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November 24, 2009

**DOCKET**  
**08-AFC-2**

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CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 08-AFC-2  
1516 Ninth Street, MS-4  
Sacramento, CA 95814-5512

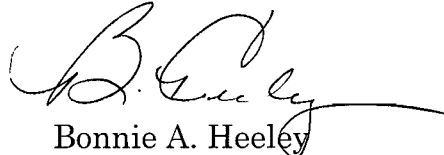
Re: Application for Certification, Beacon Solar Energy Project, 08-AFC-2

Dear Docket Clerk:

Enclosed are an original and copy of California Unions for Reliable Energy Response to Beacon Solar LLC's Comments on Biological Resources Conditions of Certification. Please process the document, conform a copy and return the copy in the envelope provided. The document was previously sent via email.

Thank you for your assistance with this matter.

Sincerely,



Bonnie A. Heeley  
Administrative Assistant

:bh  
Enclosures

2162-057a

**STATE OF CALIFORNIA**  
**California Energy Commission**

In the Matter of:

The Application for Certification for the  
BEACON SOLAR ENERGY PROJECT

Docket No. 08-AFC-2

**CALIFORNIA UNIONS FOR RELIABLE ENERGY  
RESPONSE TO BEACON SOLAR LLC'S COMMENTS ON  
BIOLOGICAL RESOURCES CONDITIONS OF CERTIFICATION**

November 24, 2009

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CURE submits these comments in response to Beacon Solar, LLC's ("Beacon" or "applicant") November 12, 2009 comments on the FSA's Conditions of Certification pertaining to biological resources. Beacon requested deletion of several conditions that were specifically proposed by the applicant and included in both the Application for Certification ("AFC") and the Incidental Take Permit application. However, those conditions were specifically relied upon by both the Energy Commission staff and the wildlife agencies in reviewing the proposed Project and drafting the FSA.

Beacon proposes its Project on 2,012 acres of potential Desert tortoise, Mohave ground squirrel, and burrowing owl habitat. Beacon's proposed changes to the FSA's conditions should be rejected because the changes:

1. Reduce the likelihood even further that proposed mitigation will be successful.
2. Further result in mitigation that does not minimize and fully mitigate take of listed species.
3. Conflict with the applicant's written commitment to implement any measures required by the California Energy Commission, the Department of Fish and Game, and the U.S. Fish and Wildlife Service as a condition of Project certification.<sup>1</sup>
4. Further undermine the assumptions and conclusions of the applicant's Project impact analysis.
5. Eliminate the mitigation measures originally proposed by the applicant, and that were relied on by the Energy Commission and agencies in their review of the proposed Project.

These comments were prepared with the technical assistance of Scott Cashen, who has more than 17 years of working on natural resources management.

### **DESERT TORTOISE CLEARANCE SURVEYS (BIO-9)**

The applicant's incidental take permit application attached to its testimony as Exhibit 92 proposes desert tortoise clearance surveys during the species' heightened activity period. The FSA requires it as Condition BIO-9. Now, the applicant proposes to *eliminate* the FSA's requirement for desert tortoise clearance surveys during the heightened activity period (i.e., late March through May and during October). The applicant's rationale for revising the timing of clearance surveys is reported to be "based on the disturbed nature of the plant site and the absence of any desert tortoise sign."

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<sup>1</sup> See p. 41 of Beacon Solar Energy Project. 2008. Application for Incidental Take of Threatened and Endangered Species, Section 2081 of the California Endangered Species Act. Application submitted to the California Department of Fish and Game.

The applicant's rationale is deceptive and fails to ensure that impacts are minimized and take is fully mitigated. Surveyors detected an intact juvenile carcass and a deteriorated adult desert tortoise burrow within the Project site. They also detected two additional sets of bone and carapace fragments.<sup>2</sup>

Tortoises are less likely to occur aboveground during the inactivity period (i.e., typically during July and August, and between November and February).<sup>3</sup> Therefore, clearance surveys during this period require extra diligence in excavating all potential burrows. The rationale behind the timing of clearance surveys should be based on minimizing take of desert tortoises.

