

DOCKETED

Docket Number:	09-AFC-06C
Project Title:	Blythe Solar Power Project - Compliance
TN #:	201247
Document Title:	Staff's Testimony of Andrea Martine and Carol Wason re Bio Resources
Description:	N/A
Filer:	Janice Titgen
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	11/18/2013 4:25:40 PM
Docketed Date:	11/18/2013

BIOLOGICAL RESOURCES

Testimony of Andrea Martine and Carol Watson

We are the authors of the Biological Resources section of the Staff Assessment. After considering the information in the Staff Assessment, the discussion at the November 12, 2013 workshop, the petitioner's filing entitled "NextEra Blythe Solar Energy Center LLC's Prehearing Statement and Testimony" (dated November 13, 2013; tn:201193), and discussions with U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW) staff, Staff agrees to the petitioner's proposed changes for **BIO-5**, **BIO-8**: #3, #20, and #22, **BIO-16**: #3, and **BIO-17**: #2b, #5a, and the verification.

Staff proposes the following changes to Conditions of Certification **BIO-12**, **BIO-15** and **BIO-24** below. Staff finds that all of these proposed changes are consistent with the existing license and address significant project impacts, as described in the Staff Assessment, associated with the proposed photovoltaic project.

BIO-12 #1d

Staff has agreed to the petitioner's proposed language filed on November 13, 2013 (tn:201193); however upon further review and discussion with USFWS and CDFW, Staff would like to add the following change as it provides examples of areas (DWMAs) to use for mitigation in the section talking about mitigation land criteria. In addition, these DWMAs are important areas to preserve, have land available, and are near the site of impact. They were discussed during the Workshop (November 12, 2013) and the language modified, but Staff would prefer some mention of these DWMAs in #1d without specifically stating they are the only options available.

d. be prioritized near larger blocks of lands that are either already protected or planned for protection, **such as DWMAs within the Colorado Desert Recovery Unit (Chuckwalla DWMA as first priority, Chemehuevi DWMA as the second)** or which could feasibly be protected long-term by a public resource agency or a nongovernmental organization to habitat preservation.

BIO-12 #3h and #3i

Staff disagrees with petitioner's proposed mitigation security and maintains that the mitigation security must be based on the REAT table as was determined in the original proceeding.

h. Mitigation Security. The project owner shall provide financial assurances in accordance with **BIO-28** (phasing) to the CPM and ~~CDFG~~**CDFW** with copies of the document(s) to BLM and the USFWS, to guarantee that an adequate level of funding is available to implement the mitigation measures described in this Condition. These

funds shall be used solely for implementation of the measures associated with the project in the event the project owner fails to comply with the requirements specified in this Condition, or shall be returned to the project owner upon successful compliance with the requirements in this Condition. The CPM's or ~~CDFG~~**CDFW**'s use of the security to implement measures in this Condition may not fully satisfy the project owner's obligations under this condition. Financial assurance can be provided to the CPM and ~~CDFG~~**CDFW** in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security"). Prior to submitting the Security to the CPM, the project owner shall obtain the CPM's approval, in consultation with ~~CDFG~~**CDFW**, BLM and the USFWS, of the form of the Security. Security shall be provided in the amounts of ~~\$2,374,672~~ **\$3,681,687.00** for Phase 1A; ~~\$9,248,560~~ **\$3,234,921.00** for Phase 1B; ~~\$3,613,250.50~~ **\$3,613,250.50**, for Phase 3; and ~~\$9,859,984~~ **\$3,115,754.00** for Phase 24. These Security estimates are based on the most current guidance from the REAT agencies (Desert Renewable Energy REAT Biological Resource Compensation/Mitigation Cost Estimate Breakdown for use with the REAT-NFWF Mitigation Account, July 23, 2010) and may be revised with updated information. This Security estimate reflects the amount that would be required for Security if the project owner acquired the ~~6,958~~ **3975** acres of mitigation lands itself. **The actual costs to comply with this condition will vary depending on the final footprint of the project and its four phases, and the actual costs of acquiring, improving and managing the compensation lands.**

i. **NFWF REAT Account.** The project owner may elect to fund the acquisition and initial improvement of compensation lands through NFWF by depositing funds for that purpose into NFWF's REAT Account. Initial deposits for this purpose, which includes a NFWF administrative fee, must be made in the amounts of **\$3,802,991 for Phase 1, \$3,304,650.63 for Phase 2, \$3,691,169.02 for Phase 3, and \$3,182,894.62 for Phase 4** ~~\$2,465,611 for Phase 1a; \$9,481,161 for Phase 1b; and \$10,105,186 for Phase 2~~ as the security required in section 3h., above and may be provided in lieu of security. If this option is used for the acquisition and initial improvement, the project owner shall make an additional deposit into the REAT Account if necessary to cover the actual acquisition costs and administrative costs and fees of the compensation land purchase once land is identified and the actual costs are known. If the actual costs for acquisition and administrative costs and fees are less than that estimated based on the *Desert Renewable Energy REAT Biological Resource Compensation/Mitigation Cost Estimate Breakdown for use with the REAT-NFWF Mitigation Account, July 23, 2010*, or more current guidance from the REAT agencies, the excess money deposited in the REAT Account shall be returned to the project owner. Money deposited for the initial protection and improvement of the compensation lands shall not be returned to the project owner.

