BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

DOCKET
09-AFC-6
DATE SEP 14 2010
RECD. SEP 14 2010

APPLICATION FOR CERTIFICATION FOR THE
*BLYTHE SOLAR POWER PROJECT*
BY *PALO VERDE SOLAR, I, LLC*

DOCKET NO. 09-AFC-6

# ERRATA TO THE PRESIDING MEMBER'S PROPOSED DECISION

After reviewing the comments submitted by the parties and members of the public, we incorporate the following changes to the August 11, 2010 Presiding Member's Proposed Decision (PMPD):

## GENERAL

All references to the acreage of the disturbed area should be 7,025 acres.
All references to the length of the transmission line should be approximately 10 miles.
All references to the four units being identical should be deleted.

## INTRODUCTION

***1. Page 2, first paragraph, line 7:***

A weather station located in the power block areas provides real-time measurements of weather conditions that affect the solar field operation. ***Two to four additional weather stations may be required per unit for energy-scheduling accuracy. These additional weather stations would be located within the solar fields.*** Radiation data is used to determine the performance of the solar field.

***2. Page 2, second paragraph:***

Remove the reference to HTF heaters. HTF heaters were removed from the BSPP as referenced in Exhibit 29.

***3. Page 2, third paragraph:***

The number of wells should be changed from "one of two" to "up to 10" as referenced in Exhibit 52.

***4. Page 2, fourth paragraph, first sentence:***

At each solar field, to facilitate dust and contaminant removal, demineralized water from the primary desalination process~~, reverse osmosis (RO) water,~~ would be used to spray clean the solar collectors.

***5. Page 4, first paragraph, line 5:***

Staff publishes its initial technical evaluation of the Project in its ~~Preliminary Staff Assessment (PSA)~~, Staff Assessment/Draft Environmental Impact Statement (SA/DEIS) which is made available for a 30-day public comment period. Staff's responses to public comment on the ~~PSA~~ SA/DEIS and its complete analyses and recommendations are published in the ~~Final Staff Assessment (FSA, also Exhibit 500).~~ Revised Staff Assessment (RSA).

***6. Page 6, second paragraph, line 1:***

Change 2001 to 2010.

***7. Page 7, add the following paragraph:***

Following publication of the RSA, 46 letters in support of the project were received. These letters have been docketed under docket nos. 57551 (7/8/10), 57610 (7/14/10) and 57611 (7/15/10). In addition, a comment letter from the California Department of Transportation dated August 10, 2010 expressed the Department's concurrence with Staff's proposed Conditions of Certification TRANS-1 through TRANS-6 and with the proposed locations for project linear facilities. (Docket no. 58116).

**PROJECT DESCRIPTION AND PURPOSE**

***8. Page 9, Heat Collection Elements:***

The HCEs should be referred to as steel pipes and not steel tubes.

***9. Page 11. Major Project Components:***

Change bulleted items as follows:

- Solar Field & Power Block #1 (northeast)
- Solar Field & Power Block #2 (northwest)
- Solar Field & Power Block #3 (southwest)
- Solar Field & Power Block #4 (southeast)
- Access road from and including upgraded portion of Black Rock Road to onsite office;
- Warehouse/maintenance building, assembly hall and laydown area;
- Telecommunications Lines
- Natural Gas Pipeline

***10. Page 12, Fuel Supply and Use:***

The auxiliary boiler for each unit would be fueled by natural gas. The gas for the entire project would be supplied from a new 10-mile (two miles offsite) up to 10 ~~four~~-inch diameter pipeline connected to an existing Southern California Gas (SGC) main pipeline south of I-10. The estimated

maximum natural gas usage rater per unit is 34 MMBtu/hr. The BSPP will also include removal of an existing abandoned gas pipeline within the BSPP ROW.

***11. Page 14, last sentence:***

The plant will operate on one pond for approximately ~~24~~ 4 months, and then switch to the second pond.

***12. Page 16, 11. Fire Protection:***

The systems include a fire protection water system, foam generators, foam trucks, carbon dioxide fire protection systems, and portable fire extinguishers.