In addition, although the FSA states desert tortoise mitigation measures should be consistent with the *Guidelines for Handling Desert Tortoise During Construction Projects* (Desert Tortoise Council 1999)<sup>4</sup>, the FSA should make it explicitly clear that the applicant needs to follow all the techniques described in the guidelines.

### **DESERT TORTOISE FENCING (BIO-9)**

The applicant's incidental take permit application attached to its testimony as Exhibit 92 proposes temporary desert tortoise fencing that follows the guidelines of permanent fencing.<sup>5</sup> The FSA requires this fencing as Condition BIO-9. Now, the applicant suggests that silt fencing may be used for temporary tortoise exclusion areas (e.g., utility corridors). However, the applicant has not provided a rationale for modifying the conditions associated with temporary fencing. Specifically, the applicant has not demonstrated that proposed silt fencing is effective in excluding tortoises for up to two months (i.e., the duration it may be in place).

The FSA's requirement for temporary fencing (i.e., that it follow the guidelines for permanent fencing) was adapted from the applicant's AFC and incidental take permit application.<sup>6</sup> Energy Commission and resource agency staff relied on the applicant's proposals in conducting their analysis of potential impacts and mitigation for such impacts. Therefore, the condition that temporary fencing must follow the guidelines for permanent fencing must be required to mitigate the impacts that have been recognized and analyzed by the agencies.

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<sup>2</sup> FSA, p. 4.2-16.

<sup>3</sup> Desert Tortoise Council. 1999. *Guidelines for Handling Desert Tortoises during Construction Projects*. Edward L. LaRue, Jr., editor. Wrightwood, California.

<sup>4</sup> FSA, p. 4.2-88.

<sup>5</sup> Application for Incidental Take, p. A3-6.

<sup>6</sup> AFC, p. 5.3-39; Application for Incidental Take, p. 43.

## MOHAVE GROUND SQUIRREL CLEARANCE SURVEYS (BIO-10)

### TRANSLOCATION

The applicant proposes to modify Condition BIO-10 such that the applicant does not have to prepare a Mohave ground squirrel translocation plan prior to clearance surveys. In exchange, the applicant states “[i]f Mojave ground squirrels are captured via trapping or burrow excavation, they will be relocated by a qualified biologist to an adjacent offsite area with potential Mojave ground squirrel habitat.”

#### Applicant’s Rationale for Proposed Changes

The applicant’s rationale for proposed changes to Condition BIO-10 include:

- (a) the stipulation that the Project site does not provide habitat;
- (b) that the applicant has sought incidental take coverage for the potential take;
- (c) that the applicant’s Mohave ground squirrel expert has confirmed that clearance surveys do not provide realistic mitigation; and
- (d) that any Mohave ground squirrels that may be present are expected to be transient individuals.

#### Rebuttal to Proposed Changes

The applicant is incorrect in stating the Project site does not provide potential habitat for Mohave ground squirrels.<sup>7</sup> Furthermore, an application for an incidental take permit does not resolve the applicant’s need to avoid and minimize take to the maximum extent possible. In addition, there is no evidence to support the applicant’s suggestion that clearance surveys do not provide “realistic” mitigation. Any such assumption must be substantiated. Moreover, the applicant must propose alternate methods for minimizing take. Finally, the presumption that any Mohave ground squirrels present would be transient individuals is irrelevant to the issue of take; the California Endangered Species Act covers all individuals of a covered species.

The FSA requires the applicant to conduct clearance surveys for Mohave ground squirrels over the entire Project site. The FSA further requires the applicant to develop and implement a Mohave ground squirrel translocation plan to address the handling and disposition of any Mohave ground squirrels encountered during the clearance surveys.

The applicant proposes eliminating the FSA’s requirement for a Mohave ground squirrel translocation plan. In exchange, the applicant proposes that any Mohave ground squirrels “captured via trapping or burrow excavation” will be relocated to an adjacent offsite area with *potential* Mohave ground squirrel habitat. However, the applicant has not proposed any trapping, even though excavation of potential desert tortoise burrows

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<sup>7</sup> See Testimony of Scott Cashen on Behalf of California Unions For Reliable Energy on Biological Resources of the Beacon Solar Energy Project, p. 1.

may occur. Therefore, it's unclear how squirrels could be captured "via trapping or burrow excavation." The applicant's proposed changes to the FSA should be rejected.

