STATE OF CALIFORNIA

Energy Resources Conservation

And Development Commission

In the Matter of: Application for Certification For the Blythe Solar Power Project Palo Verde Solar, LLC	Docket No. 09-AFC-6

Stipulated Comments on the Blythe Solar Power Project Presiding Member's Proposed Decision

At the August 31, 2010 Blythe Committee Conference Energy Commission staff, various agency representatives, and the applicant discussed the parties' comments on the PMPD and agreed to changes to those comments. This document memorializes those agreed upon changes in Biological Resources and Soil and Water Resources. This document also contains the Cultural Resources errata mentioned by staff at the conference.

BIOLOGICAL RESOURCES

The suggested staff revisions to the Biological Resources conditions of certification in this document reflect consensus reached among staff, the applicant, and agency representatives during the August 31, 2010 workshop. The revisions in this memo supersede both staff and applicant comments on the PMPD's Biological Resources section, which were each filed on August 30, 2010.

Most of the staff's recommended changes to the analysis in the biological resources section of the PMPD are minor clarifications or corrections. Revisions to the conditions of certification are also relatively minor except for the addition of new Security estimates for those conditions that call for acquisition of compensatory mitigation lands. These revisions reflect updated information made available since the Blythe Solar Power Project Revised Staff Assessment Addendum was published in June 2010 and since evidentiary hearings were held on July 15 and 16, 2010. In July 2010 the Renewable Energy Action Team (REAT) provided a consistent and comprehensive approach to mitigating impacts to biological resources caused by renewable energy development in

California's deserts (Attachment 1, *Desert Renewable Energy REAT Biological Resource Compensation/Mitigation Cost Estimate Breakdown for use with the REAT-NFWF Mitigation Account, July 23, 2010*). The REAT agencies include the U.S. Fish and Wildlife Service (USFWS), U.S. Bureau of Land Management (BLM), California Department of Fish and Game (CDFG), and the Energy Commission.

The REAT agencies have developed a total cost accounting method for calculating acquisition or conservation easement costs for mitigation lands, including costs associated with the purchase transactions, appraisal, escrow, and title insurance including mineral, oil, and gas rights. The estimate also addresses costs of initial enhancement (e.g., signs, fencing, and boundary/property line surveys; or restoration actions such as removal of exotic species, roads), management for ongoing activities such as public access and enforcement; and monitoring the implementation, effectiveness, and compliance of conservation measures with the goals and objectives of the mitigation. For those projects using the REAT- National Fish and Wildlife Foundation (NFWF) Mitigation Account for implementing mitigation actions, the budget includes administration of contracts and reporting. Staff has attached a table from the REAT agencies summarizing the generic method for applying the total cost accounting to acquisition and management of compensatory mitigation lands. Staff has made a minor adjustment to this table based on recent consultation with the REAT agencies, which is to use an assumption of 160 acres as the average parcel size rather than 40 acres. This REAT cost estimate would apply to the following conditions of certification:

BIO-12 Desert Tortoise Compensatory Mitigation

BIO-18 Burrowing Owl Impact Avoidance and Minimization Measures

BIO-20 Sand Dune Community/Mojave Fringe-Toed Lizard Mitigation

BIO-21 Bighorn Sheep Mitigation

BIO-22 Mitigation for Impacts to State Waters

Staff has also worked with BLM and CDFG in revising Condition of Certification **BIO-21** (Bighorn Sheep Mitigation) to respond to the Applicant's request for more clarity on the costs and obligations associated with fulfilling this mitigation measure. The most substantial change in this condition came about as a result of staff's coordination with BLM and CDFG. These agencies confirmed that $100,000 (with a 20 percent contingency) would be sufficient to construct, maintain and monitor a bighorn sheep guzzler. BLM expressed their willingness to work with the applicant in developing, managing and monitoring the water source, using funds deposited by the Applicant to the REAT-NFWF account for that purpose.

Finally, changes have been made to a number of desert tortoise conditions to address comments from the USFWS and ensure consistency with the Biological Opinion. The USFWS is currently preparing the Biological Opinion for the Blythe Project. Staff's suggested changes are as follows:

Page 213:

The Project consists of a concentrated solar thermal electric generating facility with four identical and independent solar plants (units), each of which would have a nominal capacity of 250 MW. The proposed Project includes a right-of-way (ROW) area of approximately 9,400 acres on lands administered by the U.S. Bureau of Land Management (BLM). The total area of disturbance associated with the proposed Project is approximately 7,~~205~~025 acres, including 58 acres of impact for construction of the Project's generation tie-line . Southern California Edison's construction of the Colorado River Substation would impact an additional 65 acres, but that project would be built and permitted separately from the Blythe Project.~~7,082 acres from activities related to the Project site, and 123 acres within associated linear facility corridors and a planned substation.~~ Electricity produced by all four proposed units will be distributed from a central switchyard via a new, approximately 10-mile long, 230-kV transmission line (gen-tie line).

Page 224:

Biological Resources Table 3
Summary of Impacts and Mitigation

Stabilized and Partially Stabilized Dunes	**Direct impacts**: ~~Permanent loss of 103 acres for construction of Colorado River Substation/ gen-tie line connection area (45 acres) and associated gen-tie line and access roads (58 acres)*;~~ Permanent loss of 123 acres for construction of Blythe Project's generation tie-line and associated facilities (58 acres) also including 65 acres of impact for construction of the Colorado River Substation which will be built and permitted separately by Southern California Edison; potential accidental direct impacts to adjacent preserved habitat during construction and operation. **Indirect impacts**: Introduction and spread of invasive plants; erosion and sedimentation of disturbed soils; fragmentation and degradation of remaining habitat. **Mitigation**: Implement **BIO-20**, Sand Dune Community Impact Mitigation.

Page 227:

Because Southern California Edison would construct the substation/connection area and undertake mitigation for related biological resource impacts, ~~however,~~ mitigation calculations do not include acreages from the substation/connection area facilities.

Page 233:

Specifically, **BIO-24** requires that, during construction, golden eagle nest surveys be conducted in accordance with applicable guidelines to verify the status of golden eagle nesting territories within ~~10~~ 1 mile~~s~~ of the Project boundaries. If active nests are detected, **BIO-24** provides monitoring guidelines, performance standards, and adaptive management measures to avoid adverse impacts to golden eagles from Project construction.

Page 230:

Mojave Fringe-toed Lizard

The only habitat for Mojave fringe-toed lizard in the Project Disturbance Area is the ~~123~~ 58 acres of stabilized and partially stabilized sand dune habitat south of I-10 at the proposed substation site and along the proposed transmission line corridor. During

October 2009 protocol desert tortoise surveys, 57 Mojave fringe-toed lizards were observed; 15 of these were found within the proposed substation footprint.

Page 231:

Direct Impacts

Direct impacts to the Mojave fringe-toed lizard during construction of the transmission line, substation, and associated access road would result from a permanent loss of 123 acres of occupied habitat, accidental disturbance to protected habitat adjacent to the Project site, and mortality from vehicle strikes. Construction of the Colorado River Substation would result in impacts to approximately 65 acres of stabilized and partially stabilized sand dune habitat, but this would be constructed and permitted as a separate project by Southern California Edison.

Page 234:

Potential direct impacts to the American badger and desert kit fox from the proposed Project would include the loss of ~~6,958~~ 7,020 acres of occupied habitat, fragmentation and degradation of adjacent habitat, loss of foraging grounds, crushing or entombing of animal in dens, and increased risk of mortality from vehicular activity on local roadways.

Page 236:

Based on spring 2009 and 2010 surveys of the Project disturbance area (including the proposed substation site), the evidence indicates that construction of the Project would result in significant direct and indirect impacts to the following three special-status plant species, Harwood's woollystar (also sometimes referred to as Harwood's eriastrum or phlox), Harwood's milk-vetch, and Las Animas ~~colubrine~~ colubrina (refer to **Biological Resources Table 2** for scientific nomenclature and listing status). Direct impacts would consist of the permanent loss of individual plants during Project construction and operation, while indirect impacts would be associated with effects such as drainage alteration/erosion, habitat fragmentation, spread of noxious weeds, herbicide drift and dust.

Page 237:

Potential Project-related impacts to these (and other applicable) non-listed plant species would be addressed through Condition of Certification ~~**BIO-23**~~ **BIO-8**, which requires the implementation of a Revegetation Plan involving topsoil and native plant salvage to aid in the revegetation of temporarily disturbed areas following Project construction.

Page 239:

The proposed Project would contribute impacts of approximately 6,958 acres to low and moderate quality desert tortoise habitat, representing between 0.05 and 6.1 percent of

all foreseeable future project impacts in the NECO Plan area.~~impacts to associated habitat quality levels from the cumulative projects~~ (Exhibit 200; p. C.2-119, Biological Resources **Table 12**.)

Page 240:

Mojave Fringe-toed Lizard

~~The proposed Project would contribute to the cumulative loss of Mojave fringe-toed lizard habitat, through impacts to 123 acres of stabilized and partially stabilized dune habitat (including 65 acres associated with the proposed substation site/gen-tie connection area which, as previously discussed, would be evaluated and mitigated as a separate project).~~ The Proposed Project would result in impacts to 58 acres of stabilized and partially stabilized sand dune habitat for Mojave fringe-toed lizard, which contributes 0.06 percent (58/101,878 acres) of all foreseeable future projects impacts to sand dune habitat in the NECO Plan area. An additional 65 acres of sand dunes would be impacted by construction of the Colorado River Substation, but that impact would be evaluated and mitigated by Southern California Edison. A number of measures were identified to address Project-related impacts to Mojave fringe-toed lizard habitat, including Conditions of Certification **BIO-1** through **BIO-8** (Project monitoring, reporting and worker training; and impact avoidance and minimization), and **BIO-20** (habitat acquisition, improvement and management). The evidence indicates that, with the incorporation of these mitigation measures, the Project's contribution to Mojave fringe-toed lizard habitat loss impacts would not be cumulatively considerable. (Exhibit 200; pp. C.2-122 to C.2-124.)

Couch's Spadefoot Toad

~~The proposed Project would contribute impacts of approximately 5,952 acres to Couch's spadefoot toad habitat, representing 5.3 percent of habitat impacts from the cumulative projects~~ The proposed Project would affect 5,952 acres of potential Couch's spadefoot toad habitat. This impact would represent 5.3 percent (5,952/113,224 acres) of Couch's spadefoot toad habitat impacts from all foreseeable future projects in the NECO Plan area (Exhibit 200; p. C.2-123 and C.2-124, Biological Resources **Table 14**.)

Page 241:

Western Burrowing Owl

~~The proposed Project would impact approximately 5,952 acres of burrowing owl habitat, representing 1.9 percent of habitat impacts from the cumulative projects~~ The Proposed Project would contribute to the loss of potential burrowing owl habitat representing 1.9 percent (5,952/318,563 acres) of habitat impacts from all foreseeable future projects in the NECO Plan area (Exhibit 200; p. C.2-123, Biological Resources Table 14.) A number of measures were identified to address Project-related impacts to burrowing owl habitat, including Conditions of Certification **BIO-1** through **BIO-8** (Project monitoring, reporting and worker training; and impact avoidance and minimization), **BIO-12** (acquisition of 6,958 acres of desert tortoise habitat), **BIO-22** (acquisition of 1,384 acres

of ephemeral washes), and **BIO-18** (burrowing owl avoidance/minimization measures). The evidence indicates that, with the incorporation of these mitigation measures, the Project's contribution to burrowing owl habitat loss impacts would not be cumulatively considerable. (Exhibit 200; pp. C.2-128 and C.2-129.)

Golden Eagle

The proposed Project would impact approximately 5,988 acres of golden eagle foraging habitat within the NECO area , including: 2.6 percent of creosote scrub, 0.2 percent of desert dry wash woodland, and 66 percent of all sand dune impacts from foreseeable future projects in NECO. Additionally, the Proposed Project would contribute 0.6 percent to the cumulative loss of Sonoran creosote scrub habitat for golden eagle foraging use within a 140-mile radius of the Project ~~(and 5,952 acres within a 140-mile radius of the Project site), representing between 0.2 and 66.1 percent of impacts to varied habitats from the cumulative projects~~ (Exhibit 200; pp. C.2-126 and C.2-127, Biological Resources **Table 15**.).

Page 242:

The proposed Project would ~~impact~~ contribute 1.9 percent ~~approximately~~ (5,952 acres) to the cumulative loss of 318,563 acres of American badger and desert kit fox habitat from all foreseeable future projects in the NECO Plan area, ~~representing 1.9 percent of habitat impacts from the cumulative projects~~ (Exhibit 200; p. C.2-123, Biological Resources **Table 14**.) A number of measures were.....

Page 243:

Burro deer is a subspecies of mule deer found in the Colorado Desert of Southern California, primarily along the Colorado River and in Desert Wash Woodland communities. The Proposed Project would contribute to the cumulative loss of burro deer range, representing 0.2 percent (102/50,207 acres) of impacts from all foreseeable future projects in the NECO Plan area ~~While Project-related impacts to burro deer habitat loss would be limited to approximately 102 acres (0.2 percent of the cumulative total), the Project would incrementally contribute to a significant cumulative effect.~~ (Exhibit 200; p. C.2-123 and C.2-124, Biological Resources **Table 14**.)