***13*. Page 17, 12. Telecommunications and Telemetry*:**

The project would have telecommunications service from Frontier Communications, the telecommunications service provider for the city of Blythe. Voice and data communications would be provided by a new twisted pair telecommunications cable. The routing for this cable will ~~follow the routing of the redundant telecommunications line from~~ end at the existing infrastructure near Mesa Drive. ~~the project to Southern California Edison's (SCE) proposed Colorado River Substation.~~ In addition, the project has two other telecommunications lines required by CAISO to provide operational data to the Colorado River Substation (CRSS). The primary transmission-related telecommunications line will be strung overhead along the same poles as the 230 kV gen tie line to CRSS. The redundant transmission-related telecommunications cable will be buried cable similar to the project's telecommunications cable. The routing for both of ~~these lines~~ the buried telecommunications cables will be adjacent to ~~Black Rock Road, and~~ the site access road for the portion north of I-10. The redundant telecommunications line continues south of I-10 to the Colorado River Substation following the route of the gen-tie line, while the project's telecommunications cable follows Black Rock Road to Mesa Drive. Wireless telecom equipment will be used to support communication with staff dispersed throughout the project site. The project would utilize electronic telemetry systems to control equipment and facilities operations over the site

***14. Page 18, Item 16. Roads, Fencing and Security:***

Access to the Blythe project site would be via a new ~~public~~ road heading north from the frontage road.

***15.** Page 22, Transmission System:*

The BSPP facility would be connected to the SCE transmission system at the new Colorado River substation planned by SCE approximately five miles southwest of the Blythe project site. The proposed generator-tie line would consist of a ~~bundled~~ double circuit 230-kV line.

The gen-tie line is expected to proceed ~~directly~~ generally south from the project site, eventually both crossing I-10 and turning westward to SCE's planned Colorado River substation.

***16.*** *Page 22 Finding of Fact 1:*

Replace "east" with "west."

## PROJECT ALTERNATIVES

***17. Page 29, insert the following after the first paragraph:***

Comment was received from Beverly Bastian, Staff's Cultural Resources witness, at the Committee Conference on August 31, 2010. Ms. Bastian stated that, with respect to both the Reconfigured Alternative and the Reduced Acreage Alternative, impacts to cultural resources would remain significant and would contribute to the cumulatively considerable impact on cultural resources to the same degree as the proposed project.
This comment corroborates our determination that neither alternative is environmentally superior to the proposed project with respect to cultural resources impacts.

## GENERAL CONDITIONS OF CERTIFICATION

***18. Page 38, Compliance Project Manager Responsibilities:***

All project compliance submittals are submitted to the CPM for processing. Where a submittal required by a condition of certification requires CPM approval, the approval will involve all appropriate Energy Commission staff and management. All submittals must include searchable electronic versions (pdf or MS Word files). The CPM may accept and approve compliance submittals that provide sufficient detail to allow construction activities to commence without the submittal containing detailed information on construction activities that will be commenced later in time.

## TRANSMISSION SYSTEM ENGINEERING

***19. Page 89, third paragraph, last sentence*:**

The CAISO has provided an analysis in its Phase I ***and Phase II Studies***, ~~and will provide analysis in its Phase II Study,~~ and its approval for the facilities and changes required in its system for addition of the proposed transmission modifications. (Ex~~hibit~~s 200, p. D.5-2; 217.)

***20. Page 90, line 3:***

The CAISO has completed its ~~On completion of the~~ Phase II Interconnection Study, which identified the conditions necessary for development of the Large Generator Interconnection Study. ~~the CAISO will provide its conclusions and recommendations, and issue a final approval/disapproval letter for the interconnection of the proposed generation project. If necessary, the CAISO will provide written and verbal testimony on its findings at the Energy Commission hearings.~~ (Ex. ~~200, D.5-2~~ 217.)

***21. Page 91, first paragraph:***

The two generator tie-lines would be supported by ~~90~~70-foot to 145-foot single and double circuit towers.

