commission. 2009 Dec. Best Management Practices and Guidance Manual: Desert Renewable Energy Projects. Revised Draft Staff Report. CEC-700-2009-016-SDREV. Available at: <http://www.energy.ca.gov/publications/displayOneReport.php?pubNum=CEC-700-2009-016-SD-REV>

<sup>175</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-70.

<sup>176</sup> *Id.*

<sup>177</sup> *Id.*

<sup>178</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-71.

<sup>179</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-70.

<sup>180</sup> *Id.*

impact the Mojave fringe toed lizard, and whether those impacts are potentially significant.

114. Please indicate how the Project, and the redesigned drainage channels will impact the Couch's spadefoot toad, and whether those impacts are potentially significant.
115. Please indicate how the Project and the redesigned drainage channels have been located and/or designed to minimize or mitigate impacts to the Mojave fringe toed lizard.
116. Please indicate how the Project and the redesigned drainage channels have been located and/or designed to minimize or mitigate impacts to the Couch's spadefoot toad.
117. Please indicate how the Project and the redesigned drainage channels have been located and/or designed to minimize or mitigate impacts to wildlife movement.

### **Background: CUMULATIVE IMPACTS TO BIOLOGICAL RESOURCES**

Proposed solar projects on BLM land in the vicinity of the Project would use up to approximately 100,000 acres of desert lands.<sup>181</sup> This development could potentially result in large-scale habitat loss and habitat fragmentation for numerous sensitive species, such as the Desert tortoise, Western burrowing owl, and Desert kit fox.<sup>182</sup> The Applicant does not identify impacts to Mojave fringe-toed lizards, although California Energy Commission Staff has previously found that the cumulative impact of renewable energy development would contribute to the decline of the species.<sup>183</sup> Similarly, the SA/DEIS finds that with respect to the Mojave fringe-toed lizard, "cumulative effects of all proposed future projects are expected to be significant within the scope of the NECO planning area and even more dramatic within the context of the Chuckwalla Valley and its potentially distinct population of Mojave fringe-toed lizard."<sup>184</sup> The SA/DEIS also finds the Project's contribution to cumulative impacts to the Mojave fringe-toed lizard to be cumulatively considerable.<sup>185</sup>

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<sup>181</sup> AFC, p. 5.3-47

<sup>182</sup> AFC, Table 5.3-9

<sup>183</sup> See, e.g., Calico Solar SA/DEIS, p. C.2-138 ("Current and foreseeable renewable energy developments in the range of the Mojave fringe-toed lizard contribute to the loss and damage of habitat through development, fragmentation, and disruption of Aeolian sand movement. Cumulative, impacts to the Mohave fringe-toed lizard would be severe and would contribute to the decline of the species.").

<sup>184</sup> SA/DEIS, p. C.2-98.

<sup>185</sup> *Id.*



The Applicant claims to fully mitigate cumulative impacts to biological resources, with the exception of DT dispersal movement, and states that the rerouted washes will allow for wildlife to move through the Project disturbance area.<sup>186</sup> The Applicant relies on this reasoning to conclude that the Project's contribution to the cumulative impacts of these other projects would be minimal.<sup>187</sup> Elsewhere, however, the Applicant states that wildlife corridors will likely be significantly and permanently impacted, and that the rerouted washes may cause a hazard to wildlife, and special status species in particular.<sup>188, 189</sup>

### **Data Requests:**

118. Please provide the Applicant's proposed measures to avoid, minimize, and mitigate significant cumulative impacts to biological resources. In your response, please include the Project's mitigation for,
- a. habitat loss and fragmentation affecting the desert tortoise
  - b. habitat loss and fragmentation affecting the western burrowing owl,
  - c. habitat loss and fragmentation affecting the desert kit fox,
  - d. habitat loss and fragmentation affecting the Mojave fringe-toed lizard
  - e. habitat loss and fragmentation affecting the Nelson's bighorn sheep.