Pages 245-246:

Dunes provide habitat for a variety of special-status plants and animals, including Mojave fringe-toed lizard and Harwood's milk-vetch in the Project vicinity. The gen-tie line for the proposed Project would contribute ~~123~~ 58 acres (or ~~0.73~~ 0.3 percent) to the cumulative loss of active dune habitat from all foreseeable future projects in the Chuckwalla Valley, which are estimated to total 16,921 acres (11.3 percent) of all dunes in the Chuckwalla Valley. ~~with the Project impacts limited to the planned substation/gen-tine connection area and related gen-tie line.~~ As previously described, the 65-acre substation/gen-tie connection would be constructed (and mitigated) as a separate project, but is included in this analysis. Staff has concluded that the construction of a

65-acre substation/gen-tie connection facility within the active wind transport corridor, and the reasonably anticipated downwind loss of habitat from obstruction of the dune-maintaining processes from the substation facility only, is a significant effect. Transmission lines and poles themselves do not represent a downwind obstruction for dune habitat development, but the substation facility structure would result in a downwind loss of dune habitat. Based on this conclusion, a mitigation ratio of 3:1 (consistent with the NECO plan) has been recommended for the for the direct impacts to 58 acres of sand dunes for construction of the Project's transmission line-~~substation/gen-tie connection facility footprint and the downwind effect~~.

Page 245:

The analysis of cumulative impacts to special-status plants is focused on three species: ~~las animas colubrine~~ Las Animas colubrina, Harwood's milk-vetch and Harwood's woollystar. Based on the associated evidence, Staff has provided the following impact conclusion for these three species:

The Project would incrementally contribute to significant cumulative impacts on ~~las animas colubrine~~ Las Animas colubrina and its associated habitat.

Page 246:

Electricity produced by the BSSP Project will be distributed via a new, approximately 10 ~~7~~-mile long, 230 ~~500~~-kV gen-tie line extending south and southwest to a planned substation/gen-tie connection area that will be constructed by Southern California Edison as a separate project.

Page 247, Findings of Fact:

Based on the evidence, we find the following:

1. The total area of disturbance with the proposed 9,400-acre Project ROW is approximately 7,025 acres, including ~~7,082~~ 58 acres of direct impacts for construction of the Project's generation tie-line. ~~from activities related to the Project site, and 123 acres within associated linear facility corridors and a planned substation/gen-tie connection area.~~
2. The 7,025-acre Project disturbance area consists almost entirely of native habitats, including 213 acres of desert dry wash woodland, 371 acres of vegetated ephemeral swales (creosote bush-big galleta grass association), 9 acres of unvegetated ephemeral dry wash, 6365 acres of Sonoran creosote bush scrub, 9 acres of other cover types, and 58 acres of stabilized and partially stabilized desert dunes.

Page 248, Conclusions of Law

4. Pursuant to Public Resources Code section 25500, this certification serves as the Lake and Streambed Alteration Agreement and the California Fish and Game Code section 2081 Incidental Take permit, as well as all other permits required by any state, local, or regional agency or federal agency, to the extent permitted by federal law.

Conditions of Certification

*Page 253, Condition of Certification **BIO -5**:*

Designated Biologist and Biological Monitor Authority

BIO-5 The Project owner's construction/operation manager shall act on the advice of the Designated Biologist and Biological Monitor(s) to ensure conformance with the biological resources conditions of certification. The Project owner shall provide Energy Commission staff with reasonable access to the Project site under the control of the Project owner and shall otherwise fully cooperate with the Energy Commission's efforts to verify the Project owner's compliance with, or the effectiveness of, mitigation measures set forth in the conditions of certification. The Designated Biologist shall have the authority to immediately stop any activity that is not in compliance with these conditions and/or order any reasonable measure to avoid take of an individual of a listed species. If required by the Designated Biologist and Biological Monitor(s) the Project owner's construction/operation manager shall halt all site mobilization, ground disturbance, grading, boring, trenching and operation activities in areas specified by the Designated Biologist. The Designated Biologist shall:

1. Require a halt to all activities in any area when determined that there would be an unauthorized adverse impact to biological resources if the activities continued;
2. Inform the Project owner and the construction/operation manager when to resume activities; and
3. Notify the CPM and if there is a halt of any activities and advise them of any corrective actions that have been taken or would be instituted as a result of the work stoppage. If the work stoppage relates to desert tortoise or any other federal or state-listed species, the Carlsbad Office of USFWS and the Ontario Office of CDFG shall also be notified.

If the Designated Biologist is unavailable for direct consultation, the Biological Monitor shall act on behalf of the Designated Biologist.

Verification: The Project owner shall ensure that the Designated Biologist or Biological Monitor notifies the CPM immediately (and no later than the morning following the incident, or Monday morning in the case of a weekend) of any non-compliance or a halt of any site mobilization, ground disturbance, grading, construction, and operation activities. If the non-compliance or halt to construction or operation relates to desert tortoise or any other federal or state-listed species, the Project owner shall notify the Carlsbad Office of USFWS and Ontario Office of CDFG at the same time. The Project owner shall notify the CPM of the circumstances and actions being taken to resolve the problem.

Whenever corrective action is taken by the Project owner, a determination of success or failure would be made by the CPM, in consultation with USFWS and CDFG, within five working days after receipt of notice that corrective action is completed, or the Project

owner would be notified by the CPM that coordination with other agencies would require additional time before a determination can be made.

Page 254, Condition of Certification BIO-6:

Worker Environmental Awareness Program (WEAP)

BIO-6 The Project owner shall develop and implement a Blythe Project-specific Worker Environmental Awareness Program (WEAP) and shall secure approval for the WEAP from the CPM. The Project owner shall also provide the BLM, USFWS and CDFG a copy of all portions of the WEAP relating to desert tortoise and any other federal or state-listed species for review and comment. The WEAP shall be administered to all onsite personnel including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors, and delivery personnel. The WEAP shall be implemented during site preconstruction, construction, operation, and closure. The WEAP shall:

1. Be developed by or in consultation with the Designated Biologist and consist of an on-site or training center presentation in which supporting written material and electronic media, including photographs of protected species, is made available to all participants;
2. Discuss the locations and types of sensitive biological resources on the Project site and adjacent areas, and explain the reasons for protecting these resources; provide information to participants that no snakes, reptiles, or other wildlife shall be harmed;
3. Place special emphasis on desert tortoise, including information on physical characteristics, distribution, behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and protection measures;
4. Include a discussion of fire prevention measures to be implemented by workers during Project activities; request workers dispose of cigarettes and cigars appropriately and not leave them on the ground or buried;
5. Describe the temporary and permanent habitat protection measures to be implemented at the Project site;
6. Identify whom to contact if there are further comments and questions about the material discussed in the program; and
7. Include a training acknowledgment form to be signed by each worker indicating that they received training and shall abide by the guidelines.

The specific program can be administered by a competent individual(s) acceptable to the Designated Biologist.

Verification: At least ~~No fewer than~~ 30 days prior to construction-related ground disturbance the Project owner shall provide to the CPM for review and approval and to BLM, USFWS, and CDFG a copy of the final WEAP and all supporting written materials

and electronic media prepared or reviewed by the Designated Biologist and a resume of the person(s) administering the program.

The Project owner shall provide in the Monthly Compliance Report the number of persons who have completed the training in the prior month and a running total of all persons who have completed the training to date. At least 10 days prior to construction-related ground disturbance activities the Project owner shall submit two copies of the ~~BLM- and CPM-approved~~ final WEAP.

Training acknowledgement forms signed during construction shall be kept on file by the Project owner for at least ~~six~~ **6** months after the start of commercial operation.

Throughout the life of the Project, the WEAP shall be repeated annually for permanent employees, and shall be routinely administered within one week of arrival to any new construction personnel, foremen, contractors, subcontractors, and other personnel potentially working within the Project area. Upon completion of the orientation, employees shall sign a form stating that they attended the program and understand all protection measures. These forms shall be maintained by the Project owner and shall be made available to the CPM, BLM, USFWS, and CDFG and upon request. Workers shall receive and be required to visibly display a hardhat sticker or certificate that they have completed the training.

During Project operation, signed statements for operational personnel shall be kept on file for six months following the termination of an individual's employment.

*Page 255, Condition of Certification **BIO -7:***

Biological Resources Mitigation Implementation and Monitoring Plan

BIO-7 The Project owner shall develop a Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP), and shall submit two copies of the proposed BRMIMP to the CPM for review and approval. The Project owner shall implement the measures identified in the approved BRMIMP. The BRMIMP shall incorporate avoidance and minimization measures described in final versions of the Desert Tortoise Relocation Translocation Plan, the Raven Management Plan, the Closure, Conceptual Restoration Plan, the Burrowing Owl Mitigation and Monitoring Plan, the Weed Management Plan, and all other biological mitigation and/or monitoring plans associated with the Project. The Project owner shall provide to BLM, CDFG, and USFWS a copy of all portions of the BRMIMP relating to desert tortoise and any other federal or state-listed species for review and comment.

The BRMIMP shall be prepared in consultation with the Designated Biologist and shall include accurate and up-to-date maps depicting the location of sensitive biological resources that require temporary or permanent protection during construction and operation. The BRMIMP shall include complete and detailed descriptions of the following:

1. All biological resources mitigation, monitoring, and compliance measures proposed and agreed to by the Project owner;

2. All biological resources conditions of certification identified as necessary to avoid or mitigate impacts;
3. All biological resource mitigation, monitoring and compliance measures required in federal agency terms and conditions, such as those provided in the USFWS Biological Opinion;
4. All sensitive biological resources to be impacted, avoided, or mitigated by Project construction, operation, and closure;
5. All required mitigation measures for each sensitive biological resource;
6. All measures that shall be taken to avoid or mitigate temporary disturbances from construction activities;
7. Duration for each type of monitoring and a description of monitoring methodologies and frequency;
8. Performance standards to be used to help decide if/when proposed mitigation is or is not successful;
9. All performance standards and remedial measures to be implemented if performance standards are not met;
10. Biological resources-related facility closure measures including a description of funding mechanism(s);
11. A process for proposing plan modifications to the CPM and appropriate agencies for review and approval; and
12. A requirement to submit any sightings of any special-status species that are observed on or in proximity to the Project site, or during Project surveys, to the California Natural Diversity Data Base ~~(~~CNDDB~~)~~ per CDFG requirements.

Verification: The Project owner shall submit the ~~final~~ draft BRMIMP to the CPM at least 30 days prior to start of any preconstruction site mobilization and construction-related ground disturbance, grading, boring, and trenching. At the same time, the Project owner shall provide to BLM, CDFG, and USFWS a copy of all portions of the draft BRMIMP relating to desert tortoise and any other federal or state-listed species. The Project owner shall provide the final BRMIMP to the CPM at least 7 days prior to the start of any construction-related ground disturbance, grading, boring, or trenching. The BRMIMP shall contain all of the required measures included in all biological Conditions of Certification. No construction-related ground disturbance, grading, boring or trenching may occur prior to approval of the final BRMIMP by the CPM.

If any permits have not yet been received when the final BRMIMP is ~~first~~ submitted, these permits shall be submitted to the CPM within 5 days of their receipt, and the BRMIMP shall be revised or supplemented to reflect the permit conditions. ~~within at least 10 days of their receipt by the Project owner. Ten days prior to site and related facilities mobilization the revised BRMIMP shall be resubmitted to the CPM.~~

To verify that the extent of construction disturbance does not exceed that described in these conditions ~~this analysis~~, the Project owner shall submit aerial photographs, at an

approved scale, taken before and after construction to the CPM, BLM, USFWS, and CDFG. The first set of aerial photographs shall reflect site conditions prior to any preconstruction site mobilization and construction-related ground disturbance, grading, boring, and trenching, and shall be submitted ~~at least 60 days~~ prior to initiation of such activities. The second set of aerial photographs shall be taken subsequent to completion of construction, and shall be submitted to the CPM, BLM, USFWS, and CDFG no later than 90 days after completion of construction. The Project owner shall also provide a final accounting in whole acres of the areas of vegetation communities/cover types present before and after construction. Construction acreages shall be rounded to the nearest acre.

Any changes to the approved BRMIMP must be approved by the CPM and in consultation with CDFG and USFWS.

Implementation of BRMIMP measures (for example, construction activities that were monitored, species observed) shall be reported in the Monthly Compliance Reports by the Designated Biologist. Within 30 days after completion of Project construction, the Project owner shall provide to the CPM, for review and approval, a written construction termination report identifying which items of the BRMIMP have been completed, a summary of all modifications to mitigation measures made during the Project's preconstruction site mobilization and construction-related ground disturbance, grading, boring, and trenching, and which mitigation and monitoring items are still outstanding.

Page 257, Condition of Certification BIO -8:

Impact Avoidance AND MINIMIZATION MEASURES

BIO-8 The Project owner shall undertake the following measures to manage the ~~construction~~ Project site and related facilities in a manner to avoid or minimize impacts to biological resources:

1. Limit Disturbance Areas. The boundaries of all areas to be disturbed (including staging areas, access roads, and sites for temporary placement of spoils) shall be delineated with stakes and flagging prior to construction activities in consultation with the Designated Biologist. Spoils and topsoil shall be stockpiled in disturbed areas lacking native vegetation and which do not provide habitat for special-status species. Parking areas, staging and disposal site locations shall similarly be located in areas without native vegetation or special-status species habitat. All disturbances, Project vehicles and equipment shall be confined to the flagged areas.

2. Minimize Road Impacts. New and existing roads that are planned for construction, widening, or other improvements shall not extend beyond the flagged impact area as described above. All vehicles passing or turning around would do so within the planned impact area or in previously disturbed areas. Where new access is required outside of existing roads or the construction zone, the route shall be clearly marked (i.e., flagged and/or staked) prior to the onset of construction.

3. Minimize Traffic Impacts. Vehicular traffic during Project construction and operation shall be confined to existing routes of travel to and from the Project site, and cross country vehicle and equipment use outside designated work areas shall be prohibited. The speed limit shall not exceed 25 miles per hour within the Project area, on maintenance roads for linear facilities, or on access roads to the Project site. Speed limit signs shall be posted on new access roads to the site.