## RECORDS OF CAPTURE

FSA Condition BIO-10 requires the Designated Biologist to keep records of each Mohave ground squirrel that is captured and handled. However, the FSA does not require the applicant to do any trapping or other activities that would likely result in capture. FSA Condition BIO-10 should be revised to require the Designated Biologist to keep records of each Mohave ground squirrel detected. The records would provide essential information on potential take. The records would also contribute much needed scientific information on Mohave ground squirrel habitat associations.

## **DESERT TORTOISE AND MOHAVE GROUND SQUIRREL COMPENSATORY MITIGATION (BIO-11)**

### SELECTION CRITERIA FOR COMPENSATION LANDS

The applicant proposes to eliminate the requirement for compensation lands having habitat capable of improving in quality and value (for the desert tortoise and Mohave ground squirrel).

The FSA requires the compensation lands to be (a) adjacent to larger blocks of lands that are already protected such that there is connectivity between the acquired lands and the protected lands; and (b) be connected to lands for which there is reasonable evidence suggesting current occupation by desert tortoise and Mohave ground squirrel, ideally with populations that are stable, recovering, or likely to recover.<sup>8</sup> The applicant has proposed modifying these conditions to include lands that are "in close proximity" to the lands described above.<sup>9</sup>

### Applicant's Rationale for Proposed Changes

The applicant's rationale for adding "in proximity to" is that it avoids eliminating potential compensation lands that would add value to the protected species and still provide connectivity. The rationale for eliminating the requirement for compensation lands to have habitat capable of improving in quality and value was not provided.

### Rebuttal to Proposed Changes

The applicant's proposed changes to the Condition BIO-11 should be rejected. The applicant's proposed compensation (which was accepted by staff) was based on the conclusion that over time, habitat on the compensation lands would improve and thus generate an increased carrying capacity for desert tortoises and Mohave ground squirrels. The applicant stated: (1) "[t]he project proponent will compensate for the potential

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<sup>8</sup> FSA, p. 4.2-93.

<sup>9</sup> Beacon Solar, LLC's Comments on Biological Resources Conditions of Certification, p. BIO-13.

impact to two transient DT [desert tortoises] that may enter the Plant Site based on anticipated increase in carrying capacity”;<sup>10</sup> and (2) “[i]f such [compensation] land were purchased for conservation and protected by fencing to improve habitat quality, it should certainly increase carrying capacity by 25 percent or 0.2 animal per 10 acres. Then, based upon this projected increase in the carrying capacity of compensation lands from 0.8 animal per 10 acres to one animal per 10 acres, the acreage of compensation land that is needed can be determined. The increase of 0.2 individual per 10 acres protected will require the purchase of 100 acres to compensate for the incidental take of up to two MGS on the Plant Site.”<sup>11</sup>

The belief that compensation lands would be adjacent to protected land was fundamental to environmental review. Therefore, the applicant’s modifier “in proximity to” needs to be defined before the proposed change can be effectively evaluated. Conservation of a 15-acre “island” will not benefit the long-term recovery of either the Mohave ground squirrel or desert tortoise unless connectivity with larger patches of protected habitat is guaranteed. Furthermore, the calculation that was used to justify the applicant’s proposed compensation acreage included a density estimate of Mohave ground squirrels from land immediately adjacent to the Desert Tortoise Natural Area (i.e., protected land).<sup>12</sup> Consequently, compensation lands that are not adjacent to protected land undermine the applicant’s justification for the proposed acreage value. Finally, until now, the applicant has proposed to purchase compensation lands that are part of a larger block of lands that are either already protected or planned for protection (or that feasibly could be protected).<sup>13</sup>

## **DESERT TORTOISE AND MOHAVE GROUND SQUIRREL COMPLIANCE VERIFICATION (BIO-12)**

The applicant proposes to eliminate the requirement for an Annual Listed Species Status Report. According to the FSA, the Annual Listed Species Status Report would be submitted to the Compliance Project Manager by January 31 of every year, and it would provide (a) the current implementation status of each mitigation measure; (b) an assessment of the effectiveness of each completed or partially completed mitigation measure in minimizing and compensating for project impacts; and (c) recommendations on how to improve the effectiveness of mitigation measures.