### **Background: MITIGATION MEASURES FOR IMPACTS TO WESTERN BURROWING OWL**

The California Burrowing Owl Consortium protocols call for mitigation in the amount of 1.5 to 3 times the 6.5 acres per pair of birds.<sup>190</sup> However, the Applicant states that only a 1:1 ratio of acquisition to mitigate for the WBO found on site.<sup>191</sup>

### **Data Request:**

119. Please provide justification for the Applicant's proposal to employ a 1:1 acquisition ratio to mitigate impacts to the WBO.

### **Background: MITIGATION MEASURES FOR IMPACTS TO THE MOJAVE FRINGE-TOED LIZARD**

The Blythe Solar Power Project Mitigation and Monitoring Plan proposes monitoring MFTL in mitigation areas by walking transects by two monitors on

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<sup>186</sup>AFC, p. 5.3-47

<sup>187</sup> Blythe Solar Power Project Biological Resources Technical Report, p. 118.

<sup>188</sup> AFC, p. 5.3-51.

<sup>189</sup> Applicant's Responses to CEC Data Requests Set 1, Biological Resources, January 6, 2010, Response to DR-BIO-70.

<sup>190</sup> WBOC Protocol

<sup>191</sup> Blythe Solar Power Project Mitigation and Monitoring Plan. Table 3, p. 13 (in DR).

either side of the focal habitat, approximately 7-9 meters apart. The plan calls for surveys to be conducted between March and September when temperatures exceed 79°F,<sup>192</sup> However, the Applicant does not describe how many surveys will be conducted or specific the frequency of surveys.

#### **Data Requests:**

120. Please provide a protocol for proposed mitigation surveys for MFTL. Please include date and time of recommended surveys and how many surveys will be conducted.

#### **Background: MITIGATION MEASURES FOR IMPACTS TO WILDLIFE MOVEMENT**

The Applicant proposes to mitigate for Project impacts to wildlife movement and habitat fragmentation as a result of the Project by “contributing to the general knowledge of wildlife movement, edge effects, and the role of dispersal in metapopulation dynamics.”<sup>193</sup> According to the Applicant, such measures may include financing for research on species specific movement through telemetry studies, etc.<sup>194</sup>

121. Please state the amount of money and the recipient of the money that the Applicant believes would be adequate to implement this proposed mitigation measure.

#### **Background: IMPACTS TO STATE WATERS**

An accurate description of the environmental baseline is necessary for an adequate analysis of potentially significant impacts.<sup>195</sup> A jurisdictional delineation of waters of the State and waters of the United States is relevant to determine the Project’s impacts on those features, as well as the Project’s impacts on water quality, erosion and flooding, and biological resources. According to the Applicant’s January 6, 2010 response to Staff’s data requests, a revised Jurisdictional Delineation Report was submitted as part of the November 25, 2009 of the SAA application.<sup>196</sup> However, the November 25, 2009 SAA application was found

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<sup>192</sup> *Id.*

<sup>193</sup> AFC, p. 5.3-58.

<sup>194</sup> *Id.*

<sup>195</sup> *See, e.g., Communities for a Better Environment v. South Coast Air Quality Management District* (March 15, 2010) 48 Cal.4th 310, 316.

<sup>196</sup> Applicant’s Responses to CEC Data Requests, Set 1, Vol. A, January 6, 2010, Response to DR-BIO-55.

incomplete by the Department of Fish and Game, and the Applicant was required to submit additional required information.<sup>197</sup>

On May 7, 2010, the Applicant provided preliminary survey results for jurisdictional waters within the Project action area.<sup>198</sup> These preliminary results were provided at the request of staff at the April 28 and 29 Staff Assessment workshop.<sup>199</sup> The preliminary results depict areas surveyed within the “Project Study Area” and buffer.<sup>200</sup> According to the figures provided, “the Project Study Area” and buffer contain 366.3 acres of desert dry wash woodland and 434 acres of unvegetated ephemeral dry wash and swales, for a total of 800.3 acres of waters of the State, excluding downstream and upstream impacts to jurisdictional State waters. The Applicant’s prior submittals indicated that 550.3 acres of waters of the State would be impacted within the “Project Disturbance area,” as defined by the Jurisdictional Delineation Report submitted with the November 25, 2009 SAA application.<sup>201</sup>

### **Data Requests:**

122. Please indicate whether the Applicant submitted a revised SAA application to the California Department of Fish and Game that post-dates the November 25, 2009 submittal.