4. Monitor During Construction. In areas that have not been fenced with desert tortoise exclusion fencing ~~and~~ but have been cleared, the Designated Biologist shall be present at the construction site during all Project activities that have potential to disturb soil, vegetation, and wildlife. The Designated Biologist or Biological Monitor shall walk immediately ahead of equipment during brushing and grading activities. If desert tortoise are found during construction monitoring, procedures outlined in **BIO-9** shall be implemented.

5. Minimize Impacts of Transmission/Pipeline Alignments, Roads, and Staging Areas. Staging areas for construction on the plant site shall be within the area that has been fenced with desert tortoise exclusion fencing and cleared. For construction activities outside of the plant site (transmission line, pipeline alignments) access roads, pulling sites, and storage and parking areas shall be designed, installed, and maintained with the goal of minimizing impacts to native plant communities and sensitive biological resources. Transmission lines and all electrical components shall be designed, installed, and maintained in accordance with the Avian Power Line Interaction Committee's (APLIC's) S*uggested Practices for Avian Protection on Power Lines* (APLIC 1994) and *Mitigating Bird Collisions with Power Lines* (APLIC 2004) to reduce the likelihood of large bird electrocutions and collisions.

6. Avoid Use of Toxic Substances. Soil bonding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants.

7. Minimize Lighting Impacts. Facility lighting shall be designed, installed, and maintained to prevent side casting of light towards wildlife habitat.

8. Minimize Noise Impacts A continuous low-pressure technique shall be used for steam blows, to the extent possible, in order to reduce noise levels in sensitive habitat proximate to the Blythe Project. Loud construction activities (e.g., unsilenced high pressure steam blowing and pile driving, or other) shall be avoided from February 15 to April 15 when it would result in noise levels over 65 dBA in nesting habitat (excluding noise from passing vehicles). Loud construction activities may be permitted from February 15 to April 15 only if:

   a. the Designated Biologist provides documentation (i.e., nesting bird data collected using methods described in **BIO-15** and maps depicting location of the nest survey area in relation to noisy construction) to the

CPM indicating that no active nests would be subject to 65 dBA noise, OR

b. the Designated Biologist or Biological Monitor monitors active nests within the range of construction-related noise exceeding 65 dBA. The monitoring shall be conducted in accordance with Nesting Bird Monitoring and Management Plan approved by the CPM. The Plan shall include adaptive management measures to prevent disturbance to nesting birds from construction related noise. Triggers for adaptive management shall be evidence of Project-related disturbance to nesting birds such as: agitation behavior (displacement, avoidance, and defense); increased vigilance behavior at nest sites; changes in foraging and feeding behavior, or nest site abandonment. The Nesting Bird 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 Designated Biologist to be the source of disturbance to the nesting bird.

9. Avoid Vehicle Impacts to Desert Tortoise. Parking and storage shall occur within the area enclosed by desert tortoise exclusion fencing to the extent feasible. No vehicles or construction equipment parked outside the fenced area shall be moved prior to an inspection of the ground beneath the vehicle for the presence of desert tortoise. If a desert tortoise is observed outside the areas permanently fenced with desert tortoise exclusion fencing, it ~~would~~ shall be left to move on its own. If it does not move within 15 minutes, a Designated Biologist or Biological Monitor under the Designated Biologist's direct supervision may move it out of harm's way as described in the USFWS Desert Tortoise Field Manual (USFWS 2009). ~~may remove and relocate the animal to a safe location if temperatures are within the range described in the USFWS' 2009 *Desert Tortoise Field Manual* (http://www.fws.gov/ventura/speciesinfo/protocols_guidelines~~

10. Avoid Wildlife Pitfalls:

    a. Backfill Trenches. At the end of each work day, the Designated Biologist shall ensure that all potential wildlife pitfalls (trenches, bores, and other excavations) outside the area fenced with desert tortoise exclusion fencing have been backfilled. If backfilling is not feasible, all trenches, bores, and other excavations shall be sloped at a 3:1 ratio at the ends to provide wildlife escape ramps, or covered completely to prevent wildlife access, or fully enclosed with desert tortoise-exclusion fencing. All trenches, bores, and other excavations outside the areas permanently fenced with desert tortoise exclusion fencing shall be inspected periodically throughout the day, at the end of each workday and at the beginning of each day by the Designated Biologist or a Biological Monitor. Should a tortoise or other wildlife become trapped, the Designated Biologist or Biological Monitor ~~shall remove and relocate the individual~~ move

it out of harm's way as described in the USFWS Desert Tortoise ~~Relocation/Translocation Plan~~ Field Manual (USFWS 2009). Any other wildlife encountered during the course of construction shall be allowed to leave the construction area unharmed.

b. Avoid Entrapment of Desert Tortoise. Any construction pipe, culvert, or similar structure with a diameter greater than 3 inches, stored less than 8 inches aboveground and within desert tortoise habitat (i.e., outside the permanently fenced area) for one or more nights, shall be inspected for tortoises before the material is moved, buried or capped. As an alternative, all such structures may be capped before being stored outside the fenced area, or placed on elevated pipe racks. These materials would not need to be inspected or capped if they are stored within the permanently fenced area after the clearance surveys have been completed.

11. Minimize Standing Water. Water applied to dirt roads and construction areas (trenches or spoil piles) for dust abatement shall use the minimal amount needed to meet safety and air quality standards in an effort to prevent the formation of puddles, which could attract desert tortoises and common ravens to construction sites. A Biological Monitor shall patrol these areas to ensure water does not puddle and shall take appropriate action to reduce water application where necessary.

12. Dispose of Road-killed Animals. Road killed animals or other carcasses detected by personnel on roads ~~near~~ associated with the Project area shall be reported immediately to a Designated Biologist, Biological Monitor or Project Environmental Compliance Manager who will promptly remove the roadkill for disposal (i.e. removal to a landfill or disposal at the BSPP facility). ~~picked up immediately and delivered to the Biological Monitor.~~ For special-status species roadkill, the Biological Monitor shall contact CDFG and USFWS within 1 working day of ~~receipt~~ detection of the carcass for guidance on disposal or storage of the carcass; all other roadkill shall be disposed of promptly. The Biological Monitor shall ~~report~~ provide the special-status species record as described in **BIO-11** below.

13. Minimize Spills of Hazardous Materials. All vehicles and equipment shall be maintained in proper working condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. The Designated Biologist shall be informed of any hazardous spills immediately as directed in the Project Hazardous Materials Plan. Hazardous spills shall be immediately cleaned up and the contaminated soil properly disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated area. Service/maintenance vehicles shall carry a bucket and pads to absorb leaks or spills.

14. Worker Guidelines. During construction all trash and food-related waste shall be placed in self-closing containers and removed daily from the site.

Workers shall not feed wildlife or bring pets to the Project site. Except for law enforcement personnel, no workers or visitors to the site shall bring firearms or weapons. Vehicular traffic shall be confined to existing routes of travel to and from the Project site, and cross country vehicle and equipment use outside designated work areas shall be prohibited. The speed limit when traveling on dirt access routes within desert tortoise habitat shall not exceed 25 miles per hour.

15. Implement Erosion Control Measures. Standard erosion control measures shall be implemented for all phases of construction and operation where sediment run-off from exposed slopes threatens to enter "Waters of the State". Sediment and other flow-restricting materials shall be moved to a location where they shall not be washed back into the stream. All disturbed soils and roads within the Project site shall be stabilized to reduce erosion potential, both during and following construction. Areas of disturbed soils (access and staging areas) ~~with slopes toward a drainage~~ which slope toward drainages shall be stabilized to reduce erosion potential.

16. Monitor Ground Disturbing Activities Prior to Pre-Construction Site Mobilization. If pre-construction site mobilization requires ground-disturbing activities such as for geotechnical borings or hazardous waste evaluations, a Designated Biologist or Biological Monitor shall be present to monitor any actions that could disturb soil, vegetation, or wildlife.

17. Revegetation of Temporarily Disturbed Areas. The Project owner shall prepare and implement a Revegetation Plan to restore all areas subject to temporary disturbance to pre-Project grade and conditions. Temporarily disturbed areas within the Project area include, but are not limited to: all proposed locations for linear facilities, temporary access roads, berms, areas surrounding the drainage diffusers, construction work temporary lay-down areas, and construction equipment staging areas. The Revegetation Plan shall include a description of topsoil salvage and seeding techniques and a monitoring and reporting plan, and the following performance standards by the end of monitoring year 2:

    a. at least 80 percent of the species observed within the temporarily disturbed areas shall be native species that naturally occur in desert scrub habitats; and

    b. relative cover and density of plant species within the temporarily disturbed areas shall equal at least 60 percent.

Verification: All mitigation measures and their implementation methods shall be included in the BRMIMP and implemented. Implementation of the measures would be reported in the Monthly Compliance Reports by the Designated Biologist. Within 30 days after completion of Project construction, the Project owner shall provide to the CPM, for review and approval, a written construction termination report identifying how measures have been completed. As part of the Annual Compliance Report each year following construction, the Designated Biologist shall provide a report to the CPM that

describes compliance with avoidance and minimization measures to be implemented during construction, operation, and maintenance (for example a summary of the incidence of roadkilled animals during the year, implementation of measures to avoid toxic spills, erosion and sedimentation, efforts to enforce worker guidelines, etc.).

No less than 30 days prior to construction ~~following the publication of the Energy Commission License Decision or the Record of Decision/ROW Issuance, whichever comes first~~, the Project owner shall submit to the CPM a final agency-approved Revegetation Plan that has been reviewed and approved by the CPM. All modifications to the Revegetation Plan shall be made only after approval from the CPM.

Within 30 days after completion of Project construction, the Project owner shall provide to the CPM for review and approval, a written report identifying which items of the Revegetation Plan have been completed, a summary of all modifications to mitigation measures made during the Project's construction phase, and which items are still outstanding.

As part of the Annual Compliance Report, each year following construction until the completion of the revegetation monitoring specified in the Revegetation Plan, the Designated Biologist shall provide a report to the CPM that includes: a summary of revegetation activities for the year, a discussion of whether revegetation performance standards for the year were met; and recommendations for revegetation remedial action, if warranted, are planned for the upcoming year.

If loud construction activities are proposed between February 15 to April 15 which would result in noise levels over 65 dBA in nesting habitat, the Project owner shall submit nest survey results (as described in 8a) to the CPM no more than 7 days before initiating such construction. If an active nest is detected within this survey area the Project owner shall submit a Nesting Bird Monitoring and Management Plan to the CPM for review and approval no more than 7 days before initiating noisy construction.

Page 263, Condition of Certification BIO-9:

DESERT TORTOISE CLEARANCE SURVEYS AND FENCING

BIO-9 The Project owner shall undertake appropriate measures to manage the ~~construction~~ Project site and related facilities in a manner to avoid or minimize impacts to desert tortoise. Methods for clearance surveys, fence specification and installation, tortoise handling, artificial burrow construction, egg handling and other procedures shall be consistent with those described in the USFWS ~~2009~~ *Desert Tortoise Field Manual (USFWS 2009)* <http://www.fws.gov/ventura/speciesinfo/protocols_guidelines> or more current guidance provided by CDFG and USFWS. The Project owner shall also implement all terms and conditions described in the Biological Opinion prepared by USFWS. The Project owner shall implement the following measures:

1. Desert Tortoise Exclusion Fence Installation. To avoid impacts to desert tortoises, permanent exclusion fencing shall be installed along the permanent perimeter security fence (boundaries) as phases are

constructed. Temporary fencing shall be installed along ~~linear features or~~ any subset of the plant site phasing that does not correspond to permanent perimeter fencing. Temporary fencing shall be installed along linear features unless a Biological Monitor is present in the immediate vicinity of construction activities for the linear facility. All fencing shall be flagged and surveyed within 24 hours prior to the initiation of fence construction. Clearance surveys of the desert tortoise exclusionary fence and utility rights-of-way alignments shall be conducted by the Designated Biologist(s) using techniques outlined in the ~~USFWS' 2009~~ *Desert Tortoise Field Manual* (USFWS 2009) and may be conducted in any season with USFWS and CDFG approval. Biological Monitors may assist the Designated Biologist under his or her supervision. These fence clearance surveys shall provide 100-percent coverage of all areas to be disturbed and an additional transect along both sides of the fence line. Disturbance associated with desert tortoise exclusionary fence construction shall not exceed 30 feet on either side of the proposed fence alignment. Prior to the surveys the project owner shall provide to the CPM, CDFG and USFWS a figure clearly depicting the limits of construction disturbance for the proposed fence installation. The fence line survey area shall be 90 feet wide centered on the fence alignment. Where construction disturbance for fence line installation can be limited to 15 feet on either side of the fence line, this fence line survey area may be reduced to an area approximately 60 feet wide centered on the fence alignment. Transects shall be no greater than 15 feet apart. ~~All desert tortoise burrows, and burrows constructed by other species that might be used by desert tortoises, shall be examined to assess occupancy of each burrow by desert tortoises and handled in accordance with the USFWS' 2009 *Desert Tortoise Field Manual.* Any d~~ Desert tortoise located within the utility ROW alignments shall be moved out of harm's way in accordance with the USFWS *Desert Tortoise Field Manual* (USFWS 2009). Any desert tortoise detected during clearance surveys for fencing within the Project site and along the perimeter fence alignment shall be translocated and monitored in accordance with the Desert Tortoise Relocation/Translocation Plan (**BIO-10**). ~~during fence clearance surveys~~ Tortoise shall be handled by the Designated Biologist(s) in accordance with the USFWS' ~~2009~~ *Desert Tortoise Field Manual* (USFWS 2009).

a. Timing, Supervision of Fence Installation. The exclusion fencing shall be installed in any area subject to disturbance prior to the onset of site clearing and grubbing in that area. The fence installation shall be supervised by the Designated Biologist and monitored by the Biological Monitors to ensure the safety of any tortoise present.

b. Fence Material and Installation. All desert tortoise exclusionary fencing shall be constructed in accordance with the USFWS' ~~2009~~ *Desert Tortoise Field Manual* (USFWS 2009) (Chapter 8 – Desert Tortoise Exclusion Fence).

c. Security Gates. Security gates shall be designed with minimal ground clearance to deter ingress by tortoises. The gates may be electronically activated to open and close immediately after the vehicle(s) have entered or exited to prevent the gates from being kept open for long periods of time.

d. Fence Inspections. Following installation of the desert tortoise exclusion fencing for both the permanent site fencing and temporary fencing in the utility corridors, the fencing shall be regularly inspected. If tortoise were moved out of harm's way during fence construction, permanent and temporary fencing shall be inspected at least two times a day for the first 7 days to ensure a recently moved tortoise has not been trapped within the fence. Thereafter, permanent fencing shall be inspected monthly and during and within 24 hours following all major rainfall events. A major rainfall event is defined as one for which flow is detectable within the fenced drainage. Any damage to the fencing shall be temporarily repaired immediately to keep tortoises out of the site, and permanently repaired within 48 hours of observing damage. Inspections of permanent site fencing shall occur for the life of the Project. Temporary fencing shall be inspected weekly and, where drainages intersect the fencing, during and within 24 hours following major rainfall events. All temporary fencing shall be repaired immediately upon discovery and, if the fence may have permitted tortoise entry while damaged, the Designated Biologist shall inspect the area for tortoise.