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<sup>10</sup> See p. 47 of Beacon Solar Energy Project. 2008. Application for Incidental Take of Threatened and Endangered Species, Section 2081 of the California Endangered Species Act. Application submitted to the California Department of Fish and Game.

<sup>11</sup> See p. 40 of *Id.*

<sup>12</sup> See Attachment 2 of *Id.*

<sup>13</sup> Applicant’s response to CEC staff Data Request #78, 13 Oct 2008.

### Applicant's Rationale for Proposed Changes

The applicant proposes the Condition be deleted and rewritten to be consistent with COMPLIANCE-4.

### Rebuttal to Proposed Changes

Condition BIO-4 (i.e., the Condition referenced by the applicant) requires the Designated Biologist to submit monthly compliance reports to the Compliance Project Manager. Summaries of the monthly reports subsequently would be provided in the Annual Compliance Report. The monthly reports would "document biological resources compliance activities, including those conducted or monitored by Biological Monitors."

As currently proposed, the monthly compliance reports would not possess the same level of rigor, or encompass the same range of topics, as the Annual Listed Species Status Report. Therefore, the applicant's proposed change may prohibit the ability to ensure compliance with the California Endangered Species Act, in addition to the California Environmental Quality Act.

## **EVAPORATION POND NETTING AND MONITORING (BIO-14)**

### **MESH SIZE**

Condition BIO-14 requires the project owner to cover the evaporation ponds with 1.5-inch mesh netting to exclude birds and other wildlife. The applicant has proposed removing the 1.5-inch mesh size requirement.

### Applicant's Rationale for Proposed Changes

The applicant claims the mesh size will be dependent upon the best feasible technology available.

### Rebuttal to Proposed Changes

The purpose of the condition is to minimize wildlife mortality. Therefore, mesh size should be based on efficacy for minimizing wildlife mortality, not based on "technology." Gorenzal et al. (1994) reported that 1- to 2-inch mesh is required to exclude all fish-eating birds.<sup>14</sup> There has been extensive use of netting to protect aquaculture facilities and ornamental ponds, and there's no indication that there will be significant advancements in mesh size "technology" before Project evaporation ponds are installed.

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<sup>14</sup> Gorenzal WP, FS Conte, TP Salmon. 1994. Bird Damage at Aquaculture Facilities *in* Hygnstrom SE, RM Timm, GE Larson, editors. Prevention and Control of Wildlife Damage. University of Nebraska, Lincoln.



## EVAPORATION POND MONITORING

Condition BIO-14 requires monthly, and then quarterly, site visits to inspect the evaporation ponds for wildlife mortality. If there are no wildlife deaths or entanglements for 12 consecutive quarters, site visits can be reduced to two surveys per year (during spring and fall migration). The applicant proposes to terminate the surveys after eight semi-annual surveys have been conducted. The applicant also proposes surveys can be conducted by the Environmental Compliance Manager instead of the Designated Biologist.

### Applicant's Rationale for Proposed Changes

The applicant stated that with the netting installed, the Environmental Compliance Manager should be able to identify if birds are trapped within the netting. The applicant further stated it is unreasonable to expect surveys for the life of the project if netting is required.

### Rebuttal to Proposed Changes

The FSA does not identify an Environmental Compliance Manager as a member of the Project team. The applicant needs to identify the qualifications of the Environmental Compliance Manager and establish that he/she will provide monitoring that reflects independent judgment.

The applicant's proposal to terminate surveys has no associated success criteria. Because pond netting will likely require periodic repair and replacement, and because pond water quality may change over time, routine monitoring and adaptive management should be required for the life of the Project.

## **BURROWING OWL IMPACT AVOIDANCE, MINIMIZATION, AND COMPENSATION MEASURES (BIO-17)**

### SURVEYS OF RELOCATION AREA

The applicant proposes to eliminate the FSA's requirement for remedial actions if burrowing owls are not nesting in the relocation area. The applicant further proposes to eliminate the FSA's requirement for an annual report describing survey results (of the relocation area) and remedial actions.