**TRANSMISSION LINE SAFETY AND NUISCANCE**

***22. Page 100, third paragraph:***

Replace paragraph 3 with the following:

The Gen-Tie line proceeds in generally in a southerly direction with some line angle deviations which the Applicant made to accommodate the Blythe Airport Land Use Commission concerns regarding pole location and height. The right-of-way width is approximately 120 feet, however where larger H-frame structures were designed to accommodate the Blythe Airport Land Use Commission the right of way width is approximately 250 feet. The aluminum steel-reinforced conductors for the proposed BSPP will be supported by 90 to 145 foot tall double circuit tubular steel monopoles except for the portion of the line near Blythe Airport Runway 8-26 (oriented east-west), which will be supported by 70-foot tall H-Frame structures. (Ex. 207, pp. 20 – 22.)

***23. Page 105, Finding 1:***

The on-site switchyard will be 230-kV and not 500-kV.

**AIR QUALITY**

***24. Page 123, Conclusion 4:***

4. The SB 1368 EPS does not apply to ~~USEGS~~ BSPP, but if it did BSPP GHG emissions will meet ~~or exceed~~ it.

***25. Page 128, first paragraph, line 4:***

The references to 2-mile natural gas supply pipeline should be changed to 10-mile.

**WORKER SAFETY AND FIRE PROTECTION**

***26. Page 180, first paragraph, line 1:***

To mitigate this situation, the RCFD proposed that the solar plant developers contribute ~~to "Development Impact Fee Programs" adopted by the Riverside County Board of Supervisors~~ funds pursuant to an agreement with RCFD to mitigate for potential fire protection impacts.

## HAZARDOUS MATERIALS

***27. Page 190, b. Therminol VP-1:***

Change the reference to 1,300,000 gallons of HTF to 8,800,000 gallons. See Hazardous Materials Appendix A.

## BIOLOGICAL RESOURCES

***28. Page 213, third paragraph:***

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).

***29. Page 218, third paragraph, last sentence, change to read as follows:***

We adopt ~~Condition of Certification **BIO-11** to require that reconductoring take place outside the breeding season to avoid impacts to nesting birds and~~ Conditions of Certification **BIO-6** through **BIO-10** to require protection of special-status species, preconstruction surveys, and development of incidental take minimization measures.

***30. Pages 223 - 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.

***31. Page 227, line 8:***

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.

***32. 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.

***33. Page 230:***

**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.

***34. Page 232, paragraph 2, line 12:***

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.

***35. Page 234, paragraph 1:***

Potential direct impacts to the American badger and desert kit fox from the proposed Project would include the loss of ~~6,958~~ 7,025 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.

***36. Pages 235 - 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.

***37. Page 237, paragraph 1, line 11:***

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.

***38. Page 239, paragraph 2, line 1:***

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**.)

***39. 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, pp. C.2-123 and C.2-124, Biological Resources **Table 14**.)

***40. Page 240, third paragraph, line 1 – page 241, first paragraph, line 5:***

**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**.).

***41. Page 241, second paragraph, line 1:***

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…..

***42. Page 243, paragraph 1:***

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, pp. C.2-123 and C.2-124, Biological Resources **Table 14**.)

***43. Pages 244, third paragraph – 245, line 8:***

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~~.

***44. Page 245, second paragraph:***

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.

***45. 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.

3. 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.

***46. 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.

## BIOLOGICAL RESOURCES CONDITIONS OF CERTIFICATION

***47. OMITTED***

***48. Page 252, 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.

***49. Page 253, 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.

***50. Page 254, 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 condition**s**. ~~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.

***51. Page 256, 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.

***52. Page 261, 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.

***53. Page 264, 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.

***54. Page 265, 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.

***55. Page 267, 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.

***56. Page 273, 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 213, *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.

***57. 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] 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).

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 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.

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

[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>

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 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

[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.

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 treated as a CNDDB rank 2 plant species. A plant occurrence would be considered to have local or regional significance if:

   a. It occurs at the outermost periphery of its range in California;

   b. It occurs in an atypical habitat, region, or elevation for the taxon that suggests that the occurrence may have genetic significance (e.g., that may increase its ability to survive future threats), or;

   c. It exhibits any unusual morphology that is not clearly attributable to environmental factors that may indicate a potential new variety or sub-species.

4. Pre-Construction Notification for State- or Federal-Listed Species, or BLM Sensitive Species. If a state or federal-listed species or BLM Sensitive species is detected, the Project owner shall immediately notify the CDFG, USFWS, BLM, and the CPM.