2. Desert Tortoise Clearance Surveys within the Plant Site. Clearance surveys shall be conducted in accordance with the USFWS' ~~2009~~ *Desert Tortoise Field Manual* (USFWS 2009) (Chapter 6 – Clearance Survey Protocol for the Desert Tortoise – Mojave Population) and shall consist of two surveys covering 100 percent the Project area by walking transects no more than 15-feet apart. If a desert tortoise is located on the second survey, a third survey shall be conducted. Each separate survey shall be walked in a different direction to allow opposing angles of observation. Clearance surveys for non-linear areas of Phase 1A may be conducted outside the active season. Clearance surveys of the remaining portions of the power plant site may only be conducted when tortoises are most active (April through May or September through October) unless the Project receives approval from CDFG and USFWS. Clearance surveys of linear features may be conducted during anytime of the year. Surveys outside of the active season in areas other than Phase 1A require approval by USFWS and CDFG. Any tortoise located during clearance surveys of the power plant site and linear features shall be translocated or relocated and monitored in accordance with the Desert Tortoise Relocation/Translocation Plan:

a. Burrow Searches. During clearance surveys all desert tortoise burrows, and burrows constructed by other species that might be used by desert tortoises, shall be examined by the Designated Biologist, who may be assisted by the Biological Monitors, to assess occupancy of each burrow by desert tortoises and handled in accordance with the USFWS' ~~2009~~ *Desert Tortoise Field Manual* (USFWS 2009). To prevent reentry by a tortoise or other wildlife, all burrows shall be collapsed once absence has been determined in accordance with the Desert Tortoise Relocation/Translocation Plan. Tortoises taken from burrows and from elsewhere on the power plant site shall be relocated or translocated as described in the Desert Tortoise Relocation/Translocation Plan.

b. Burrow Excavation/Handling. All potential desert tortoise burrows located during clearance surveys would be excavated by hand, tortoises removed, and collapsed or blocked to prevent occupation by desert tortoises in accordance with the Desert Tortoise Relocation/Translocation Plan. All desert tortoise handling, ~~and~~ removal, and burrow excavations, including nests, would be conducted by the Designated Biologist, who may be assisted by a Biological Monitor in accordance with the USFWS' ~~2009~~ *Desert Tortoise Field Manual* (USFWS 2009).

3. Monitoring Following Clearing. Following the desert tortoise clearance and removal from the power plant site and utility corridors, workers and heavy equipment shall be allowed to enter the Project site to perform clearing, grubbing, leveling, and trenching activities. A Designated Biologist or Biological Monitor shall be onsite for ~~monitor~~ clearing and grading activities to ~~find and~~ move tortoises missed during the initial tortoise clearance survey. Should a tortoise be discovered, it shall be relocated or translocated as described in the Desert Tortoise Relocation/Translocation Plan.

4. Reporting. The Designated Biologist shall record the following information for any desert t*ortoises handled: a) the locat*ions (narrative and maps) and dates of observation; b) general condition and health, including injuries, state of healing and whether desert tortoise voided their bladders; c) location moved from and location moved to (using GPS technology); d) gender, carapace length, and diagnostic markings (i.e., identification numbers or marked lateral scutes); e) ambient temperature when handled and released; and f) digital photograph of each handled desert tortoise ~~as described in the paragraph below~~. Desert tortoise moved from within Project areas shall be marked and monitored in accordance with the Desert Tortoise Relocation/Translocation Plan.

Verification: All mitigation measures and their implementation methods shall be included in the BRMIMP and implemented. Implementation of the measures shall be

reported in the Monthly Compliance Reports by the Designated Biologist. Within 30 days after completion of desert tortoise clearance surveys the Designated Biologist shall submit a report toBLM, the CPM, USFWS, and CDFG describing implementation of each of the mitigation measures listed above. The report shall include the desert tortoise survey results, capture and release locations of any relocated desert tortoises, and any other information needed to demonstrate compliance with the measures described above.

Page 267, Condition of Certification BIO-10:

DESERT TORTOISE RELOCATION/TRANSLOCATION PLAN

BIO-10 The Project owner shall develop and implement a final Desert Tortoise Relocation/Translocation Plan (Plan) that is consistent with current USFWS approved guidelines, and meets the approval of the CPM. The Plan shall include guidance specific to each of the three phases of Project construction, as described in **BIO-28** (Phasing), and shall include measures to minimize the potential for repeated translocations of individual desert tortoises. The goals of the Desert Tortoise Relocation/Translocation Plan shall be to relocate or translocate all desert tortoises from the Project site to nearby suitable habitat; minimize impacts on resident desert tortoises outside the Project site; minimize stress, disturbance, and injuries to relocated/translocated tortoises; and assess the success of the relocation/translocation effort through monitoring. The final Plan shall be based on the draft Desert Tortoise Relocation/Translocation Plan prepared by the Applicant (AECOM 2010t) and shall include all revisions deemed necessary by BLM, USFWS, CDFG and the Energy Commission staff.

Verification: ~~No fewer than~~ At least 30 days prior to site mobilization the Project owner shall provide the CPM with the final version of a Desert Tortoise Relocation/Translocation Plan that has been reviewed and approved by the CPM in consultation with BLM, USFWS and CDFG. All modifications to the approved Plan shall be made only after approval by the CPM, in consultation with BLM, USFWS and CDFG.

Within 30 days after initiation of relocation and/or translocation activities, the Designated Biologist shall provide to the CPM for review and approval, a written report identifying which items of the Plan have been completed, and a summary of all modifications to measures made during implementation of the Plan.

Page 268, Condition of Certification BIO-11:

Desert Tortoise Compliance VERIFICATION

BIO-11 The Project owner shall provide Energy Commission, CDFG, and USFWS and BLM staff with reasonable access to the Project site and compensation lands under the control of the Project owner and shall otherwise fully cooperate with the Energy Commission's and BLM's efforts to verify the

Project owner's compliance with, or the effectiveness of, mitigation measures set forth in the conditions of certification. The Designated Biologist shall do all of the following:

1. Notification. Notify the CPM ~~and~~ at least 14 calendar days before initiating construction-related ground disturbance activities; immediately notify the CPM in writing if the Project owner is not in compliance with any conditions of certification, including but not limited to any actual or anticipated failure to implement mitigation measures within the time periods specified in the conditions of certification;

2. Monitoring During Grubbing and Grading. Remain onsite daily while vegetation salvage, grubbing, grading and other ground-disturbance construction activities are taking place to avoid or minimize take of listed species and verify personally or use Biological Monitors, to check for compliance with all impact avoidance and minimization measures, ~~and to~~ including checking all exclusion zones to ensure that signs, stakes, and fencing are intact and that human activities are restricted in these protective zones.

3. Monthly Compliance Inspections. Conduct compliance inspections at a minimum of once per month after clearing, grubbing, and grading are completed and submit a monthly compliance report to the BLM, CPM, USFWS and CDFG during construction~~, as required under **Compliance-6**~~.

4. Notification of Injured, Dead, or Relocated Listed Species. ~~In the event of a sighting in an active construction area (e.g., with equipment, vehicles, or workers), injury, kill, or relocation of any listed species, the CPM, CDFG, and USFWS shall be notified immediately by phone.~~ If an injured or dead listed species is detected within or near the Project Disturbance area, the CPM, the Ontario Office of CDFG, and Carlsbad Office of USFWS shall be notified immediately by phone. Notification shall occur no later than noon on the business day following the event if it occurs outside normal business hours so that the agencies can determine if further actions are required to protect listed species. Written follow-up notification via FAX or electronic communication shall be submitted to these agencies within two calendar days of the incident and include the following information as relevant:

   a. Injured Desert Tortoise. If a desert tortoise is injured as a result of Project-related activities during construction, the Designated Biologist or approved Biological Monitor shall immediately take it to a CDFG-approved wildlife rehabilitation and/or veterinarian clinic. Any veterinarian bills for such injured animals shall be paid by the Project owner. Following phone notification as required above, the CPM, CDFG, and USFWS shall determine the final disposition of the injured animal, if it recovers. Written notification shall include, at a minimum, the date, time, location, circumstances of the incident, and the name of the facility where the animal was taken.

b. Desert Tortoise Fatality. If a desert tortoise is killed by Project-related activities during construction or operation, submit a written report with the same information as an injury report to the CPM, CDFG, and USFWS. These desert tortoises shall be salvaged according to guidelines described in *Salvaging Injured, Recently Dead, Ill, and Dying Wild, Free-Roaming Desert Tortoise* (Berry 2001). The Project owner shall pay to have the desert tortoises transported and necropsied. The report shall include the date and time of the finding or incident.

5. Stop Work Order. The CPM may issue the Project owner a written stop work order to suspend any activity related to the construction or operation of the Project to prevent or remedy a violation of one or more conditions of certification (including but not limited to failure to comply with reporting, monitoring, or habitat acquisition obligations) or to prevent the illegal take of an endangered, threatened, or candidate species. The Project owner shall comply with the stop work order immediately upon receipt thereof.

Verification: No later than 2 days following the above required notification of a sighting, kill, or relocation of a listed species, the Project owner shall deliver to the CPM, CDFG, and USFWS via FAX or electronic communication the written report from the Designated Biologist describing all reported incidents of injury, kill, or relocation of a listed species, identifying who was notified, and explaining when the incidents occurred. In the case of a sighting in an active construction area, the Project owner shall, at the same time, submit a map (e.g., using Geographic Information Systems) depicting both the limits of construction and sighting location to the CPM, CDFG and USFWS.

No later than 45 days after initiation of Project operation the Designated Biologist shall provide the CPM a Final Listed Species Mitigation Report that includes, at a minimum: 1) a copy of the table in the BRMIMP with notes showing when each of the mitigation measures was implemented; 2) all available information about Project-related incidental take of listed species; 3) information about other Project impacts on the listed species; 4) construction dates; 5) an assessment of the effectiveness of conditions of certification in minimizing and compensating for Project impacts; 6) recommendations on how mitigation measures might be changed to more effectively minimize and mitigate the impacts of future Projects on the listed species; and 7) any other pertinent information, including the level of take of the listed species associated with the Project. Beginning with the first month after clearing, grubbing, and grading are completed and continuing every month until construction is complete, the Project owner shall submit a report describing their results of the Monthly Compliance Inspections to the CPM, BLM, USFWS, and CDFG.

Page 270, Condition of Certification BIO-12:

DESERT TORTOISE COMPENSATORY MITIGATION

BIO-12 To fully mitigate for habitat loss and potential take of desert tortoise, the Project owner shall provide compensatory mitigation at a 1:1 ratio for impacts

to 6,958 acres, adjusted to reflect the final Project footprint. For purposes of this condition, the Project footprint means all lands disturbed in the construction and operation of the Blythe Project, including all linears, as well as undeveloped areas inside the Project's boundaries that will no longer provide viable long-term habitat for the desert tortoise. To satisfy this condition, the Project owner shall acquire, protect and transfer 1 acre of desert tortoise habitat for every acre of habitat within the final Project footprint, and provide associated funding for the acquired lands, as specified below. Condition **BIO-27** may provide the Project owner with another option for satisfying some or all of the requirements in this condition. In lieu of acquiring lands itself, the Project owner may satisfy the requirements of this condition by depositing funds into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF), as provided below in section 3.i. of this condition.

The timing of the mitigation shall correspond with the timing of the site disturbance activities as stated in **BIO-28** (phasing). If compensation lands are acquired in fee title or in easement, the requirements for acquisition, initial improvement and long-term management of compensation lands include all of the following:

1. Selection Criteria for Compensation Lands. The compensation lands selected for acquisition in fee title or in easement shall:

    a. be within the Colorado Desert Recovery Unit, with potential to contribute to desert tortoise habitat connectivity and build linkages between desert tortoise designated critical habitat, known populations of desert tortoise, and/or other preserve lands;

    b. provide habitat for desert tortoise with capacity to regenerate naturally when disturbances are removed;

    c. be prioritized near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation;

    d. be connected to lands with desert tortoise habitat equal to or better quality than the Project Site, ideally with populations that are stable, recovering, or likely to recover;

    e. not have a history of intensive recreational use or other disturbance that does not have the capacity to regenerate naturally when disturbances are removed or might make habitat recovery and restoration infeasible;

    f. not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration;

    g. not contain hazardous wastes that cannot be removed to the extent that the site could not provide suitable habitat; and

h. have water and mineral rights included as part of the acquisition, unless the CPM, in consultation with CDFG, BLM and USFWS, agrees in writing to the acceptability of land.