### Applicant's Rationale for Proposed Changes

The applicant states "[t]his is an unreasonable criteria for success because WBO [western burrowing owl] may be using other burrows within their home range, they may use burrows for wintering but not nesting, etc. In addition, the 6-acre conservation area is in addition to the 20 acres of compensation lands that are being acquired to fully mitigate impacts to WBO."

## Rebuttal to Proposed Changes

The FSA concluded the Project would result in permanent loss of 2,012 acres that are currently used by burrowing owls for nesting and foraging.<sup>15</sup> The FSA considers these impacts significant.<sup>16</sup> To approve a project with potentially significant impacts, a lead agency must mitigate to a level of insignificance. Therefore, to offset impacts, Project mitigation must maintain the current level of burrowing owl nesting and foraging. The applicant's proposed changes to Condition BIO-17 preclude assurance of successful mitigation, and thus preclude a finding of a less than significant impact.

The long-term use of artificial burrows and the ability of these burrows to maintain burrowing owl populations are unknown.<sup>17</sup> As a result, the U.S. Fish and Wildlife Service (USFWS) concluded the conservation value of artificial nest burrows needs to be determined.<sup>18</sup> The USFWS further concluded follow-up research needs to be conducted to determine the breeding success of relocated burrowing owls.<sup>19</sup> Therefore, Condition BIO-17 should not only be preserved, but it should be strengthened to ensure Project impacts will be offset by long-term monitoring that demonstrates the Project has not diminished reproductive output of the local burrowing owl population.

The applicant's rationale for the proposed change has no support. The applicant's claim that owls may use the artificial burrows for wintering but not for nesting is irrelevant and incorrect.<sup>20 21</sup> Burrowing owls are known to exhibit strong burrow fidelity.<sup>22</sup> The FSA establishes that burrowing owls nest on the Project site. Therefore, if evicted owls do not use the applicant's artificial burrows, it's reasonable to infer the burrows are not suitable, or that the burrows are at least two levels lower in quality than those lost by the Project.<sup>23</sup>

Whereas evicted owls may use other burrows within their home range, those owls might die or fail to reproduce. Establishing the long-term use of the relocation area for breeding is not only reasonable, it's necessary to verify successful mitigation. Condition BIO -17 is especially relevant given the applicant proposes to put the artificial burrows closer together than the USFWS's recommended 110 meters.<sup>24</sup>

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<sup>15</sup> FSA, p. 4.2-34.

<sup>16</sup> *Id.*

<sup>17</sup> Klute DS, LW Ayers, MT Green, WH Howe, SL Jones, JA Shaffer, SR Sheffield, TS Zimmerman. 2003. Status assessment and conservation plan for the western burrowing owl in the United States. Bio Tech Pub FWS/BTP-R6001-2003. Washington: US Fish and Wildlife Service.

<sup>18</sup> *Id.*

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

<sup>20</sup> *Id.*

<sup>21</sup> Rosenberg DK, LA Trulio, D Catlin, D Chromczack, JA Gervais, N Ronan, KA Haley. 2007. The ecology of the Burrowing Owl in California. Unpubl. report to Bureau of Land Management.

<sup>22</sup> Martin DJ. 1973. Selected aspects of burrowing owl ecology and behavior. *Condor* 75: 446-456.

<sup>23</sup> First selection = burrows currently occupied; second selection = other burrows; third selection = artificial burrows.

<sup>24</sup> Klute DS, LW Ayers, MT Green, WH Howe, SL Jones, JA Shaffer, SR Sheffield, TS Zimmerman. 2003. Status assessment and conservation plan for the western burrowing owl in the

Lastly, the applicant has provided no scientific basis for the conclusion that 26 acres of compensation lands will “fully mitigate” the permanent loss of 2,012 acres currently used by nesting and foraging burrowing owls.<sup>25</sup>

## BURROWING OWL COMPENSATION LANDS

The applicant proposes to modify one of the Condition’s criteria for compensation lands, such that acquisition lands are not restricted to those currently supporting burrowing owls, but could be “capable of currently” supporting burrowing owls.