123. Please define the term “Project Study Area” as used in the figure titled Preliminary Results State Waters Spring 2010 Surveys, provided by the Applicant on May 10, 2010.

124. Please state whether the term “Project Study Area” encompasses a different area than the area defined by the term “Project Disturbance Area” as used in the Jurisdictional Delineation Report included with the November 2009 SAA application, and identify the distinctions between those terms.

125. Please identify the methodology employed by the Applicant to document existing functions and values of desert washes within the Project action area, and state whether the Applicant used the California Rapid Assessment Methodology (CRAM) for this evaluation.

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<sup>197</sup> CDFG email communication to Solar Millennium and Chevron, November 25, 2009.

<sup>198</sup> Blythe Solar Power Project (09-AFC-6), Preliminary Spring 2010 Survey Results for Desert Tortoise, Rare Plants and Jurisdictional Waters, May 7, 2010.

<sup>199</sup> *Id.*

<sup>200</sup> *Id.* at Figure “Preliminary Results State Waters Spring 2010 Surveys.”

<sup>201</sup> Blythe Solar Power Project Jurisdictional Delineation Report, November 24, 2009, p. 2.

126. Please provide a revised discussion of impacts to State waters, including acreages of anticipated impact to downstream and upstream State waters, based on the preliminary survey results provided by the Applicant on May 10, 2010.

127. Please state whether the Applicant intends to submit a revised SAA application package that includes discussion of impacts to waters of the State as a result of the Applicant's proposed transmission line.<sup>202</sup>

128. Please provide the Applicant's revised plan for mitigating, avoiding and reducing impacts to waters of the State in light of the new impact acreages provided by the Applicant on May 10, 2010.

129. Please state whether the Applicant proposes mitigation for Project impacts to unvegetated ephemeral dry wash and swales within the Project action area.<sup>203</sup>

130. Please state whether the Applicant would accept a condition of certification that would require the Applicant to manage artificial and natural channels within the Project action area, pursuant to the terms of the CEC license, for the life of the Project and through decommissioning.

### **Background: MITIGATION FOR IMPACTS TO BIOLOGICAL RESOURCES**

The Applicant is required to provide a discussion of all feasible mitigation measures including but not limited to proposed avoidance measures, and off-site habitat mitigation, improvement and compensation, which could reduce the Project's direct, indirect and cumulative impacts on biological resources.<sup>204</sup> According to the Drainage Report the proposed drainage modifications seek to replicate the existing flow patterns as nearly as possible for the drainages as they exit the site.<sup>205</sup> Five channels have been proposed adjacent to, through, or across the site: north, southeast, central, south and west channels.<sup>206</sup> The Drainage Report further provides that these channels intercept the offsite flows prior to their entry to the site and convey them in re-aligned channels to approximately the same location where they exited the site under existing conditions.<sup>207</sup> The proposed channels were designed to maintain an average flow velocity below 4 ft/sec in order to prevent soil erosion in the bottom and side slope of the channel.<sup>208</sup> To accomplish this, the Applicant has proposed a series of grade control structures to each channel.

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<sup>202</sup> See Figure Preliminary Results State Waters Spring 2010 Surveys.

<sup>203</sup> *Id.*

<sup>204</sup> Cal. Code Regs., tit. 20, Appendix B, Information Required for an Application, (g)(13)(B)

<sup>205</sup> Drainage Report, p. 5-6.

<sup>206</sup> *Id.*

<sup>207</sup> *Id.*

<sup>208</sup> *Id.*

Additionally, all of the receiving water channels will be designed using native material with 3:1 side slopes and soil cement for the grade control structures and bank protection in areas of transitions and curves.<sup>209</sup>

Although soil cement may be required for bank stabilization and protection for transitions and curves, all segments of the drainage reach may not necessarily require soil cement. In drainage reaches that run along a linear or meandering course the use of natural substrate instead of cement would be beneficial for wildlife species. The natural substrate on the drainage bottom and side slopes could provide an opportunity for vegetative establishment, food source, cover, and refugia for the Desert tortoise, Burrowing owl, small mammals, amphibians and reptiles. Wildlife and plant species require natural substrates and adequate vegetation to establish metapopulations and species richness and abundance. The channel design proposed in the drainage report may result in significant impacts to wildlife species by removing the natural substrates and vegetation communities occurring within the Project action area.