2. Review and Approval of Compensation Lands Prior to Acquisition. The Project owner shall submit a formal acquisition proposal to the CPM, CDFG, USFWS, and BLM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for desert tortoise in relation to the criteria listed above. Approval from the CPM and CDFG, in consultation with BLM and the USFWS, shall be required for acquisition of all compensatory mitigation parcels.

3. Compensation Lands Acquisition Requirements. The Project owner shall comply with the following requirements relating to acquisition of the compensation lands after the CPM and CDFG, in consultation with BLM and the USFWS, have approved the proposed compensation lands:

   a. Preliminary Report. The Project owner, or approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary or requested documents for the proposed compensation land to the CPM and CDFG. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPM and CDFG, in consultation with BLM and the USFWS. For conveyances to the State, approval may also be required from the California Department of General Services, the Fish and Game Commission and the Wildlife Conservation Board.

   b. Title/Conveyance. The Project owner shall transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement as required by the CPM and CDFG. Transfer of either fee title or an approved conservation easement will usually be sufficient, but some situations, e.g., the donation of lands burdened by a conservation easement to BLM, will require that both types of transfers be completed. Any transfer of a conservation easement or fee title must be to CDFG, a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM under terms approved by the CPM and CDFG. If an approved non-profit organization holds title to the compensation lands, a conservation easement shall be recorded in favor of CDFG in a form approved by CDFG. If an approved non-profit holds a conservation easement, CDFG shall be named a third party beneficiary.

   c. Initial Habitat Improvement Fund. The Project owner shall fund the initial protection and habitat improvement of the compensation lands. Alternatively, a non-profit organization may hold the habitat

improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965) and if it meets the approval of CDFG and the CPM. If CDFG takes fee title to the compensation lands, the habitat improvement fund must be paid to CDFG or its designee.

d. Property Analysis Record. Upon identification of the compensation lands, the Project owner shall conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate long-term maintenance and management fee to fund the in-perpetuity management of the acquired mitigation lands.

e. Long-term Maintenance and Management Fund. In accordance with **BIO-28** (phasing), the Project owner shall deposit in NFWF's REAT Account a non-wasting capital long-term maintenance and management fee in the amount determined through the Property Analysis Record (PAR) or PAR-like analysis conducted for the compensation lands.

   The CPM, in consultation with CDFG, may designate another non-profit organization to hold the long-term maintenance and management fee if the organization is qualified to manage the compensation lands in perpetuity. If CDFG takes fee title to the compensation lands, CDFG shall determine whether it will hold the long-term management fee in the special deposit fund, leave the money in the REAT Account, or designate another entity to manage the long-term maintenance and management fee for CDFG and with CDFG supervision.

f. Interest, Principal, and Pooling of Funds. The Project owner, the CPM and CDFG shall ensure that an agreement is in place with the long-term maintenance and management fee holder/manager to ensure the following conditions:

   i. Interest. Interest generated from the initial capital long-term maintenance and management fee shall be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and any other action approved by CDFG designed to protect or improve the habitat values of the compensation lands.

   ii. Withdrawal of Principal. The long-term maintenance and management fee principal shall not be drawn upon unless such withdrawal is deemed necessary by the CDFG or the approved third-party long-term maintenance and management fee manager to ensure the continued viability of the species on the compensation lands. If CDFG takes fee

title to the compensation lands, monies received by CDFG pursuant to this provision shall be deposited in a special deposit fund established solely for the purpose to manage lands in perpetuity unless CDFG designates NFWF or another entity to manage the long-term maintenance and management fee for CDFG.

iii. Pooling Long-Term Maintenance and Management Fee Funds. CDFG, or a CPM-and CDFG-approved non-profit organization qualified to hold long-term maintenance and management fees solely for the purpose to manage lands in perpetuity, may pool the endowment with other endowments for the operation, management, and protection of the compensation lands for local populations of desert tortoise. However, for reporting purposes, the long-term maintenance and management fee fund must be tracked and reported individually to the CDFG and CPM.

g. Other expenses. In addition to the costs listed above, the Project owner shall be responsible for all other costs related to acquisition of compensation lands and conservation easements, including but not limited to title and document review costs, expenses incurred from other state agency reviews, and overhead related to providing compensation lands to CDFG or an approved third party; escrow fees or costs; environmental contaminants clearance; and other site cleanup measures.

~~h.~~ Mitigation Security. The Project owner shall provide financial assurances in accordance with BIO-28 (phasing) to the CPM and CDFG 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'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 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 ~~and CDFG's~~ approval, in consultation with CDFG, BLM and the USFWS, of the form of the Security. Security shall be provided in the amounts of $2,374,672 for Phase 1A; $9,248,560 for Phase 1B, and $9,859,984 for Phase 2. 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 acres of mitigation lands itself.~~calculated as follows:~~

~~i. land acquisition costs for compensation land, calculated at $500/acre.~~

~~ii. initial protection and improvement activities on the compensation land, calculated at $330/acre.~~

iii. ~~Long term maintenance and management fee, calculated at $1,450 an acre~~.

~~Security required for Phase 1A equals $1,753,320 .~~

~~Security required for Phase 1B equals $6,828,600.~~

~~Security required for Phase 2 equals $7,280,040.~~

The amount of security shall be adjusted for any change in the Project footprints for each phase as described above.

i. 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 ~~same~~ amounts of $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 3.h., 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, ~~$500 an acre~~ , 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.

The responsibility for acquisition of compensation lands may be delegated to a third party other than NFWF, such as a non-governmental organization supportive of desert habitat conservation, by written agreement of the Energy Commission and

CDFG. Such delegation shall be subject to approval by the CPM and CDFG, in consultation with BLM and USFWS, prior to land acquisition, initial protection or maintenance and management activities. Agreements to delegate land acquisition to an approved third party, or to manage compensation lands, shall be implemented with 18 months of the Energy Commission's approval.

Verification: If the mitigation actions required under this condition are not completed prior to the start of ground-disturbing activities, the Project owner shall provide the CPM and CDFG with an approved form of Security in accordance with this condition of certification no later than 30 days prior to beginning Project ground-disturbing activities. Actual Security shall be provided no later than 7 days prior to the beginning of Project ground-disturbing activities. If Security is provided, the Project owner, or an approved third party, shall complete and provide written verification to the CPM, CDFG, BLM and USFWS of the compensation lands acquisition and transfer within 18 months of the start of Project ground-disturbing activities.

The Project owner may elect to fund the acquisition and initial improvement of compensation lands through NFWF or other approved third party by depositing funds for that purpose into NFWF's REAT Account. Initial deposits for this purpose must be made in the ~~same~~ amounts ~~as the Security required~~ in section 3~~.h.~~ of this condition. Payment of the initial funds for acquisition and initial improvement must be made at least 30 days prior to the start of ground-disturbing activities for each phase.

No fewer than 90 days prior to acquisition of the property, the Project owner shall submit a formal acquisition proposal to the CPM, CDFG, USFWS, and BLM describing the parcels intended for purchase and shall obtain approval from the CPM and CDFG prior to the acquisition.

No fewer than 30 days after acquisition of the property the Project owner shall deposit the funds required by Section 3e above (long term management and maintenance fee) and provide proof of the deposit to the CPM.

The Project owner, or an approved third party, shall provide the CPM, CDFG, BLM and USFWS with a management plan for the compensation lands within180 days of the land or easement purchase, as determined by the date on the title. The CPM shall review and approve the management plan, in consultation with CDFG, BLM and the USFWS.

Within 90 days after completion of all project related ground disturbance, the Project owner shall provide to the CPM, CDFG, BLM and USFWS an analysis, based on aerial photography, with the final accounting of the amount of habitat disturbed during Project construction. This shall be the basis for the final number of acres required to be acquired.

Page 276, Condition of Certification BIO-13:

RAVEN MANAGEMENT PLAN

BIO-13 The Project owner shall implement a Raven Monitoring, Management, and Control Plan (Raven Plan) that is consistent with the most current USFWS-

approved raven management guidelines, and which meets the approval of the CMP, in consultation with BLM, USFWS and CDFG. The draft ~~Common~~ Raven ~~Management~~ Plan submitted by the Applicant (AECOM 10a, Attachment DR-BIO-49) shall provide the basis for the final Raven Plan, subject to review, revisions and approval from BLM, the CPM, CDFG and USFWS. The ~~Common~~ Raven ~~Monitoring and Control~~ Plan shall include but not be limited to a program to monitor raven presence in the Project vicinity, determine if raven numbers are increasing, and to implement raven control measures as needed based on that monitoring. The purpose of the plan is to avoid any Project-related increases in raven numbers during construction, operation, and decommissioning. In addition to monitoring at the Project site, the Plan shall address raven monitoring and control at the new water source proposed in the McCoy Mountains in staff's proposed Condition of Certification **BIO-21.**The Project owner shall also provide funding for implementation of the USFWS Regional Raven Management Program, as described below.

The Raven Plan shall:

a. Identify conditions associated with the Project that might provide raven subsidies or attractants;

b. Describe management practices to avoid or minimize conditions that might increase raven numbers and predatory activities;

c. Describe control practices for ravens;

d. Establish thresholds that would trigger implementation of control practices;

e. Address monitoring and nest removal during construction and for the life of the Project, and;

f. Discuss reporting requirements.

USFWS Regional Raven Management Program. The Project owner shall submit payment to the project sub-account of the REAT Account held by the National Fish and Wildlife Foundation (NFWF) to support the USFWS Regional Raven Management Program. The one time fee shall be as described in the cost allocation methodology (Exhibit **_214__**, *Renewable Energy Development And Common Raven Predation on the Desert Tortoise – Summary*, dated May 2010; *Cost Allocation Methodology for Implementation of the Regional Raven Management Plan*, dated July 9, 2010) or more current guidance as provided by USFWS or CDFG.

Verification: No less than 10 days prior to the start of any Project-related ground disturbance activities, the Project owner shall provide ~~BLM,~~ the CPM, USFWS, and CDFG with the final version of a ~~Common~~ Raven ~~Management~~ Plan. The CPM would determine the plan's acceptability within 15 days of receipt of the final plan. All modifications to the approved Raven ~~Management~~ Plan shall be made only with approval of CPM in consultation with ~~BLM,~~ USFWS and CDFG.

No less than 10 days prior to the start of any Project-related ground disturbance activities, the Project owner shall provide documentation to the CPM, BLM, CDFG and USFWS that the one-time fee for the USFWS Regional Raven Management Program of has been deposited to the REAT-NFWS subaccount for the Project.

Current estimate of the fee for the USFWS Regional Raven Management Program is $105/acre. Phase 1a disturbance is estimated to be 769 acres. Phase 1b disturbance is estimated to be 2,995 acres. Phase 2 disturbance is estimated to be 3,193 acres.

Within 30 days after completion of Project construction, the Project owner shall provide to the CPM for review and approval, a written report identifying which items of the Raven ~~Monitoring and Control~~ Plan have been completed, a summary of all modifications to mitigation measures made during the Project's construction phase, and which items are still outstanding.

As part of the annual compliance report, each year following construction the Designated Biologist shall provide a report to the CPM that includes: a summary of the results of raven management and control activities for the year; a discussion of whether raven control and management goals for the year were met; and recommendations for raven management activities for the upcoming year.

Page 284, Condition of Certification BIO-19:

SPECIAL-STATUS PLANT impact avoidance, minimization and compensation

BIO-19 This condition contains the following four sections:

- **Section A: Special-Status Plant Impact Avoidance and Minimization Measures** contains the Best Management Practices and other measures designed to avoid accidental impacts to plants occurring outside of the Project Disturbance Area and within 100 feet of the Project Disturbance Area during construction, operation, and closure.
- **Section B: Conduct Late Season Botanical Surveys** describes guidelines for conducting summer-fall 2010 surveys to detect special-status plants that would have been missed during the spring 2010 surveys.
- **Section C: Avoidance Requirements for Special-Status Plants** Detected **in the Summer/Fall 2010 Surveys** outlines the level of avoidance required for plants detected during the summer-fall surveys, based on the species' rarity and status codes.
- **Section D: Off-Site Compensatory Mitigation for Special-Status Plants** describes performance standards for mitigation for a range of options for compensatory mitigation through acquisition, restoration/enhancement, or a combination of acquisition and restoration/enhancement.

"Project Disturbance Area" encompasses all areas to be temporarily and permanently disturbed by the Project, including the plant site, linear facilities,

and areas disturbed by temporary access roads, fence installation, construction work lay-down and staging areas, parking, storage, or by any other activities resulting in disturbance to soil or vegetation.

The Project owner shall implement the following measures in Section A, B, C, and D to avoid, minimize, and compensate for impacts to special-status plant species:

Section A: Special-Status Plant Impact Avoidance and Minimization Measures

To protect all special-status plants[1] located outside of the Project Disturbance Area and within 100 feet of the permitted Project Disturbance Area from accidental and indirect impacts during construction, operation, and closure, the Project owner shall implement the following measures:

1. Designated Botanist. An experienced botanist who meets the qualifications described in Section **B-2** below shall oversee compliance with all special-status plant avoidance, minimization, and compensation measures described in this condition throughout construction and closure. The Designated Botanist shall oversee and train all other Biological Monitors tasked with conducting botanical survey and monitoring work. During operation of the Project, the Designated Biologist shall be responsible for protecting special-status plant occurrences within 100 feet of the Project boundaries.