### Applicant’s Rationale for Proposed Changes

None provided.

### Rebuttal to Proposed Changes

The term “capable of currently” is confusing and too vague to be evaluated. If acquisition lands are capable of, but are not currently supporting burrowing owls, it would be reasonable to infer that they possess little current value in the conservation of the species (e.g., they may never be occupied or they may serve as a “sinks”). In addition, the applicant’s proposed change permits a temporal (and arguably permanent) loss in resource availability, and it is not compliant with CDFG and California Burrowing Owl Consortium mitigation guidelines. CDFG guidelines require protected habitat to be adjacent to occupied habitat (the FSA permits the acquisition land to be up to five miles away from an active nesting territory).<sup>26</sup> California Burrowing Owl Consortium guidelines require 19.5 acres of unoccupied compensation habitat per pair or single bird.<sup>27</sup>

## **STREAMBED IMPACT MINIMIZATION AND COMPENSATION MEASURES (BIO-18)**

### FUNCTIONS AND VALUES OF THE CREATED CHANNEL

The applicant proposes to modify Condition BIO-18 such that the created channel does not need to be geomorphologically equivalent to, nor maintain the biological functions and values of, a typical desert wash ecosystem.

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United States. Bio Tech Pub FWS/BTP-R6001-2003. Washington: US Fish and Wildlife Service.

<sup>25</sup> FSA, p. 4.2-34.

<sup>26</sup> State of California, Department of Fish and Game. 1995. Staff Report on Burrowing Owl Mitigation. Available at: [http://www.dfg.ca.gov/wildlife/nongame/survey\\_monitor.html#Birds](http://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html#Birds).

<sup>27</sup> The California Burrowing Owl Consortium. 1993. Burrowing Owl Survey Protocol and Mitigation Guidelines. Available online at: <http://www.dfg.ca.gov/wildlife/species/docs/boconsortium.pdf>.

## Applicant's Rationale for Proposed Changes

The applicant proposes to delete these functions and values to reflect that the rerouted wash is intended to mitigate for impacts to the existing washes, and not to achieve conditions that are equivalent to a natural desert wash.

## Rebuttal to Proposed Changes

Pine Tree Creek wash and the unnamed wash that will be impacted by the Project are natural desert washes. The FSA reported “these washes are nevertheless characterized by natural processes that support recruitment of native desert wash vegetation and provide wildlife habitat.”<sup>28</sup>

California Energy Commission staff and the resource agencies have dedicated considerable effort to analyses of the existing site and the proposed rerouted channel.<sup>29</sup> As a result of these analyses, staff concluded the Project would need to maintain the geomorphological and biological functions and values of a natural desert ecosystem (as reflected in Condition BIO-18).<sup>30</sup> Failure to maintain these functions and values would have numerous ramifications both on and off the Project site. The FSA provides an extensive discussion of these ramifications.<sup>31</sup>

The goals and success criteria for the rerouted channel were adapted from the applicant's environmental documents. The applicant's Rerouted Wash Mitigation Plan states:

1. “[t]he primary success standards for the mitigation area within the rerouted wash are focused on maintaining hydrological characteristics of a natural desert wash, maintaining native vegetation cover, and maintaining problematic nonnative species below certain thresholds. An additional goal of the Project mitigation is to create physical conditions that promote natural hydrologic functions of a desert wash, natural successional processes and native plant recruitment onsite and ultimately attain a minimum of 26 percent cover (4.8 acres of vegetative cover as required for 2:1 mitigation of impacted vegetation) at the end of five years. The existing Pine Tree Creek Wash prior to filling will serve as a photo-documented reference for determining the success of the rerouted wash and will be supplemented by the upstream reach at the Plant Site boundary. The Project restoration ecologist will compare the condition of the rerouted wash with the existing wash in order to verify the biological and hydrological functions of

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<sup>28</sup> FSA, p. 4.2-1.

<sup>29</sup> See FSA, Appendix C.

<sup>30</sup> FSA, p. 4.2-106.