Condition of Certification BIO-15 Avian and Bat Protection Plans

On November 18, 2013, the petitioner filed supplemental Condition of Certification BIO-15 language, following is staff's response.

Petitioner's Modification 1: Proposes to delete language that would allow for implementation of an Avian and Bat Monitoring Plan developed by the responsible agencies. Staff continues to disagree with the petitioner. Although we acknowledge that changing the plan often could be cumbersome, and could, depending on statistical analysis data being collected, weaken the confidence in some of the data, we do not recommend frequent updates, nor does that seem likely. Agency guidance typically is updated on an infrequent basis. However, staff believes that use of an agency-developed monitoring plan would have value, and that the use of this should not be precluded within a condition. Although petitioner points out that the plans need to be approved by the CPM regardless of authorship, staff feels that inclusion of this scenario in the condition is appropriate. Should the CPM want to use this approach in the future, clearly stating it up front could eliminate confusion and time lost. Staff's recommended language reads as follows:

"The project owner shall prepare a Bird and Bat Conservation Strategy (BBCS) and submit it to the CPM for review and approval, in consultation with BLM, CDFW, and USFWS for review and comment. ~~Alternately, the CPM, in conjunction with the USFWS, BLM, and CDFW, may determine the appropriate plan for the project site and provide it to the project owner for implementation.~~ In the event a standard monitoring plan is developed for the industry, the CPM may request the project owner implement that plan, in conjunction with the USFWS and CDFW, and accounting as necessary for project-specific technology or onsite environmental conditions or constraints."

Petitioner's Modification 2: Proposes to delete language referring to studies of avian behavior. Staff and applicant discussed this at the November 13, 2013 workshop. Staff and the REAT agencies agree that assessment of behavior is vital to understanding the impacts of this project. This is because potential attraction to the site is believed to be significant, although unintended, effect of the site. The only way to understand how wildlife interact with a site is to study the interaction, and this includes more than simply looking for injured or dead species on the ground, it includes documenting how live species interact around with or adjacent to a site. This data would ultimately inform solid adaptive management strategies. Therefore, staff rejects this change.

Petitioner's Modification 3: adds language regarding a threshold of significance for avian take. Staff assumes this question is relative only to those species afforded no special protection outside of the Migratory Bird Treaty Act, as the definition of take as it relates to both Federal Endangered Species Act and Fish and Game Code Section 2081 is triggered with one individual. Staff is aware of no other defensible threshold. Staff agrees that mitigating for every single bird or bat is neither reasonable, nor meaningful. Staff intends that the duty of the TAC would be to respond appropriately to any documented adverse impacts, and would rely on the expertise of expert ornithologists in determining a level of impact that requires mitigation, and agree with the petitioner that based on affected species, would certainly have different thresholds. Further, responding to mortality monitoring on a routinely scheduled basis, such as annually, would insure mitigation responsive to the whole suite of documented impacts, and not a

single “take”, or snapshot in time. Furthermore, mitigation is envisioned to take place through habitat improvements and threats elimination, and this approach would be responsive to a suite of impacts. That is to say, staff would not be convening a TAC following every bird mortality, rather, at appropriate time intervals and only if deemed necessary, during which time mitigation could be developed. This change is rejected.

Petitioner’s Modification 4: Proposes to delete language that would acoustic bat sampling. Staff modified this language in direct response to applicant’s comments during the workshop. Staff is unclear if it is bat surveys in general that are under objection, or simply the use of radar; but we think that other methods, such as use of infrared cameras, could be used as an economical alternative survey method. Staff believes that surveys that document bat activity would largely be necessary to understand an ongoing mortality issue onsite, and so has altered the language as follows:

3. “The BBCS will contain full survey methodology and field documentation, identification of appropriate ~~onsite and offsite~~ survey locations, control sites, and the seasonal considerations. Bat ~~acoustic sampling~~ **surveying** may be implemented depending on results of the project owner’s baseline studies, including preconstruction data, **if the TAC or CPM determines that such sampling is necessary, based on onsite monitoring.**”

Petitioner’s Modification 5: This edit would restrict the condition to implementation of monitoring efforts following construction only. Staff disagrees with this on a very simple basis. The project has the potential for LORS violations and/or injury and mortality that may rise to a level of CEQA significance during the construction phase. While these mortalities may need to be processed statistically in a different manner, staff has written the condition in a manner that would also this occur, by reference only a “monitoring season”; however, these specifics should be determined by the TAC and technical experts, and staff believes the condition must be written to allow for flexibility. This modification is rejected.

Petitioner’s modification 6: The petitioner has changed the language very slightly with respect to duration of monitoring. Therefore, staff accepts the modification.

Petitioner’s modification 7: The concept of “ecologically significant” is again surfaced in this comment. While staff rejects this use in this context, staff does support inclusion of the term as discussed further below in proposed modification 8. In this context, staff objects to the term as being undefined. Regardless of semantics, staff’s analysis concluded that the project may have immitigable impacts, based on the species affected, and the scale of that effect. To request the project owner to then reduce effects to less than ecologically significant levels may simply be impossible in certain circumstances. Staff rejects this proposed modification.