2. Special-Status Plant Impact Avoidance and Minimization Measures. The Project owner shall incorporate all measures for protecting special-status plants in close proximity to the site into the BRMIMP (**BIO-7**). These measures shall include the following elements:

   a. Site Design Modifications: Incorporate site design modifications to minimize impacts to special-status plants along the Project linears: limiting the width of the work area; adjusting the location of staging areas, lay downs, spur roads and poles or towers; driving and crushing vegetation as an alternative to blading temporary roads to preserve the seed bank, and minor adjustments to the alignment of the roads and pipelines within the constraints of the ROW. Design the engineered channel discharge points to maintain the natural surface drainage patterns between the engineered channel and the outlet of the natural washes that flow toward the south and east, downstream of the Project These modifications shall be clearly depicted on the grading and construction plans, and on report-sized maps in the BRMIMP.

   b. Establish Environmentally Sensitive Areas (ESAs). Prior to the start of any ground- or vegetation-disturbing activities, the Designated Botanist shall establish ESAs to protect avoided special-status plants that occur outside of the Project Disturbance Areas and within 100 feet of Project

[1] Staff defines special-status plants as described in *Protocols for Surveying and Evaluating Impacts to Special-Status Native Plant Populations and Natural Communities* (California Natural Resources Agency, Department of Fish and Game, issued November 24, 2009).

Disturbance Areas. This includes plant occurrences identified during the spring 2009-2010 surveys and the late season 2010 surveys. The locations of ESAs shall be clearly depicted on construction drawings, which shall also include all avoidance and minimization measures on the margins of the construction plans. The boundaries of the ESAs shall be placed a minimum of 20 feet from the uphill side of the occurrence and 10 feet from the downhill side. Where this is not possible due to construction constraints, other protection measures, such as silt-fencing and sediment controls, may be employed to protect the occurrences. Equipment and vehicle maintenance areas, and wash areas, shall be located 100 feet from the uphill side of any ESAs. ESAs shall be clearly delineated in the field with temporary construction fencing and signs prohibiting movement of the fencing or sediment controls under penalty of work stoppages and additional compensatory mitigation. ESAs shall also be clearly identified (with signage or by mapping on site plans) to ensure that avoided plants are not inadvertently harmed during construction, operation, or closure.

c. Special-Status Plant Worker Environmental Awareness Program (WEAP). The WEAP **(BIO-6)** shall include training components specific to protection of special-status plants as outlined in this condition.

d. Herbicide and Soil Stabilizer Drift Control Measures. **S**pecial-status plant occurrences within 100 feet of the Project Disturbance Area shall be protected from herbicide and soil stabilizer drift. The Weed Control Program (**BIO-14**) shall include measures to avoid chemical drift or residual toxicity to special-status plants consistent with guidelines such as those provided by the Nature Conservancy's *The Global Invasive Species Team*[2] , the U.S. Environmental Protection Agency, and the Pesticide Action Network Database[3].

e. Erosion and Sediment Control Measures. Erosion and sediment control measures shall not inadvertently impact special-status plants (e.g., by using invasive or non-native plants in seed mixes, introducing pest plants through contaminated seed or straw, etc.). These measures shall be incorporated in the Drainage, Erosion, and Sedimentation Control Plan required under **SOIL&WATER-1**.

f. Avoid Special-Status Plant Occurrences. Areas for spoils, equipment, vehicles, and materials storage areas; parking; equipment and vehicle maintenance areas, and wash areas shall be placed at least 100 feet from any ESAs.

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[2] Hillmer, J. & D. Liedtke. 2003. Safe herbicide handling: a guide for land stewards and volunteer stewards. Ohio Chapter, The Nature Conservancy, Dublin, OH. 20 pp. Online: <http://www.invasive.org/gist/products.html.

[3] Pesticide Action Network of North America. Kegley, S.E., Hill, B.R., Orme S., Choi A.H., PAN Pesticide Database, Pesticide Action Network, North America. San Francisco, CA, 2010 <http://www.pesticideinfo.org>

g. Monitoring and Reporting Requirements. The Designated Botanist shall conduct weekly monitoring of the ESAs that protect special-status plant occurrences during construction and decommissioning activities.

Section B: Conduct Late-Season Botanical Surveys

The Project owner shall conduct late-summer/fall botanical surveys for late-season special-status plants prior to start of construction or by the end of 2010, as described below:

1. Survey Timing. Surveys shall be timed to detect: a) summer annuals triggered to germinate by the warm, tropical summer storms (which may occur any time between June and October). Fall-blooming perennials that respond to the cooler, later season storms (typically beginning in September or October) shall only be required if blooms and seeds are necessary for identification or the species are summer-deciduous and require leaves for identification. The surveys shall not be timed to coincide with the statistical peak bloom period of the target species but shall instead be based on plant phenology and the timing of a significant storm event (i.e., a 10mm or greater rain or multiple storm events of sufficient volume to trigger germination, as measured at or within 1 mile of the Project site). Surveys shall occur at the appropriate time to capture the characteristics necessary to identify the taxon. Construction of Phase 1A as outlined in Condition of Certification **BIO-28** is authorized to commence following a September survey.

2. Surveyor Qualifications and Training. Surveys shall be conducted by a qualified botanist knowledgeable in the complex biology of the local flora, and consistent with CDFG protocols (CDFG 2009). Each surveyor shall be equipped with a GPS unit and record a complete tracklog; these data shall be compiled and submitted along with the Summer-Fall Survey Botanical Report (described below). Prior to the start of surveys, all crew members shall, at a minimum, visit reference sites (where available) and/or review herbarium specimens of all BLM Sensitive plants, CNPS List 1B or 2 (Nature Serve rank S1 and S2) or proposed List 1B or 2 taxa, and any new reported or documented taxa, to obtain a search image. Because the potential for range extensions is unknown, the list of potentially occurring special-status plants shall include all special-status taxa known to occur within the Sonoran Desert region and the eastern portion of the Mojave in California. The list shall also include taxa with bloom seasons that begin in fall and extend into the early spring as many of these are reported to be easier to detect in fall, following the start of the fall rains.

3. Survey Coverage. The survey coverage or intensity shall be in accordance with BLM Survey Protocols (issued July 2009)[4], which specify that intuitive controlled surveys shall only be accomplished by botanists familiar with

[4] Bureau of Land Management (BLM), California State Office. *Survey Protocols Required for NEPA/ESA Compliance for BLM Special Status Plant Species*. Issued July 2009.

the habitats and species that may reasonably be expected to occur in the project area.

4. Documenting Occurrences. If a special-status plant is detected, the full extent of the population onsite shall be recorded using GPS in accordance with BLM survey protocols. Additionally, the extent of the population within one mile of Project boundaries shall be assessed at least qualitatively to facilitate an accurate estimation of the proportion of the population affected by the Project. For populations that are very dense or very large, the population size may be estimated by simple sampling techniques. When populations are very extensive or locally abundant, the surveyor must provide some basis for this assertion and roughly map the extent on a topographic map. All but the smallest populations (e.g., a population occupying less than 100 square feet) shall be recorded as area polygons; the smallest populations may be recorded as point features. All GPS-recorded occurrences shall include: the number of plants, phenology, observed threats (e.g., OHV or invasive exotics), and habitat or community type. The map of occurrences submitted with the final botanical report shall be prepared to ensure consistency with definition of an occurrence by CNDDB, i.e., occurrences found within 0.25 miles of another occurrence of the same taxon, and not separated by significant habitat discontinuities, shall be combined into a single 'occurrence'. The Project owner shall also submit the raw GPS shape files and metadata, and completed CNDDB forms for each 'occurrence' (as defined by CNDDB).

5. Reporting. Raw GPS data, metadata, and CNDDB field forms shall be provided to the CPM within two weeks of the completion of each survey. If surveys are split into two or more periods (e.g., a late summer survey and a fall survey), then a summary letter shall be submitted following each survey period.

   The Final Summer-Fall Botanical Survey Report shall be prepared consistent with CDFG guidelines (CDFG 2009), and BLM 2009 guidelines and shall include all of the following components:

   a. the BLM designation, NatureServe Global and State Rank of each species or taxon found (or proposed rank, or CNPS List);

   b. the number or percent of the occurrence that will be directly affected, and indirectly affected by changes in drainage patterns or altered geomorphic processes;

   c. the habitat or plant community that supports the occurrence and the total acres of that habitat or community type that occurs in the Project Disturbance Area;

   d. an indication of whether the occurrence has any local or regional significance (e.g., if it exhibits any unusual morphology, occurs at the periphery of its range in California, represents a significant range

extension or disjunct occurrence, or occurs in an atypical habitat or substrate);

e. a completed CNDDB field form for every occurrence (occurrences of the same species within one-quarter mile or less of each other combined as one occurrence, consistent with CNDDB methodology), and

f. two maps: one that depicts the raw GPS data (as collected in the field) on a topographic base map with Project features; and a second map that follows the CNDDB protocol for occurrence mapping.

Section C: Avoidance Requirements for Special-Status Plants Detected in the Summer/Fall 2010 Surveys

The Project owner shall apply the following avoidance standards to late blooming special-status plants that might be detected during late summer/fall season surveys. Avoidance and/or the mitigation measures described in Section D below would reduce impacts to these special-status plant species to less than significant levels.

1. Mitigation for CNDDB Rank 1 Plants (Critically Imperiled) - Avoidance Required: If late blooming species with a CNDDB rank of 1 are detected within the Project Disturbance Area the Project owner shall prepare and implement a Special-Status Plant Mitigation Plan (Plan). The goal of the Plan shall be to retain at least 75% of the local population of the affected species. Compensatory mitigation, as described in Section D of this condition, and at a mitigation ratio of 3:1, shall be required for the 25% or portion that is not avoided. The Plan shall include, at a minimum, the following components and definitions:

a. A description of the occurrences of the CNDDB rank 1 species on the Project, ecological characteristics such as micro-habitat requirements, ecosystem processes required for maintenance of the habitat, reproduction and dispersal mechanisms, pollinators, local distribution, a description of the extent of the population off-site, the percentage of the local population affected, and a description of how these occurrences would be impacted by the Project, including direct and indirect effects. The "local population" shall include the number of individuals occurring within the Palo Verde Watershed boundaries. Occurrences shall be considered impacted if they are within the Project footprint, and if they would be affected by Project-related hydrologic changes or changes to the local sand transport system.

b. A description of the avoidance and minimization measures that would achieve complete avoidance of occurrences on the Project linears and construction laydown areas, unless such avoidance would create greater environmental impacts in other resource areas (e.g. Cultural Resource Sites) or other restrictions (e.g., FAA or other restrictions for placement of transmission poles).

c. A description of the measures that would be implemented to avoid or minimize impacts to occurrences on the solar facility. Avoidance is generally considered not feasible if the species is located within the Permanent Project Disturbance Area (bounded by the permanent tortoise exclusion fence and the drainage channels).

d. If avoidance on the linears, construction laydown areas, and solar facility combined protect less than 75% of the local population of the affected species, the project owner shall implement offsite mitigation that demonstrates that the impacts will not cause a loss of viability for that species. Implementation of the compensatory offsite mitigation must meet the performance standards described in section D of this Condition, and may include land acquisition or implementation of a restoration/enhancement program for the species.

e. "Avoidance" shall include protection of the ecosystem processes essential for maintenance of the protected plant occurrence. For all but one of the late blooming plant species with potential to occur, the plant species are annuals that depend on a viable seed bank to maintain population health and persistence. The primary goal of avoidance for these annual species will be protection of the soil integrity and the seed bank that is closely associated with undisturbed soils. Any impacts to the soil structure or surface features will be considered an impact, but measures like temporary mowing or brush removal that does not disturb the soil will not be considered impacts to the population. Isolated 'islands' of protected plants disconnected by the Project from natural fluvial, aeolian (wind), or other processes essential for maintenance of the species, shall not be considered to be protected and shall not be credited as contributing to the 75% avoidance requirement because such isolated populations are not sustainable.

2. Mitigation for CNDDB Rank 2 Plants (Imperiled) –Avoidance on Linears Required: If species with a CNDDB rank of 2 are detected within the Project Disturbance Area, the Project owner shall prepare and implement a Special-Status Plant Mitigation Plan (Plan) that describes measures to achieve complete avoidance of occurrences on the Project linears and construction laydown areas, unless such avoidance would create greater environmental impacts in other resource areas (e.g. Cultural Resource Sites) or other restrictions (e.g., FAA or other restrictions for placement of transmission poles). The Project owner shall provide compensatory mitigation, at a ratio of 2:1, as described below in Section D for impacts to Rank 2 plants that could not be avoided. The content of the Plan and definitions shall be as described above in subsection C.1.

3. Mitigation for CNDDB Rank 3 Plants – No On-Site Avoidance Required Unless Local or Regional Significance: If species with a CNDDB rank of 3 are detected within the Project Disturbance Area, no onsite avoidance or compensatory mitigation shall be required unless the occurrence has local or regional significance, in which case the plant occurrence shall be

by written agreement of the Energy Commission. Such delegation shall be subject to approval by the CPM, in consultation with CDFG, BLM and USFWS, prior to land acquisition, enhancement or management activities. Agreements to delegate land acquisition to an approved third party, or to manage compensation lands, shall be executed and implemented within 18 months of the Energy Commission's certification of the Project.

II. Compensatory Mitigation by Habitat Enhancement/Restoration:

As an alternative or adjunct to land acquisition for compensatory mitigation the Project owner may undertake habitat enhancement or restoration for the target special-status plant species. Habitat enhancement or restoration activities must achieve protection at a 3:1 ratio for Rank 1 plants and 2:1 for Rank 2 plants, with improvements applied to three acres, or two acres, respectively, of habitat for every acre special-status plant habitat directly or indirectly_disturbed by the Project Disturbance Area (for example if the area occupied by the special status plant collectively measured is ¼ acre than the improvements would be applied to an area equal to ¾ of an acre at a 3:1 ratio, or one-half acre at a 2:1 ratio). Examples of suitable enhancement projects include but are not limited to the following: i) control unauthorized vehicle use into an occurrence (or pedestrian use if clearly damaging to the species); ii) control of invasive non-native plants that infest or pose an immediate threat to an occurrence; iii) exclude grazing by wild burros or livestock from an occurrence; or iv) restore lost or degraded hydrologic or geomorphic functions critical to the species by restoring previously diverted flows, removing obstructions to the wind sand transport corridor above an occurrence, or increasing groundwater availability for dependent species.