<sup>31</sup> FSA, p. 4.2-28, 29.

the rerouted wash are equal to or greater than the existing onsite wash.”<sup>32</sup>

2. “[t]he proposed design feature changes to the wash are critical to the successful hydrologic and hydraulic function of the wash to avoid and minimize potential downgradient impacts; however, they also offer opportunity to facilitate development of the biological functions and values.”<sup>33 34</sup>

There is growing literature showing that wetland restoration and creation projects do not consistently replace lost wetland structure and function.<sup>35</sup> A quantitative functional assessment of riparian mitigation projects in Orange County, California showed that none of the mitigation projects were successful from a functional perspective.<sup>36</sup>

CEQA requires consideration of (1) the differences between the functions lost at the impact site and the functions expected to be produced by the compensatory mitigation project; and (2) the likelihood the mitigation project will succeed. The applicant has yet to demonstrate that it is capable of successfully implementing the proposed mitigation. As previously noted by staff, the scale and scope of the applicant’s proposed attempt to recreate an extensive desert wash ecosystem is unprecedented. The inherent complexity of the applicant’s attempt to reroute desert washes introduces considerable uncertainty on whether the mitigation project will be successful. This problem is compounded by the applicant’s inability to produce the data and analyses necessary for a conceptual assessment of the rerouted channel. Among numerous other flaws, the FSA stated:

- The applicant’s comments on the Preliminary Staff Assessment did not address Staff’s assessment of the proposed diversion channel plan.<sup>37</sup>
- Several of the applicant’s computer models had missing input files and could not be adequately reviewed.<sup>38</sup>
- On 1 July 2009 staff asked the applicant to provide additional hydrology and hydraulic modeling data. By the time the FSA was produced, the hydrology updates and the Conditional Letter of Map Revision (CLOMR) application to FEMA had not been provided to staff.<sup>39</sup>
- Staff has not received the requested copy of the final technical analyses used as the basis for the CLOMR.<sup>40</sup>

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<sup>32</sup> AECOM Environment. Jun 2008. Attachment 1b: Rerouted Wash Mitigation Plan, p. 2,3.

<sup>33</sup> *Id.*, p. 2.

<sup>34</sup> Emphasis added.

<sup>35</sup> See Society of Wetland Scientists. 2000. Position Paper on Performance Standards for Wetland Restoration and Creation. Available at:

[http://www.sws.org/wetland\\_concerns/performance.mgi](http://www.sws.org/wetland_concerns/performance.mgi)

<sup>36</sup> Ambrose RF. 2000. Wetland Mitigation in the United States: Assessing the Success of Mitigation Policies. *Wetlands (Australia)*, 19: 1-27.

<sup>37</sup> FSA, p. 4.9-122.

<sup>38</sup> FSA, p. 4.9-123.

<sup>39</sup> *Id.*

<sup>40</sup> *Id.*

- There continues to be inconsistencies with the actual flood hazard and the applicant's mapped flood hazard.<sup>41</sup>
- A higher-level or additional sediment analysis is necessary to improve prediction and identify potential failure mechanisms related to sediment and floods.<sup>42</sup>
- At the time of the FSA, the applicant has not determined the impervious relationship between pre- and post-developed conditions.<sup>43</sup>

The CDFG and Lahontan Regional Water Quality Control Board have expressed similar and additional concerns with the applicant's approach to the channel mitigation project.<sup>44</sup>

#### ACQUISITION OF AN OFF-SITE DESERT WASH

The FSA requires the applicant to acquire an off-site (compensation) desert wash if the created channel does not meet success criteria after 10 years. The applicant proposes to eliminate the FSA's requirement for the Project owner to acquire the immediate watershed and floodplain surrounding the compensation wash.

#### Applicant's Rationale for Proposed Changes

The applicant states all references to off-site compensation lands exceeding 16-acres have been removed because the applicant is being required to attempt onsite mitigation. The applicant argues that if onsite mitigation is unsuccessful, the offsite compensation should only be equivalent to the onsite impacts to 16-acres of state waters (of which the applicant claims only 2.4 acres is vegetated).

#### Rebuttal to Proposed Changes

The FSA provided a valid scientific justification for the need to acquire the immediate watershed and floodplain surrounding the compensation wash. The applicant failed to consider that a mitigation ratio greater than one-to-one is necessary to account for the method

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<sup>41</sup> *Id.*

<sup>42</sup> FSA, p. 4.9-136.