~~6.~~ 5. Preservation of the Germplasm of Affected Special-Status Plants. For all significant impacts to special-status plants, regardless of whether compensatory mitigation is required, mitigation shall include seed collection from the affected special-status plants on-site prior to construction to conserve the germplasm and provide a seed source for restoration efforts. The seed shall be collected under the supervision or guidance of a reputable seed storage facility such as the Rancho Santa Ana Botanical Garden Seed Conservation Program, San Diego Natural

History Museum, or the Missouri Botanical Garden. The costs associated with the long-term storage of the seed shall be the responsibility of the Project owner. Any efforts to propagate and reintroduce special-status plants from seeds in the wild shall be carried out under the direct supervision of specialists such as those listed above and as part of a Habitat Restoration/Enhancement Plan approved by the CPM.

**Section D: Off-Site Compensatory Mitigation for Special-Status Plants**

Where compensatory mitigation is required under the terms of Section C, above, the Project owner shall mitigate Project impacts to special-status plant occurrences with compensatory mitigation. Compensatory mitigation shall consist of acquisition of habitat supporting the target species, or restoration/enhancement of populations of the target species, and shall meet the performance standards for mitigation described below. In the event that no opportunities for acquisition or restoration/enhancement exist, the Project owner can fund a species distribution study designed to promote the future preservation, protection or recovery of the species. Compensatory mitigation shall be at a ratio of 3:1 for Rank 1 plants, with three acres of habitat acquired or restored/enhanced for every acre of habitat occupied by the special status plant that will be disturbed by the Project Disturbance Area (for example if the area occupied by the special status plant collectively measured is ¼ acre than the compensatory mitigation will be ¾ of an acre). The mitigation ratio for Rank 2 plants shall be 2:1. So, for the example above, the mitigation ratio would be one-half acre for the Rank 2 plants.

The Project owner shall provide funding for the acquisition and/or restoration/enhancement, initial improvement, and long-term maintenance and management of the acquired or restored lands. The actual costs to comply with this condition will vary depending on the Project Disturbance Area, the actual costs of acquiring compensation habitat, the actual costs of initially improving the habitat, the actual costs of long-term management as determined by a Property Analysis Record (PAR) report, and other transactional costs related to the use of compensatory mitigation.

The Project owner shall comply with other related requirements in this condition:

**I. Compensatory Mitigation by Acquisition:** The requirements for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of special-status plant compensation lands include all of the following:

5. Selection Criteria for Acquisition Lands. The compensation lands selected for acquisition may include any of the following three categories:

   a. Occupied Habitat, No Habitat Threats: The compensation lands selected for acquisition shall be occupied by the target plant population and shall be characterized by site integrity and habitat quality that are required to support the target species, and shall be of equal or better habitat quality than that of the affected occurrence. The occurrence of

the target special-status plant on the proposed acquisition lands should be viable, stable or increasing (in size and reproduction).

b. Occupied Habitat, Habitat Threats. Occupied compensation lands characterized by habitat threats may also be acquired as long as the population could be reasonably expected to recover with habitat restoration efforts (e.g., OHV or grazing exclusion, or removal of invasive non-native plants) and is accompanied by a Habitat Enhancement/Restoration Plan as described in Section D.II, below.

c. Unoccupied but Adjacent. The Project owner may also acquire habitat for which occupancy by the target species has not been documented, if the proposed acquisition lands are adjacent to occupied habitat. The Project owner shall provide evidence that acquisitions of such unoccupied lands would improve the defensibility and long-term sustainability of the occupied habitat by providing a protective buffer around the occurrence and by enhancing connectivity with undisturbed habitat. This acquisition may include habitat restoration efforts where appropriate, particularly when these restoration efforts will benefit adjacent habitat that is occupied by the target species.

6. Review and Approval of Compensation Lands Prior to Acquisition. The Project owner shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for special-status plants in relation to the criteria listed above, and must be approved by the CPM.

7. Management Plan. The Project owner or approved third party shall prepare a management plan for the compensation lands in consultation with the entity that will be managing the lands. The goal of the management plan shall be to support and enhance the long-term viability of the target special-status plant occurrences. The Management Plan shall be submitted for review and approval to the CPM.