If the Project owner elects to undertake a habitat enhancement project for mitigation, the project must meet the following performance standards: The proposed enhancement project shall achieve rescue of an off-site occurrence that is currently assessed, based on the NatureServe threat ranking system[5] with one of the following threat ranks: a) long-term decline >30%; b) an immediate threat that affects >30% of the population, or c) has an overall threat impact that is High to Very High. "Rescue" would be considered successful if it achieves an improvement in the occurrence trend to "stable" or "increasing" status, or downgrading of the overall threat rank to slight or low (from "High" to "Very High").

[5] Master, L., D. Faber-Langendoen, R. Bittman, G. A., Hammerson, B. Heidel, J. Nichols, L. Ramsay, and A. Tomaino. 2009. *NatureServe Conservation Status Assessments: Factors for Assessing Extinction Risk.* NatureServe, Arlington, VA. Online:
http://www.natureserve.org/publications/ConsStatusAssess_StatusFactors.pdf , "Threats". See also: Morse, L.E., J.M. Randall, N. Benton, R. Hiebert, and S. Lu. 2004. An Invasive Species Assessment Protocol: Evaluating Non-Native Plants for Their Impact on Biodiversity. Version 1.
NatureServe, Arlington, Virginia. Online:
http://www.natureserve.org/publications/pubs/invasiveSpecies.pdf

If the Project owner elects to undertake a habitat enhancement project for mitigation, they shall submit a Habitat Enhancement/Restoration Plan to the CPM for review and approval, and shall provide sufficient funding for implementation and monitoring of the Plan. The amount of the Security shall be 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~~$2,280 per acre, using the estimated cost per acre for Desert Tortoise mitigation as a best available proxy~~, at the ratio of 3:1 for Rank 1 plants and 2:1 for Rank 2 plants, for every acre of habitat supporting the target special-status plant species which is directly or indirectly impacted by the project. The amount of the security may be adjusted based on the actual costs of implementing the enhancement, restoration and monitoring. The implementation and monitoring of the enhancement/restoration may be undertaken by an appropriate third party such as NFWF, subject to approval by the CPM. The Habitat Enhancement/Restoration Plan shall include each of the following:

1. Goals and Objectives. Define the goals of the restoration or enhancement project and a measurable course of action developed to achieve those goals. The objective of the proposed habitat enhancement plan shall include restoration of a target special-status plant occurrence that is currently threatened with a long-term decline. The proposed enhancement plan shall achieve an improvement in the occurrence trend to "stable" or "increasing" status, or downgrading of the overall threat rank to slight or low (from "High" to "Very High").
2. Historical Conditions. Provide a description of the pre-impact or historical conditions (before the site was degraded by weeds or grazing or ORV, etc.), and the desired conditions.
3. Site Characteristics. Describe other site characteristics relevant to the restoration or enhancement project (e.g., composition of native and pest plants, topography and drainage patterns, soil types, geomorphic and hydrologic processes important to the site or species.
4. Ecological Factors. Describe other important ecological factors of the species being protected, restored, or enhanced such as total population, reproduction, distribution, pollinators, etc.
5. Methods. Describe the restoration methods that will be used (e.g., invasive exotics control, site protection, seedling protection, propagation techniques, etc.) and the long-term maintenance required. The implementation phase of the enhancement must be completed within five years.
6. Budget. Provide a detailed budget and time-line, and develop clear, measurable, objective-driven annual success criteria.

7. Monitoring. Develop clear, measurable monitoring methods that can be used to evaluate the effectiveness of the restoration and the benefit to the affected species. The Plan shall include a minimum of five years of quarterly monitoring, and then annual monitoring for the remainder of the enhancement project, and until the performance standards for rescue of a threatened occurrence are met. At a minimum the progress reports shall include: quantitative measurements of the projects progress in meeting the enhancement project success criteria, detailed description of remedial actions taken or proposed, and contact information for the responsible parties.

8. Reporting Program. The Plan shall ensure accountability with a reporting program that includes progress toward goals and success criteria. Include names of responsible parties.

9. Contingency Plan. Describe the contingency plan for failure to meet annual goals.

10. Long-term Protection. Include proof of long-term protection for the restoration site. For private lands this would include conservations easements or other deed restrictions; projects on public lands must be contained in a Desert Wildlife Management Area, Wildlife Habitat Management Area, or other land use protections that will protect the mitigation site and target species.

III. Compensatory Mitigation by Conducting or Contributing to a Special-Status Plant Species Distribution Study: As a contingency measure in the event that there are no opportunities for acquisition or restoration/enhancement, a Scientific Study of Special-status Plant Species Distribution Study may be funded. Distribution and occurrence health data is very limited for many of the sensitive species that occur on the Project or have potential to occur on the project, especially the late summer and fall blooming species. Some of these late blooming species are only known from a few viable occurrences in California, and historic occurrences that have not been re-located or surveyed since they were first documented. The objectives of this study would be to better understand the full distribution of the affected species, the degree and immediacy of threats to occurrences, and ownership and management opportunities, with the primary goal of future preservation, protection, or recovery. This study would include the following:

1. Historical Occurrence Review. The Study would include an evaluation of historical localities for the species known to occur on the project or with potential to occur. This would include a review of the CNDDB database, herbarium records from regional herbaria (U.C. Riverside, San Diego Natural History Museum, etc.), other biotechnical reports from the region, and information from regional botanical experts.

2. Conduct Site Visits to Historical Localities. Historical occurrences would be evaluated in the field during the appropriate time of the year for each late blooming species. If located, these occurrences would be evaluated

for population size, numbers, plant associates, soils, habitat quality, and potential threats, degree and immediacy of threats, ownership and management opportunities. GPS location data would also be collected during these site visits.

3. Survey Areas with habitat potential that surround each of these species occurrences to better determine the full range of distribution. If additional populations are found, collect data (GPS and assessment) on these additional populations consistent with III.2 above.

4. Prepare a Distribution Study Report. A report that discusses the finding from the historical information and the range extension surveys would be prepared that summarizes the information for each of the late season surveys. This report will provide valuable information and a better understanding of the actual distribution of these late blooming species within California and will help to determine when and when not there is potential for these species to occur. This valuable information will include a better understand of the ecological factors driving the distribution of these species and will help to better target appropriate habitat for both future surveys as well as potential future mitigation lands. All data from this study will be submitted for incorporation into the CNDDB system and the study report will be made available to resource agencies, conservation groups, and other interested parties.

Currently there is no program or study in place that is attempting to address the distributional issues for these late blooming species. If an existing study is identified or if one is developed prior to the study outlined here, an option to fund the existing study may be considered. If an existing study cannot be indentified then one will be developed that follows the guidelines discussed above. The funding provided for the program would be no greater than the cost for acquisition, enhancement, and long-term management of compensatory mitigation lands based on impacts to late blooming sensitive plant species.

Verification: The Special-Status Plant Impact Avoidance and Minimization Measures shall be incorporated into the BRMIMP as required under Condition of Certification **BIO-7.**

Raw GPS data, metadata, and CNDDB field forms shall be submitted to the CPM within two weeks of the completion of each survey. A preliminary summary of results for the late summer/fall botanical surveys shall also be submitted to the CPM and BLM's State Botanist within two weeks following the completion of the surveys. If surveys are split into more than one period, then a summary letter shall be submitted following each survey period. The Final Summer-Fall Botanical Survey Report, GIS shape files and metadata shall be submitted to the BLM State Botanist and the CPM no less than 30 days prior to the start of ground-disturbing activities. The Final Report shall include a detailed accounting of the acreage of Project impacts to special-status plant occurrences.

The draft conceptual Special-Status Plant Mitigation Plan shall be submitted to the CPM for review and approval no less than 30 days prior to the start of ground-disturbing activities.

The Project owner shall immediately provide written notification to the CPM, CDFG, USFWS, and BLM if it detects a State- or Federal-Listed Species, or BLM Sensitive Species at any time during its late summer/fall botanical surveys or at any time thereafter through the life of the Project, including conclusion of Project decommissioning.

No less than 30 days prior to the start of ground-disturbing activities the Project owner shall submit grading plans and construction drawings to the CPM which depict the location of Environmentally Sensitive Areas and the Avoidance and Minimization Measures contained in Section A of this Condition.

If compensatory mitigation is required, no less than 30 days prior to the start of ground-disturbing activities, the Project owner shall submit to the CPM the form of Security adequate to acquire compensatory mitigation lands and/or undertake habitat enhancement or restoration activities, as described in this condition. Actual Security shall be provided 7 days prior to start of ground-disturbing activities.

No fewer than 90 days prior to acquisition of compensatory mitigation lands, the Project owner shall submit a formal acquisition proposal and draft Management Plan for the proposed lands to the CPM, with copies to CDFG, USFWS, and BLM, describing the parcels intended for purchase and shall obtain approval from the CPM prior to the acquisition. No fewer than 90 days prior to acquisition of compensatory mitigation lands, the Project owner shall submit to the CPM and obtain CPM approval of any agreements to delegate land acquisition to an approved third party, or to manage compensation lands; such agreement shall be executed and implemented within 18 months of the start of ground disturbance.

No fewer than 30 days after acquisition of the property the Project owner shall deposit the funds required by Section I e above (long term management and maintenance fee) and provide proof of the deposit to the CPM.

The Project owner or an approved third party shall complete the acquisition and all required transfers of the compensation lands, and provide written verification to the CPM of such completion no later than 18 months after the start of Project ground-disturbing activities. If NFWF or another approved third party is being used for the acquisition, the Project owner shall ensure that funds needed to accomplish the acquisition are transferred in timely manner to facilitate the planned acquisition and to ensure the land can be acquired and transferred prior to the 18-month deadline. If habitat enhancement is proposed, no later than six months following the start of ground-disturbing activities, the Project owner shall obtain CPM approval of the final Habitat Enhancement/Restoration Plan, prepared in accordance with Section D, and submit to the CPM or a third party approved by the CPM Security adequate for long-term implementation and monitoring of the Habitat Enhancement/Restoration Plan.

Enhancement/restoration activities shall be initiated no later than 12 months from the start of construction. The implementation phase of the enhancement project shall be

completed within five years of initiation. Until completion of the five-year implementation portion of the enhancement action, a report shall be prepared and submitted as part of the Annual Compliance Report. This report shall provide, at a minimum: a summary of activities for the preceding year and a summary of activities for the following year; quantitative measurements of the Project's progress in meeting the enhancement project success criteria; detailed description of remedial actions taken or proposed; and contact information for the responsible parties.

If a Distribution Study is implemented as contingency mitigation, the study shall be initiated no later than 6 months from the start of construction. The implementation phase of the study shall be completed within two years of the start of construction.

Within 18 months of ground-disturbing activities, the Project owner shall transfer to the CPM or an approved third party the difference between the Security paid and the actual costs of (1) acquiring compensatory mitigation lands, completing initial protection and habitat improvement , and funding the long-term maintenance and management of compensatory mitigation lands; and/or (2) implementing and providing for the long-term protection and monitoring of habitat enhancement or restoration activities.

Implementation of the special-status plant impact avoidance and minimization measures shall be reported in the Monthly Compliance Reports prepared by the Designated Botanist. Within 30 days after completion of Project construction, the Project owner shall provide to the CPM, for review and approval, in consultation with the BLM State Botanist, a written construction termination report identifying how measures have been completed.

The Project owner shall submit a monitoring report every year for the life of the project to monitor effectiveness of protection measures for all avoided special-status plants to the CPM and BLM State Botanist. The monitoring report shall include: dates of worker awareness training sessions and attendees, completed CNDDB field forms for each avoided occurrence on-site and within 100 feet of the Project boundary off-site, and description of the remedial action, if warranted and planned for the upcoming year. The completed forms shall include an inventory of the special-status plant occurrences and description of the habitat conditions, an indication of population and habitat quality trends.

*Page 302, Verification to Condition of Certification **BIO-20***

Verification: No later than 30 days prior to beginning Project ground disturbing activities, the Project owner shall provide written verification of approved form of Security in accordance with this condition of certification. Actual Security shall be provided no later than 7 days prior to the beginning of Project ground-disturbing activities. The Project owner, or an approved third party, shall complete and provide written verification of the proposed compensation lands acquisition within 18 months of the start of project ground-disturbing activities.

*Page 306, Condition of Certification **BIO-21:***

MITIGATION FOR IMPACTS TO BIGHORN SHEEP

BIO-21 To compensate for Project contributions to loss of spring foraging habitat for Nelson's bighorn sheep, the Project owner shall:

1. Create a New Water Source. The Project owner shall create a new water source for the Southern Mojave metapopulation of bighorn sheep in the McCoy Mountains or in other mountain ranges in the vicinity of the Project north of I-10. The proposed location of the water source shall be developed in consultation with the CPM, BLM and CDFG. ~~, or shall renovate/restore an existing water source. The Project owner shall provide an assessment of which option (restoration or creation of a water source) would offer the most benefit for the Southern Mojave metapopluation of bighorn sheep. The Project owner shall consult with BLM and with the CDFG in development of that assessment.~~ The Project owner shall monitor and manage the artificial ~~or restored~~ water source for the benefit of bighorn sheep for the life of the Project, or shall provide sufficient funding to support such monitoring and management by an approved third party.