Based on a review of the AFC, the November 25, 2009 SAA application, and Drainage Report, there are no mitigation measures proposed to reduce impacts to biological resources, including wildlife species, that currently utilize reaches within the on-site drainage systems. For instance, the Applicant's submittals do not contain an analysis of sections within the drainage system that may not require cementing for bank stabilization. Compacted earthen material along with rip/rap in selected segments of the channel would allow beneficial usages for wildlife species and should be considered for the protection of Burrowing owls, Desert tortoises, Desert kit fox, small mammals, amphibian and reptiles. Likewise, it may be feasible to limit the use of soil cement for grade control structures and bank protection in areas outside of transitions and curves may within the Project action area and its immediate surroundings, dry washes, and outlet drainage areas in order to allow wildlife species to continue to utilize the area.

The Drainage Report also proposes the use of diffusers to return the flood flows to the approximate location and depth to current conditions.<sup>210</sup> The proposed diffusers have, therefore, been designed to spread the flows out so that flow exits the end of the diffuser with non-erosive velocities.<sup>211</sup> Water flowing from the diffusers would naturally create ephemeral ponding locations. To reduce Project impacts to waters of the State and biological resources, the Applicant could plant native emergent vegetation within the surrounding areas of the diffusers to mitigate for the loss of beneficial cover and refuge for wildlife species that now exists within the Project action area. The native vegetation that could be established near the diffusers would provide beneficial usages for a suite of wildlife

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<sup>209</sup> *Id.*

<sup>210</sup> *Id.* at p. 21.

<sup>211</sup> *Id.*

species, especially ephemeral ponding areas that attract riparian birds and raptors. Plant restoration could also occur on the berms located off site as a mitigation measure for impacts to onsite drainage features.

**Data Requests:**

131. Please state whether the Applicant considered planting native emergent vegetation in locations where diffusers are proposed.
132. Please provide a discussion of the feasibility of planting native emergent vegetation in locations where diffusers are proposed.
133. Please state whether the Applicant considered the usage of natural substrate and native vegetation for basins, ditches, and swales for the onsite drainage system, and provide a discussion of the feasibility of such design.
134. Please state whether the Applicant considered native plant restoration along the Project berms proposed by the Drainage Report, and provide a discussion of the feasibility of such design.
135. Please provide information how the use of soil cement, as currently proposed, will be of beneficial use to wildlife species, specifically Burrowing owl, Desert tortoise, Desert kit fox, small mammals, amphibian and reptiles.

## WORKER SAFETY

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### **Background: MUNITIONS AND UNEXPLODED ORDNANCE ASSESSMENT AND REMEDIATION**

With regard to baseline worker safety conditions on the Project site, the Application for Certification (“AFC”) states, “there are no relevant baseline conditions to describe as there are in other environmental topical areas such as biological resources, air quality, etc.”<sup>212</sup> In the paragraph that follows this statement, the AFC provides the following information:

During World War II (1942-1945) and for two weeks in 1964, large areas of the desert along the California-Arizona border were utilized for large scale military training exercises. Small caliber ammunition and “practice ordnance” was used during these maneuvers . . . A small percentage of this ordnance did not explode and some UXO has been discovered on the Project site during routine resource surveys. When detonated by Riverside County Sheriff’s department, a few were identified as live.<sup>213</sup>

In a January 6, 2010 response to Staff’s data requests, the Applicant further provided that the former Blythe Army Airfield is adjacent to the Project site, and that two arms target ranges, Poorman and Jeep Range, are located within the boundary of the Project site.<sup>214</sup>

The Blythe Army Airfield is a formerly used defense site (“FUDS”) which extends into the Project action area as shown in the below Figure.<sup>215</sup>