8. Integrating Special-Status Plant Mitigation with Other Mitigation lands. If all or any portion of the acquired Desert Tortoise, Waters of the State, or other required compensation lands meets the criteria above for special-status plant compensation lands, the portion of the other species' or habitat compensation lands that meets any of the criteria above may be used to fulfill that portion of the obligation for special-status plant mitigation.

9. Compensation Lands Acquisition Requirements. The Project owner shall comply with the following requirements relating to acquisition of the compensation lands after the CPM, has approved the proposed compensation lands:

   Preliminary Report. The Project owner, or an 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. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPM. 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.

Title/Conveyance. The Project owner shall acquire and 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. 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 or other public agency approved by the CPM. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement shall be recorded in favor of CDFG or another entity approved by the CPM. If an entity other than CDFG holds a conservation easement over the compensation lands, the CPM may require that CDFG or another entity approved by the CPM, in consultation with CDFG, be named a third party beneficiary of the conservation easement. The Project owner shall obtain approval of the CPM of the terms of any transfer of fee title or conservation easement to the compensation lands.

Initial Protection and Habitat Improvement. The Project owner shall fund activities that the CPM requires for the initial protection and habitat improvement of the compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include trash removal, construction and repair of fences, invasive plant removal, and similar measures to protect habitat and improve habitat quality on the compensation lands. The costs of these activities 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 ~~are estimated to be $330 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, but actual costs will vary depending on the measures that are required for the compensation lands. A non-profit organization, CDFG or another public agency may hold and expend the habitat improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965), if it meets the approval of the CPM in consultation with CDFG, and if it is authorized to participate in implementing the required activities on the compensation lands. If CDFG takes fee title to the compensation lands, the habitat improvement fund must be paid to CDFG or its designee.

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 amount of the long-term maintenance and management fund to pay the in-perpetuity management

of the compensation lands. The PAR or PAR-like analysis must be approved by the CPM before it can be used to establish funding levels or management activities for the compensation lands.

Long-term Maintenance and Management Funding. 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. .

Interest, Principal, and Pooling of Funds. The Project owner shall ensure that an agreement is in place with the long-term maintenance and management fund (endowment) holder/manager to ensure the following requirements are met:

Interest. Interest generated from the initial capital long-term maintenance and management fund 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 that is approved by the CPM and is designed to protect or improve the habitat values of the compensation lands.

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

Pooling Long-Term Maintenance and Management Funds. An entity approved to hold long-term maintenance and management funds for the Project may pool those funds with similar non-wasting funds that it holds from other projects for long-term maintenance and management of compensation lands for special-status plants. However, for reporting purposes, the long-term maintenance and management funds for this Project must be tracked and reported individually to the CPM.

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 the title and document review costs incurred from other state

agency reviews, 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.

Mitigation Security. The Project owner shall provide financial assurances in accordance with **BIO-28** (phasing) to the CPM to guarantee that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing Project activities. Financial assurances shall be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") approved by the CPM. 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 a 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 significantly impacted by the project. The actual costs to comply with this condition will vary depending on the actual costs of acquiring compensation habitat, the costs of initially improving the habitat, and the actual costs of long-term management as determined by a PAR report. Prior to submitting the Security to the CPM, the Project owner shall obtain the CPM's approval of the form of the Security. The CPM may draw on the Security if the CPM determines the Project owner has failed to comply with the requirements specified in this condition. The CPM may use money from the Security solely for implementation of the requirements of this condition. The CPM's use of the Security to implement measures in this condition may not fully satisfy the Project owner's obligations under this condition, and the Project owner remains responsible for satisfying the obligations under this condition if the Security is insufficient. The unused Security shall be returned to the Project owner in whole or in part upon successful completion of the associated requirements in this condition.