The Project owner may elect to fund the creation of a new water source by depositing funds into a Renewable Energy Action Team (REAT) subaccount established with the National Fish and Wildlife Foundation (NFWF). Actual costs shall be developed in consultation with the CPM, BLM and CDFG. The Project owner shall be responsible for providing adequate funding for installation of the water source and all costs associated with that installation, as well as costs of operation, monitoring and management of the water source for the life of the Project. The Project owner shall also provide sufficient funding for any administrative fees that NFWF may require to implement the measures described in this condition. The initial estimate of funding required to fulfill the measures described above is $100,000. The total costs shall not exceed $120,000. If less than $100,000 is required to fulfill the terms of this condition, the excess shall be refunded to the Project owner. Based on the letter from Jim Abbott, Acting State Director of BLM to Alice Harron dated August 26, 2010, deposit of the funds by the Project Owner into the NFWF Account will discharge the Project Owner's obligations under this Condition of Certification.

The Project owner shall provide financial assurances to the CPM with copies of the document(s) to CDFG and BLM to guarantee that an adequate level of funding is available to implement the mitigation measures described in this condition. Security shall be in the amount of the initial estimate of $100,000.

Or

2. Acquire Compensatory Habitat. As an alternative to providing a water source as described above, the Project owner may elect to secure compensatory mitigation lands that would offset the loss of spring foraging habitat (desert dry wash woodland, vegetated swales, and unvegetated washes) for Southern Mojave metapopuelation Nelson's bighorn sheep. If the Project owner selects this compensatory mitigation option the Project owner shall acquire, in fee or in easement no less than ~~922~~929 acres of lands that:

a. Provide suitable spring foraging~~e~~ habitat for bighorn sheep in the form of desert dry wash woodland and vegetated swales within intermixed Sonoran creosote bush scrub habitat, and

b. ~~Be~~ Includes ~~within~~ spring foraging habitat that would benefit the Southern Mojave metapopulation (i.e., north of I-10). Priority acquisition areas would be in eastern Riverside County roughly bounded by Interstate 10, Highway 62, and Highway 177.

Acquisition Terms and Conditions. The terms and conditions of this acquisition or easement shall be as described in **BIO-12** (Desert Tortoise Compensatory Mitigation) and the timing associated with **BIO-28** (phasing). The responsibilities for acquisition and management of the compensation lands may be delegated by written agreement to CDFG or to a third party, such as a non-governmental organization dedicated to habitat conservation, subject to approval by the CPM, in consultation with CDFG and USFWS prior to land acquisition or management activities. Additional funds shall be based on the adjusted market value of compensation lands at the time of construction to acquire and manage habitat.

Review and Approval of Compensation Lands Prior to Acquisition. The Project owner shall submit a formal acquisition proposal to the CPM, CDFG, ~~USFWS,~~ and BLM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for the S~~s~~outhern Mojave metapopulation of bighorn in relation to the criteria listed above. Approval from the CPM, in consultation with BLM and CDFG, shall be required for acquisition of all parcels comprising the compensation lands.

Acquisition Security. If the ~~922~~929 acres of bighorn sheep mitigation land is separate from the acreage required for desert tortoise compensation lands, the Project owner or an approved third party shall complete acquisition of the proposed compensation lands within the time period specified for this acquisition (see the Verification section at the end of this condition). Alternatively, financial assurance can be provided by the Project owner to the CPM, BLM and CDFG, according to the measures outlined in **BIO-12** and **BIO-28**, with the Security estimate 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. These funds shall be used solely for implementation of the measures associated with the Project. Financial assurance can be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") prior to initiating ground-disturbing Project activities. Prior to submittal to the CPM, the Security shall be approved by the CPM and, in consultation with BLM and CDFG ~~and the USFWS~~, to ensure funding. The final amount due will be determined by an updated appraisal and PAR analysis conducted as described in **BIO-12**.

Verification: The Project owner shall provide the CPM with a form of Security for installation, management and monitoring of the water source as described in this

condition of certification no later than 30 days prior to beginning Project ground-disturbing activities for approval. Actual Security shall be provided no later than 7 days prior to the beginning of Project ground-disturbing activities. Security shall be $100,000.

If the Project owner elects to fund the creation of a new water source by depositing funds into the REAT-NFWF subaccount, no less than 30 days prior to beginning Project ground-disturbing activities the Project owner shall provide written verification to the CPM, BLM and CDFG that $100,000 has been deposited to that subaccount. Based on the letter from Jim Abbott, Acting State Director of BLM to Alice Harron, Solar Millennium dated August 26, 2010, deposit of the funds by the Project Owner into the NFWF Account will discharge the Project Onwer's obligations under this Condition of Certification.

No later than 6 months following ~~publication of the Energy Commission Decision~~ start of ground disturbance activities, the Project owner shall submit to the CPM for review and approval a description of the proposed location of the water source that will be created. ~~or restored, including a discussion as to why the proposed site would benefit local and regional bighorn sheep populations.~~ No later than 24 ~~18~~ months following the ~~publication of the Energy Commission Decision~~ Project ground-disturbing activities, the Project owner shall provide written verification to the CPM that ~~restoration or~~ construction of the ~~artificial~~ water source has been completed. At the same time, the Project owner shall: (1) provide a monitoring and management plan for bighorn use of the water source; and (2) provide evidence of an agreement (Memorandum of Understanding) and a funding mechanism to provide ongoing maintenance of the water source by ~~CDFG~~ BLM or some other party approved by the CPM in consultation with BLM and CDFG.

As part of the annual compliance report, each year following completion of construction/restoration of the water source, the Project owner shall provide a report to the CPM, BLM and CDFG that includes: a description of bighorn sheep detections at the water source and a summary of management activities for the year, and a discussion of whether management goals for the year were met~~; and, if warranted, recommendations for management activities for the upcoming year to improve bighorn sheep use at the water source.~~

If the Project owner elects to mitigate for loss of bighorn sheep spring foraging habitat with acquisition of compensatory mitigation lands as described above, no less than 90 days prior to acquisition of the bighorn sheep compensation lands, the Project owner, or an approved third party, shall submit a formal acquisition proposal to the CPM, BLM, and CDFG~~, and USFWS~~ describing the 92~~2~~9acres of lands intended for purchase. At the same time the Project owner shall submit a PAR or PAR-like analysis for the parcels for review and approval by the CPM, in consultation with BLM and CDFG. ~~, and USFWS~~.

~~No later than 30 days prior to beginning Project ground-disturbing activities, the Project owner shall provide written verification of Security for acquisition of the 922 acres of land in accordance with this condition of certification.~~

No later than 18 months from initiation of construction the Project owner shall provide written verification to the BLM, the CPM, and CDFG that no fewer than ~~922~~ 929 acres of

compensation lands or conservation easements that meet the criteria described in this condition have been acquired and recorded in favor of the approved recipient.

Security shall be refunded to Project owner once land has been acquired and recorded in favor of the approved recipient.

*Page 317, Table to Condition of Certification **BIO-28**:*

Phase	**State Waters - Direct**		**State Waters – Indirect**		**Bighorn Sheep**	
	Impact (acres)	**Mitigation (acres)**	**Impact (acres)**	**Mitigation (acres)**	Impact (acres)	Mitigation (acres)
Phase 1a	67	130	0	0	27	27
Phase 1b	231	409	36	51	488	488
Phase 2	294	665	146	189	414	414
Total	59~~3~~2	120~~5~~4	~~133~~ 182	~~179~~ 240	929	929

SOIL AND WATER RESOURCES

For purposes of clarity, staff and applicant recommend the following be added to the PMPD:

Page 341, Conclusions of Law:

3. Pursuant to Public Resources Code section 25500, this certification serves as the Water Code section 13263 Waste Discharge Requirements permit, as well as all other permits required by any state, local, or regional agency or federal agency to the extent permitted by federal law.

CULTURAL RESOURCES

As mentioned at the August 31, 2010 Committee Conference, staff recommends the following discussion be added to the PMPD's discussion of alternatives.

Reconfigured Alternative

The Reconfigured Alternative would be a 1,000-MW solar facility that would retain use of the proposed Blythe Solar Power Project (BSPP) Units 1, 2, and 4 (the two northern solar fields, and the southeastern solar field) at their proposed locations. The proposed Unit 3 (the southwestern solar field) would be relocated approximately 0.8 mile south of its proposed location and expanded from 1,200 acres to 1,350 acres.

This alternative was analyzed because:

- It would retain the 1,000-MW generation capacity defined for the proposed project;
- It minimizes impacts to state waters and to desert dry-wash woodlands (a vegetation community classified as sensitive by the BLM and CDFG); and
- The engineering is feasible, as defined by Solar Millennium.

The overall disturbance area for the Reconfigured Alternative would be approximately 5,439 acres[6]. Approximately 480 acres of the Reconfigured Alternative would be outside of the ROW application area but the alternative would remain entirely within BLM-managed lands.

Setting and Existing Conditions

Because the Reconfigured Alternative is in the same general location as the proposed project, the environmental setting and cultural resources background information would be the same as for the proposed project.

Assessment of Impacts

The relocated Unit 3 avoids impacts to some but not all of the cultural resources identified and discussed for the proposed Unit 3, and would impact all of the resources identified and discussed for the proposed Units 1, 2, and 4. Also, the Reconfigured Alternative would impact additional cultural resources located in the some 480 added acres of BLM-managed lands. This 480 acres was surveyed for cultural resources, but staff has not received information from the surveys.

BLM received information from these surveys and included frequency data (for archaeological sites only) in its recently published BSPP Final Environmental Impact Statement[7]:

[6] Acreage for the transmission line and substation are not included in the discussion of the project alternatives.

[7] Plan Amendment/Final Environmental Impact Statement for the Blythe Solar Power Project, August, 2010, vol. 2, p. 4.4-4. BLM's total for the number of sites varies slightly from that in staff's RSA because of differing choices in what resources to count, and due to last-minute boundary changes.

The record search and field survey for the proposed BSPP identified 210 sites. Of those, 20 would be within Unit 1, 38 would be within Unit 2, 22 would be located with Unit 4, and 9 would be within the previously surveyed part of the relocated Unit 3. The additional field survey of the previously unsurveyed 480 acres of the Reconfigured Alternative identified 77 new sites. So the cultural resources inventory for the Reconfigured Alternative would therefore total 166 archaeological sites.

Level of Significance of Project Impacts Under CEQA

From BLM's figures, it appears that the potential impacts to archaeological sites from the Reconfigured Alternative would be fewer than those of the proposed BSPP, but since the construction of the project would result in the destruction of all of the identified sites, the impacts of the Reconfigured Alternative would be significant and would contribute to the cumulatively considerable impact on cultural resources to the same degree as the proposed project.

Recommended Mitigation

Staff would recommend the same mitigation program for the Reconfigured Alternative as for the proposed project.

Reduced Acreage Alternative

The Reduced Acreage Alternative would essentially consist of just Units 1, 2, and 4 of the proposed BSPP and would be a 750-MW solar facility located within the boundaries of the proposed project.

This alternative was analyzed because:

- It would eliminate about 25 percent of the proposed project area so all impacts would be reduced; and
- It would minimize impacts to state waters and to desert dry-wash woodlands (a vegetation community classified as sensitive by the BLM and CDFG) and to wildlife movement corridors.

The overall disturbance area for the Reduced Acreage Alternative would be approximately 4,165 acres,[8] entirely within BLM-managed lands.

Setting and Existing Conditions

Because the Reconfigured Alternative is in the same general location as the proposed BSPP, the environmental setting and cultural resources background information would be the same as for the proposed project.

[8] Acreage for the transmission line and substation are not included in the discussion of the project alternatives.

Assessment of Impacts

The Reduced Acreage Alternative avoids impacts to all of the cultural resources identified and discussed for the proposed Unit 3, but would impact all of the resources identified and discussed for the proposed Units 1, 2, and 4.

To better facilitate comparison of the two alternatives, staff again cites BLM's frequency data (for archaeological sites only) from its recently published BSPP Final Environmental Impact Statement[9]:

> The record search and field survey for the proposed BSPP identified 210 sites. With the elimination of the 38 sites that are within the proposed action's Unit 3, the cultural resources inventory for the Reduced Acreage Alternative would be reduced to a total of 172 archaeological sites.

Level of Significance of Project Impacts Under CEQA

From BLM's figures, it appears that the potential impacts to archaeological sites from the Reconfigured Alternative would be fewer than those of the proposed BSPP, but since the construction of the project would result in the destruction of all of the identified sites, the impacts of the Reduced Acreage Alternative would be significant and would contribute to the cumulatively considerable impact on cultural resources to the same degree as the proposed project.

Recommended Mitigation

Staff would recommend the same mitigation program for the Reconfigured Alternative as for the proposed project.

DATED: September 3, 2010

Respectfully submitted,

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[9] Plan Amendment/Final Environmental Impact Statement for the Blythe Solar Power Project, August, 2010, vol. 2, p. 4.4-4.

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE STATE OF CALIFORNIA
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APPLICATION FOR CERTIFICATION FOR THE *BLYTHE SOLAR POWER PLANT PROJECT*

Docket No. 09-AFC-6

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(Revised 8/27/10)

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*indicates change

DECLARATION OF SERVICE

I, Rhea Moyer, declare that on September 3, 2010, I served and filed copies of the attached Stipulated Comments on the Blythe Solar Power Project Presiding Member's Proposal Decision, dated September 3, 2010. 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: **[http://www.energy.ca.gov/sitingcases/solar_millennium_blythe]**

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

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

_____ by personal delivery;

__x__ by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "email preferred."

AND

FOR FILING WITH THE ENERGY COMMISSION:

__x__ sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (***preferred method***);

OR

_____ depositing in the mail an original and 12 paper copies, as follows:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 09-AFC-6
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512
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I declare under penalty of perjury that the foregoing is true and correct.

Original signed by:
Rhea Moyer