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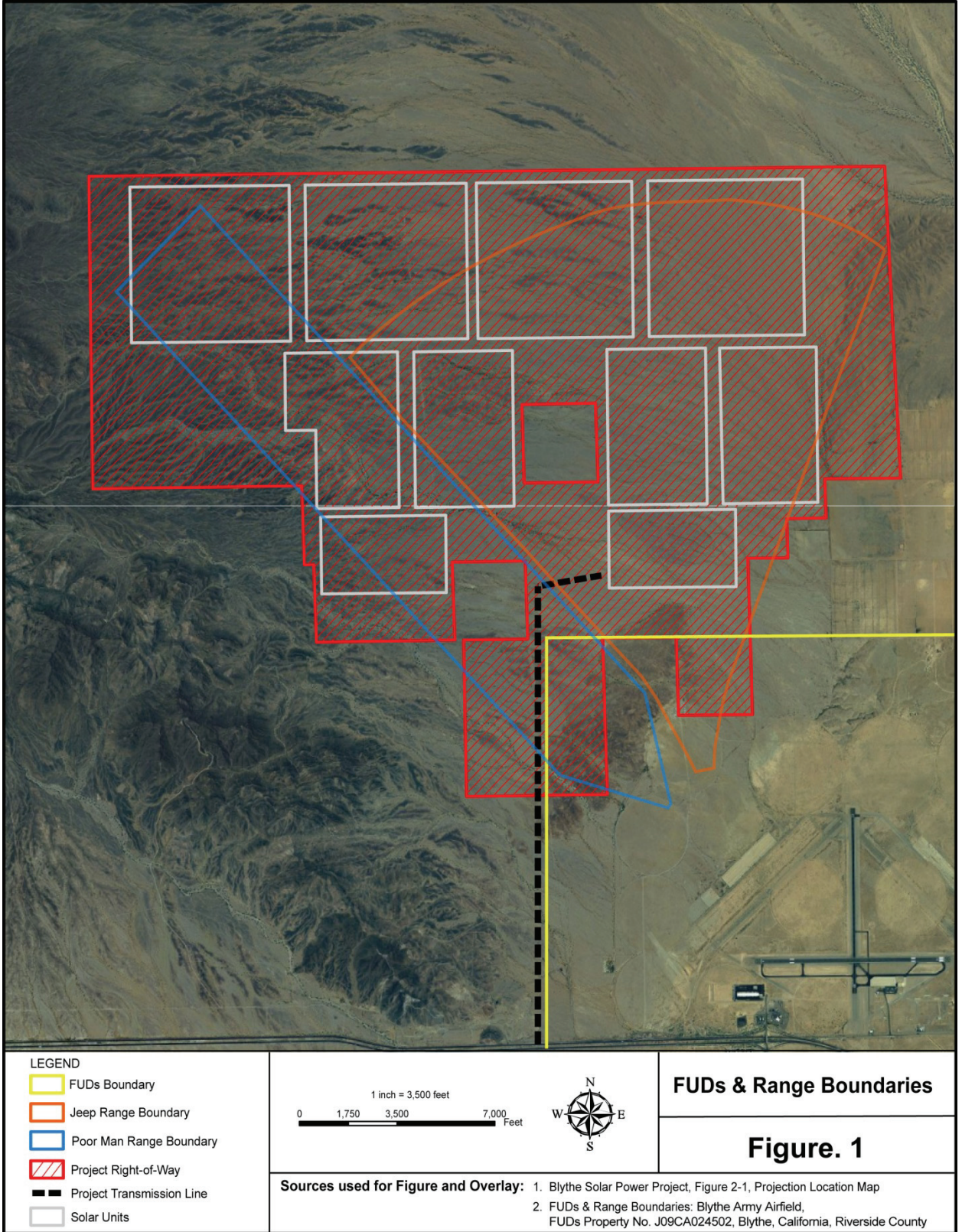
<sup>212</sup> *Id.* at p. 5.18-11.

<sup>213</sup> *Id.*

<sup>214</sup> Applicant’s Responses to CEC Staff Data Requests, January 6, 2010, Response to DR-WM-253 and DR-WM-259.