The Project owner may elect to comply with the requirements in this condition for acquisition of compensation lands, initial protection and habitat improvement on the compensation lands, or long-term maintenance and management of the compensation lands by funding, or any combination of these three requirements, by providing funds to implement those measures into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF). To use this option, the Project owner must make an initial deposit to the REAT Account in an amount equal to the estimated costs (as set forth in the Security section of this condition) of implementing the requirement. If the actual cost of the acquisition, initial protection and habitat improvements, or long-term funding is more than the estimated amount initially paid by the Project owner, the Project owner shall make an additional deposit into the REAT Account sufficient to cover the actual

acquisition costs, the actual costs of initial protection and habitat improvement on the compensation lands, and the long-term funding requirements as established in an approved PAR or PAR-like analysis. If those actual costs or PAR projections are less than the amount initially transferred by the Applicant, the remaining balance shall 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. 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

[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.

>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”).

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.

---

NatureServe, Arlington, Virginia. Online:
http://www.natureserve.org/publications/pubs/invasiveSpecies.pdf

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.

***58. Page 302, Verification to Condition of Certification BIO-20, first paragraph:***

**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.

***59. Page 303, 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 922929 acres of lands that:

a. Provide suitable spring foragingе 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 Ssouthern 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 922929 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 922~~9~~acres 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.

***60. 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 | 593~~2~~ | 120~~5~~4 | ~~133~~ 182 | ~~179~~ 240 | 929 | 929 |

**SOIL AND WATER RESOURCES**

***61. Page 321, first paragraph:***

~~Based on the fact~~ ***Staff asserts*** that a hydraulic connection exists between local groundwater and the Colorado River, the***refore*** ~~evidence~~ suggest~~s~~***ing*** that groundwater withdrawals from the PVMGB are largely balanced by recharge (inflow) from the river via the Palo Verde Valley Groundwater Basin. (Exhibit 200, pp. c.9-20 to C.9-31, and P. C.9-44). ***Applicant, however, contends that the recharge is largely influenced by mounded groundwater in the Palo Verde Groundwater Basin, that prevents hydraulic connectivity between the PVMGB and the Colorado River. (Ex. 52, Soil and Water Resources Testimony.)***

***62. Page 322, starting at line 7:***

Based on the described connection between the PVMGB and the Colorado River, ~~however, the evidence~~ ***Staff asserts*** ~~suggest~~ that wells drawing groundwater from the PVMGB might be considered as withdrawing water from the river. (Exhibit 200, pp. C.9-44 and C.9-45). Water supplies in the Colorado River are fully appropriated, with the existing appropriations encompassing all consumptive uses (including

applicable groundwater pumping) pursuant to related Supreme Court decrees. ***While the Applicant agrees that Colorado River water supplies are fully appropriated, it and Staff agree that the BSPP would not require an entitlement to pump groundwater for the BSPP. (Ex. 52; 7/15/10 RT, 61:10 – 14.)*** ~~The Project applicant has not provided a detailed analysis of the proportion of proposed groundwater extraction that would be derived from basin recharge and Colorado River underflow. Based on this condition and the noted connection between the PVMGB and the river, Project related groundwater withdrawal could potentially result in significant impacts related to the diversion of Colorado River water~~.

Public/agency comments from the Colorado River Board of California and Defenders of Wildlife were also received on this issue. These comments identified similar concerns as described above regarding a connection between the Colorado River and PVMGB, and related impacts from Project groundwater extraction. ***Rather than adjudicate the disagreements on whether the project pumping would cause a significant impact to the Colorado River, Applicant and Staff agreed to Conditions of Certification SOIL & WATER-2 and SOIL & WATER-15 as appropriate mitigation to offset its water use.***

The described potential impacts to groundwater basin balance identified in the Project technical analysis and public/agency comments would be addressed through Condition of Certification **SOIL & WATER-2** which we hereby adopt. Specifically, this condition requires the Project owner to implement a Water Supply Plan to mitigate Project impacts to ***Palo Verde Mesa Groundwater Basin from recharge from the Palo Verde Valley Groundwater Basin*** ~~Colorado River flows~~ (potentially including efforts such as conservation programs, funding of irrigation improvements, purchasing water rights, and/or tamarisk removal). (Exs. 200, pp. C.9-44 to C.9-46, C.9-97, C.9-98; 202, pp. 1 – 2.) We also adopt Condition of Certification **SOIL & WATER-16**, to help define the quantity of surface water contributing to Project groundwater extraction (i.e., to estimate the amount of water that must be replaced pursuant to Condition of Certification **SOIL & WATER-2**). It is also noted that future water use in the PVMGB may be governed by ~~impending~~ ***future*** regulations ***which may be*** ~~being~~ formulated by the U.S. Bureau of Reclamation (which oversees management and appropriation of Colorado River water). (Ex. 200, pp. C.9-45, C.9-76; 7/15/10 RT, 57:17 - 62:9.)