<sup>43</sup> FSA, p. 4.9-127.

<sup>44</sup> Letter from CDFG to Susan Sanders, Standard Lake and Streambed Alteration Provisions for Notification No. 2008-0146-R4 (Jan 26, 2009); Letter from CDFG to Susan Sanders, Technical Memorandum Beacon Solar Energy Project, Pine Tree Creek, California City, Kern County, Streambed Alteration Notification 2008-0146-R4 (February 19, 2009); Letter from CDFG to Bill Pfanner, CEC, (June 19, 2008); Letter from Joseph Koutsky, Lahontan RWQCB, to Gary Palo, Beacon, Review of Draft Report Of Waste Discharge, Beacon Solar Energy Project, Fremont Valley, Kern County (January 12, 2009).

of compensatory mitigation (e.g., preservation), the temporal losses of aquatic resource functions, and/or the distance between the affected aquatic resource and the compensation site.<sup>45</sup>

In addition, the applicant's claim that only 2.4 acres of the site's washes are vegetated is misleading and unsubstantiated. Satellite imagery demonstrates that there is at least some vegetative cover throughout Pine Tree Creek wash. This is reflected in staff's conclusion that the Project would result in impacts to 60.3 acres of desert wash scrub.<sup>46</sup> As a result, the FSA condition requiring the applicant to acquire up to 50 acres of compensation wash (and associated watershed) is not even commensurate with Project impacts.

## **ROSAMOND PIPELINE MITIGATION (BIO-21)**

Construction of the Rosamond pipeline would impact habitat for several special-status wildlife species.<sup>47</sup> The FSA requires the applicant to revegetate all disturbed areas along the pipeline with seed from locally occurring species. The applicant proposes to modify this condition such that only areas "not previously disturbed" would require revegetation.

### Applicant's Rationale for Proposed Changes

The applicant states "clarification was made that revegetation only applies to areas not previously disturbed that are impacted by the pipeline."<sup>48</sup>

### Rebuttal to Proposed Changes

Whereas the FSA's condition was vague, the applicant's clarification is equally vague. Arguably all vegetation communities have been exposed to disturbance (either anthropogenic or natural). As a result, the FSA needs to provide clear declaratory language on where revegetation will be required. As noted by staff, the success of Mohave Desert revegetation projects is highly dependent on the techniques used, and revegetation projects often fail.<sup>49</sup> Consequently, the FSA's conditions need to establish performance standards and contingency plans for the revegetation efforts.

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<sup>45</sup> See 40 CFR Part 230: Compensatory Mitigation for Losses of Aquatic Resources; Final Rule.

<sup>46</sup> See FSA, p. 4.2-17; 4.2-25; 4.2-26; 4.2-27.

<sup>47</sup> FSA, p. 4.2-163.

<sup>48</sup> Beacon Solar, LLC's Comments on Biological Resources Conditions of Certification, p. BIO-36.

<sup>49</sup> FSA, p. 4.2-157.

Dated: November 24, 2009

Respectfully submitted,

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PROOF OF SERVICE

I, Bonnie Heeley, declare that on November 24, 2009 I served and filed copies of the attached CALIFORNIA UNIONS FOR RELIABLE ENERGY RESPONSE TO BEACON SOLAR LLC'S COMMENTS ON BIOLOGICAL RESOURCES CONDITIONS OF CERTIFICATION. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at [www.energy.ca.gov/sitingcases/beacon](http://www.energy.ca.gov/sitingcases/beacon). The document has been sent to both the other parties in this proceeding as shown on the Proof of Service list and to the Commission's Docket Unit electronically to all email addresses on the Proof of Service list and by depositing in the U.S. Mail at South San Francisco, CA with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service list to those addresses NOT marked "email preferred." I also sent a copy via email and an original and one copy via U.S. mail to the California Energy Commission Docket Office.

I declare under penalty of perjury that the foregoing is true and correct. Executed at South San Francisco, CA on November 24, 2009.

\_\_\_\_\_/s/\_\_\_\_\_  
Bonnie Heeley

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