<sup>215</sup> Compare U.S. Army Corps of Engineers Munitions Response Site Inventory, available at [http://deparc.xservices.com/PDFS/MMRP\\_MAPS/CA99799F537100.pdf](http://deparc.xservices.com/PDFS/MMRP_MAPS/CA99799F537100.pdf) and AFC, Figure 1-2.







The FUDS in and around the Project include the following:

- Blythe Army Airfield (AAF) site (CA99799F537100);
- Blythe AAF BEA Site No.1 (CA99799F536900);
- Blythe AAF BEA Site No.2 (CA99799F537000); and
- Blythe Beacon Site Access Road (CA99799F537200).

FUDS are identified and inventoried by the Army of Corps of Engineers (“the Corps”) pursuant to the Defense Environmental Restoration Program (“DERP”) Act, 10 U.S.C. § 2701 *et seq.* The DERP Act authorizes the Secretary of Defense to correct environmental damage which creates an imminent and substantial endangerment to the public health or welfare and to the environment at FUDS. The Department of Defense (“DoD”) is required by statute to implement the DERP in consultation with the U.S. EPA, and in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (“CERCLA”), 42 U.S.C. § 9620, and the National Contingency Plan, 40 C.F.R. Part 300.<sup>216</sup> The DoD, working through the Corps, is the primary federal agency responsible for the investigation and remediation of FUDS.

In assessing whether a site is eligible, the Corps conducts record searches and historical background searches on a particular property. The review may require a site visit to identify property contamination, or evidence of DoD caused contamination. The Corps will also conduct interviews with regulators, landowners. The results of ACE’s investigations are documented in the Inventory Project Report (“INPR”). Target ranges, such as those identified on the Project site, were used to train troops in the use of machine guns. Soldiers fired rounds, which likely included 50 caliber ammunition, into an area of the site in a configuration known as a “range fan” where bullets would typically come to rest in a fan-like configuration at distances up to four miles behind the targets (see range boundaries in figure above).

FUDs with potential for munitions and explosives of concern (“MEC”), formerly categorized as ordnance and explosive waste (“OEW”), and munitions constituents (“MC”), are subject to investigation and remediation under a CERCLA equivalent process.<sup>217</sup> Under this process, the Corps prepares a preliminary assessment (“PA”), determines whether MEC and MC exist onsite and whether removal is necessary. If, after a PA, the Corps determines that there is no MEC or MC on the FUDS, ACE must obtain EPA or state concurrence to close out the site.

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<sup>216</sup> 10 U.S.C. § 2701(a)(2)-(3).

<sup>217</sup> *See* 10 U.S.C. § 2701(a)(2)-(3).

The public is allowed notice and an opportunity to comment on the results of the remedial investigation and the proposed plan of action.

**Data Requests:**

136. Please explain whether the Applicant has obtained the results of any investigations conducted by the Corps, or its consultants, which identify the nature of MC and MEC associated with the Blythe Army Airfield FUDS.
137. If the Applicant has obtained results from investigations conducted by the Corps, as identified in Data Request #1, please provide the results of any such investigations.
138. Please state whether the Applicant has consulted with the Corps regarding the Corps' review of the Blythe Army Airfield FUDS.
139. Please provide copies of all communications between the Corps and the Applicant regarding any DERP actions on the Project site.
140. Please state whether the Applicant has consulted with state or local officials regarding DERP actions within the Project site boundary.
141. Please state whether the Applicant has consulted with the Department of Toxic Substance Control regarding DERP actions within the Project site boundary.
142. Please state whether the Applicant has consulted with the BLM regarding DERP actions within the Project site boundary.
143. Please provide copies of all communications between the BLM and the Applicant regarding any DERP actions on the Project site.
144. Please provide copies of all communications between the Applicant and the Department of Toxics Substance Control regarding DERP actions within the Project site boundary.
145. Please provide copies of all communications between the Applicant and state and local officials regarding DERP actions within the Project site boundary.