***63.*** Page 325, first paragraph, first sentence:

Each of the proposed 250 MW units will have two ***4*** ~~3.5~~-acre evaporation ponds to dispose of wastewater from sources including cooling tower and boiler blowdown (for a total of ~~seven~~ ***eight*** acres per unit, or ~~28~~ ***32*** acres for the entire Project site.)

***64. Page 325, first paragraph, last sentence:***

Pond dimensions will be designed to provide adequate surface area and depth to accommodate proposed wastewater inflow and precipitation rates over the life of the Project (approximately 30 years), as well as to provide adequate freeboard for direct precipitation from ~~large~~ <u>100-year recurrence interval</u> storm events (i.e., to prevent overflow).

***65. Page 325, third paragraph, first sentence:***

Based on the described design criteria and monitoring program, as well as the additional requirements identified in **SOIL & WATER-7 ~~and SOIL & WATER-17~~** including Appendices B,C & D (which mandate compliance with applicable waste discharge standards and implementation of an approved Groundwater Quality Monitoring and Reporting Plan, respectively),

***66. Page 326, second paragraph:***

Based on the described conditions, as well as the requirements set forth in Conditions of Certification **SOIL & WATER-7 ~~and SOIL & WATER-17~~**, operation of project LTUs is not expected to result in significant impacts to groundwater quality.

***67. Page 327, second paragraph:***

Based on the described information, preliminary studies conducted for the proposed Project septic systems conclude that there is a low potential for related impacts to local groundwater quality. The evidence indicates some uncertainty due to the preliminary nature of these analyses, however, and identifies a number of measures to address the associated potential impacts. Specifically, these include Conditions of Certification **SOIL & WATER-7** and **SOIL & WATER-8** and **~~SOIL & WATER-17~~**, which we hereby adopt, which require conformance with applicable waste discharge standards and Riverside County septic system/leach field standards~~, as well as an approved Groundwater Quality Monitoring and Reporting Plan~~

***68. Page 333, first paragraph, starting at line 6:***

The Project applicant proposes to implement appropriate BMPs for managing potential construction-related impacts to surface water quality. This would include conformance with related ~~permit requirements under the Federal Clean Water Act/National Pollutant Discharge Elimination System (CWA/NPDES); as well as implementing applicable~~ elements of Conditions of Certification **SOIL & WATER-1**, **SOIL & WATER-7**, and **SOIL & WATER-14**.

***69. Page 333, second paragraph, starting at line 8:***

Potential impacts related to accidental spills and releases will be managed through: (1) appropriate Project design features (e.g., providing two feet of freeboard in evaporation ponds to minimize potential overtopping during ~~large~~ 100-year recurrence storm events); (2) hazardous materials management requirements (refer to the **Hazardous Materials Management** portion of this Decision); and (3) ~~conformance with applicable CWA/NPDES permit requirements; and (4)~~ implementation of pertinent elements of Conditions of Certification **SOIL & WATER-7** and **SOIL & WATER-14**.

***70. Page 334 fourth paragraph, starting at line 4:***

Based on an estimated storage capacity of five million af for the PVMGB, cumulative groundwater extraction for the proposed Project and the cumulative projects during construction would be approximately 0.35 percent of the total stored groundwater (including 0.08 percent for Project-related extraction).