Petitioner's modification 8: language was copied from within the condition part #6, to condition part #7. Staff understands the project owner's rationale in doing so, and accepts this change.

During discussion of this topic, the USFWS offered insight on the utility of doing offsite surveys, and that in certain circumstances, they may be appropriate. Staff had also recommended offsite surveys to determine natural avian mortality/injury rates. The petitioner indicated an acceptance to work from an approach that considers that all species found dead or injured onsite were affected by the site, and the parties agreed to move this type of specific language into the BBCS component of the condition.

Petitioner's modification 9: This concept was discussed at the workshop, and staff accepts this modification to the language dictating monitoring period duration. However, there does seem to be potential for future disagreement during development of the BBCS. The Renewable Energy Action Team (REAT) agencies and staff are currently envisioning a longer-term monitoring scenario, and the petitioner should be aware of this.

BIO-24 Golden Eagle Inventory and Monitoring

Staff accepts the petitioner's insertion of language in **BIO-24 #1**; and wish to incorporate that into staff's condition. Staff and the petitioner agree that **BIO-24 #3** may be deleted. These sets of edits have now been incorporated with the proposed edits that staff filed on November 13, 2013 (TN: 201189). An update condition follows; please note that staff also changed the verification language to refer to "CDFW" as opposed to "CDFG". Staff recommends implementation of the following condition.

GOLDEN EAGLE INVENTORY AND MONITORING

- BIO-24** The project owner shall implement the following measures to avoid or minimize project-related construction impacts to golden eagles.
1. Annual Inventory During Construction. For each calendar year during which construction will occur **and for up to two years after commercial operation begins**, an inventory shall be conducted to determine if golden eagle territories occur within one mile of the project boundaries. Survey methods for the inventory shall be as described in the **USFWS Land Based Wind Energy Guidelines (2011b)** ~~Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations (Page et al. 2010)~~ or more current guidance from the USFWS or **CPM**.
 2. Inventory Data: Data collected during the inventory shall include at least the following: territory status (unknown, vacant, occupied, breeding successful, breeding unsuccessful); nest location, nest elevation; age class of golden eagles observed; nesting chronology; number of young at each visit; digital photographs; and substrate upon which nest is placed.

- ~~3. Determination of Unoccupied Territory Status: A nesting territory or inventoried habitat shall be considered unoccupied by golden eagles ONLY after completing at least two full surveys in a single breeding season. In circumstances where ground observation occurs rather than aerial surveys, at least two ground observation periods lasting at least four hours or more are necessary to designate an inventoried habitat or territory as unoccupied as long as all potential nest sites and alternate nests are visible and monitored. These observation periods shall be at least 30 days apart for an inventory, and at least 30 days apart for monitoring of known territories.~~
4. Monitoring and Adaptive Management Plan: If an occupied nest¹ is detected within one mile of the project boundaries, the project owner shall prepare and implement a Golden Eagle Monitoring and Management Plan for the duration of construction to ensure that project construction activities do not result in injury or disturbance to golden eagles. The monitoring methods shall be consistent with those described in the Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations (Pagel et al. 2010) or more current guidance from the USFWS. The Monitoring and Management Plan shall be prepared in consultation with the USFWS. Triggers for adaptive management shall include any evidence of project-related disturbance to nesting golden eagles, including but not limited to: agitation behavior (displacement, avoidance, and defense); increased vigilance behavior at nest sites; changes in foraging and feeding behavior, or nest site abandonment. The Monitoring and Management Plan shall include a description of adaptive management actions, which shall include, but not be limited to, cessation of construction activities that are deemed by the **CPM Designated Biologist** to be the source of golden eagle disturbance.

Verification: No fewer than 30 days from completion of the golden eagle inventory the project owner shall submit a report to the CPM, CDFW, and USFWS documenting the results of the inventory.

If an occupied nest is detected within one mile of the project boundary during the inventory the project owner shall contact staff at the USFWS Carlsbad Office and CDFW within one working day of detection of the nest for interim guidance on monitoring and nest protection. The project owner shall provide the CPM, CDFW, and

¹ An occupied nest is one used for breeding by a pair of golden eagles in the current year. Presence of an adult, eggs, or young, freshly molted feathers or plucked down, or current years' mutes (whitewash) also indicate site occupancy. Additionally, all breeding sites within a breeding territory are deemed occupied while raptors are demonstrating pair bonding activities and developing an affinity to a given area. If this culminates in an individual nest being selected for use by a breeding pair, then the other nests in the nesting territory will no longer be considered occupied for the current breeding season. A nest site is considered occupied throughout the periods of initial courtship and pair - bonding, egg laying, incubation, brooding, fledging, and post - fledging dependency of the young.

USFWS with the final version of the Golden Eagle Monitoring and Management Plan within 30 days after detection of the nest. This final Plan shall have been reviewed and approved by the CPM in consultation with USFWS and CDFW.