146. Please state whether the Applicant has consulted with the U.S. Environmental Protection Agency regarding DERP actions within the Project site boundary.
147. Please provide a map indicating where unexploded ordnance was detected on the Project site.
148. Please identify the person(s) at the Riverside County Sherriff's Department who detonated unexploded ordnance located in the Project area.<sup>218</sup>
149. Please provide the records that document the response by the Riverside County Sherriff in the detonation of the live ordnance and the ordnance encountered.
149. Please identify any additional former ranges, including any aerial ranges (air to ground, ground to air, practice bombing targets) and additional gunnery ranges that may be within the Project site.
150. For every former Department of Defense installation (ground and aerial ranges) identified within the Project area, please identify the ammunition and ordnance known or suspected to have been used at that installation, including spotting charges, fuses, incendiary devices, and smoke charges.

### **Background: DESERT TRAINING CENTER**

The AFC states:

During World War II (1942-1945) and for two weeks in 1964, large areas of the desert along the California-Arizona border were utilized for large scale military training exercises in what was known as the Desert Training Center. Small caliber ammunition and "practice ordnance" was used during these maneuvers. Tanks and planes were also involved in these exercises. Shells that contained spotting or marking charges were fired and dropped over a large area during these activities.<sup>219</sup>

### **Data Requests:**

151. Please identify the military training exercises that have occurred within the Project boundary, including, but not limited to, all activities known or

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<sup>218</sup> See AFC, p. p. 5.18-11.

<sup>219</sup> AFC, p. 5.18-10.

suspected to have taken place within the Project site and any MEC and MC that may likely be associated with the exercises.

152. Please identify the military training exercises that have occurred within the transmission line alignment and transmission construction staging area, specifying all activities known or suspected to have taken place and any associated MEC and MC.

## **PROJECT DESCRIPTION**

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### **Background: ON SITE DRAINAGE DESIGN**

A fundamental principle of CEQA is that a project's description be stable, finite and accurate so that the environmental impacts of a proposed project can be assessed. The Applicant's November 25, 2009 application for a Streambed Alteration Agreement, submitted pursuant to Section 1602 of the Fish and Game Code ("SAA application"), mentions that outlets for each channel would end in diffusers, but the only channel that is specifically mentioned to have a diffuser is the north channel.<sup>220</sup> In contrast, the Applicant's January 6, 2010 Drainage Report indicates that the central and north channels would outlet to level spreaders (a type of diffuser); the north and west channels would outlet to diffusers; and the south channel will connect directly to an existing dry wash south of the solar field.<sup>221</sup> The Drainage Report also provides varying flow rates for each of the proposed channels; this information is not included the November 25, 2009 SAA application.<sup>222</sup>

There are additional discrepancies between the November 25, 2009 SAA application and the January 6, 2010 Drainage Report. The Drainage Report includes a description of swales and drainage features that are not included in the SAA application.<sup>223</sup> Specifically, the SAA application does not include information regarding the Applicant's plans to create swales and ditches, or include a discussion of whether those features will provide beneficial usage by wildlife species. Since the submission of the Drainage Report, the Applicant provided clarification and suggested changes of the Project drainage design at a May 7, 2010 Staff Assessment

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<sup>220</sup> Streambed Alteration Agreement Application, November 25, 2009, section 10 "Project Description."

<sup>221</sup> Drainage Report for Pre-Development Hydrology and Post-Development Hydrology and Hydraulics. Blythe Solar Power Project. Riverside County, California. Submitted by Kiewit Power Engineers Company. January 6, 2010. p. 5 ("Drainage Report")

<sup>222</sup> *See id.*

<sup>223</sup> Drainage Report, p. 5.

workshop. Additionally, on May 10, 2010, the Applicant provided the preliminary results of revised jurisdictional surveys for the Project action area. The preliminary survey results suggest a greater area of impact to State waters than previously indicated.<sup>224</sup>

**Data Requests:**

153. Please provide an updated SAA application which includes the Applicant's most current Project description.
154. Please provide a map showing the Applicant's most current drainage design, including location of swales, peripheral ditches, berms and conveyance channels, and include the grading details for such features.

**Background: SWALE DESIGN**

A fundamental principle of CEQA is that a project's description be stable, finite and accurate so that the environmental impacts of a proposed project can be assessed. The Applicant's Drainage Report states that swales will be constructed onsite.<sup>225</sup> Based on the diagram provided in the Drainage Report, it appears that the proposed swales will be constructed using cement. Swales can be designed in a manner that minimizes or avoids impacts to wildlife. For example, bioswales can be created and filled with native vegetation and riprap, or a combination of the two. Such design could replicate the beneficial uses of existing swales by providing a source of refugia for wildlife, as well as a source for cover and food for riparian birds, small mammals, amphibians and reptiles. In contrast, cement bottom streambeds result in potentially significant adverse impacts on biological resources. Such impacts could include the removal of native vegetation which provides cover for burrowing animals, and animals seeking shelter from predators.

**Data Requests:**

155. Please identify the material(s) that will be used to construct the proposed swales.
156. Please state whether the Applicant proposes to use native vegetation, compost or riprap to fill the proposed swales.

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<sup>224</sup> Compare Blythe Solar Power Project Jurisdictional Delineation Report, November 24, 2009, p. 2 and Blythe Solar Power Project (09-AFC-6), Preliminary Spring 2010 Survey Results for Desert Tortoise, Rare Plants and Jurisdictional Waters, May 7, 2010, Fig. Preliminary Results State Waters Spring 2010 Surveys.

<sup>225</sup> Drainage Report, p. 5.

157. Please explain how the Applicant's proposed design for the swales would provide beneficial usage for wildlife species.

**DECLARATION OF SERVICE**  
**Blythe Solar Power Plant Project**

**Docket No. 09-AFC-6**

I, Bonnie Heeley, declare that on May 14, 2010, I served and filed copies of the attached CURE Data Requests, Set One (Nos. 1-157) dated May 14, 2010. The original document, filed with the Docket Office, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: [http://www.energy.ca.gov/sitingcases/solar\\_millennium\\_blythe/index.html](http://www.energy.ca.gov/sitingcases/solar_millennium_blythe/index.html).

The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Office via email and U.S. mail as addressed below:

**CALIFORNIA ENERGY COMMISSION**

Attn: Docket No. 09-AFC-6  
1516 Ninth Street, MS-4  
Sacramento, CA 95814-5512  
[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

I declare under penalty of perjury that the foregoing is true and correct.  
Executed at South San Francisco, California on May 14, 2010.

/s/

\_\_\_\_\_  
Bonnie Heeley

CALIFORNIA ENERGY COMMISSION Attn: Docket No. 09AFC6 1516 Ninth Street, MS4 Sacramento, CA 95814-5512 <a href="mailto:docket@energy.state.ca.us">docket@energy.state.ca.us</a>	Alice Harron Senior Director-Project Dvlpmnt 1625 Shattuck Ave., #270 Berkeley, CA 94709-1161 <a href="mailto:harron@solarmillennium.com">harron@solarmillennium.com</a>	Elizabeth Ingram, Associate Dvlpr Solar Millennium, LLC 1625 Shattuck Avenue Berkeley, CA 94709 <a href="mailto:ingram@solarmillennium.com">ingram@solarmillennium.com</a>
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<p>Karen Douglas  Chairman/Presiding Member  California Energy Commission  1516 Ninth Street  Sacramento, CA 95814  <a href="mailto:kldougl@energy.state.ca.us">kldougl@energy.state.ca.us</a></p>	<p>Robert Weisenmiller  Commissioner-Assoc. Member  California Energy Commission  1516 Ninth Street  Sacramento, CA 95814  <a href="mailto:rweisenm@energy.state.ca.us">rweisenm@energy.state.ca.us</a></p>	<p>Raoul Renaud  Hearing Officer  California Energy Commission  1516 Ninth Street  Sacramento, CA 95814  <a href="mailto:rrenaud@energy.state.ca.us">rrenaud@energy.state.ca.us</a></p>
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<p>Ram Ambatipudi  Chevron Energy Solutions  150 E. Colorado Blvd., Ste. 360  Pasadena, CA 91105  <a href="mailto:rambatipudi@chevron.com">rambatipudi@chevron.com</a></p>		