***71. Page 335, first paragraph, starting at line 7:***

> The cumulative projects, however, will likely induce subsurface inflow from the ~~Colorado River~~ ***Palo Verde Valley Groundwater Basin*** similar to that described for the proposed Project. ***Staff believes this may impact the Colorado River.*** Because the Colorado River is fully appropriated, groundwater production in the PVMGB that increases subsurface flow from the ***Palo Verde Valley Groundwater Basin*** ~~Colorado River would~~ ***could*** represent a significant cumulative impact. With implementation of Conditions of Certification **SOIL & WATER-2** and **SOIL & WATER-16**, we find that potential Project-specific impacts to ~~surface water~~ related to groundwater extraction and ***recharge from the Palo Verde Valley Groundwater Basin*** ~~inflow from the Colorado River~~ would be reduced below a level of significance. While mitigation for similar impacts from the cumulative projects cannot be determined at this time, it is likely that such impacts would be subject to similar measures as the proposed Project due to potential CEQA impacts ~~due to the legal requirements associated with Colorado River appropriations~~. In any case, the impacts to ~~surface water associated with Colorado River inflow~~ from the proposed Project would not be cumulatively considerable, based on the requirements in Conditions of Certification **SOIL & WATER-2** and **SOIL & WATER-16**.

***72. Page 336, second paragraph:***

The proposed Project would be expected to contribute only a small amount to potential short- or long-term cumulative groundwater quality impacts, based on the following considerations: (1) the groundwater table at the Project site is located approximately 195 feet below the surface; (2) Project construction and operation would require implementation of a hazardous material management plan ~~(as well as conformance with other applicable requirements such as CWA/NPDES permits)~~; and (3) operation of the LTU, evaporation ponds and, septic systems would require applicable monitoring and mitigation plans (pursuant to Conditions of Certification **SOIL & WATER-7** and **SOIL & WATER-8** ~~and **SOIL & WATER-17)**~~. As a result, impacts to groundwater quality from the proposed Project would not be cumulatively considerable.

***73. Page 337, second paragraph:***

The proposed Project would implement appropriate measures for managing potential construction- and operation-related impacts to surface water quality, including: (1) ~~conformance with applicable permit requirements under CWA/NPDES; (2)~~ implementation of Conditions of Certification **SOIL & WATER-1**, **SOIL & WATER-7**, and **SOIL & WATER-14**; (~~3~~2) use of appropriate Project design features; and (~~4~~3) implementing hazardous materials management requirements (refer to the **Hazardous Materials Management** portion of this Decision).

***74. Page 338, second paragraph, starting at line 15:***

Specifically, this compliance would likely include implementation of a ~~SWPP and/or~~ DESCP, and a Drainage Report, as outlined in **SOIL & WATER-1** and **SOIL & WATER-11**.

***75. Page 339, Finding 2:***

2. Adherence to the procedures in the Condition of Certification **SOIL & WATER-1** (including the construction DESCP) ~~and related CWA/NPDES permit requirements~~ will avoid significant soil erosion and subsequent sedimentation during construction, conserve soil resources, maintain water quality, and prevent accelerated soil loss.

***76. Page 339, Finding 3:***

Project construction and operation will require approximately 22,100 af of groundwater extraction from the PVMGB, with this basin hydraulically connected to the ***Palo Verde Valley***~~Colorado River~~.

***77. Page 340, Finding 4:***

~~4. Proposed Project groundwater withdrawals from the PVMGB could result in the sue of Colorado River water, with water supplies in the river already allocated.~~

*Renumber all subsequent findings accordingly.*

***78. Page 340, Finding 5:***

~~5~~.4. Implementation of Condition of Certification **SOIL & WATER-2** and **SOIL & WATER-16** ~~(if applicable)~~ would reduce potential impacts related to groundwater basin balance in the PVMGB. ***The Proposed Project does not require an entitlement of Colorado River Water to pump groundwater.*** ~~and associated effects to surface water from Colorado River inflow below a level of significance (although future water use in the PVMGB may be governed by impending regulations being formulated by the U.S. Bureau of Reclamation)~~.

***79. Page 340, Finding 10:***

~~10~~.9. Implementation of Conditions of Certification **SOIL & WATER-7**, **SOIL & WATER-8, ~~SOIL & WATER-17~~** and **SOIL & WATER-18** would reduce long-term impacts related to groundwater quality below a level of significance.

***80.*** 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.

***81. Page 341, Condition of Certification SOIL & WATER-1:***

**Drainage Erosion and Sedimentation Control Plan**

**SOIL&WATER-1:** Prior to site mobilization, the project owner shall obtain the Compliance Project Manager (CPM) approval of the Drainage Erosion and Sedimentation Control Plan (DESCP) for managing stormwater during Project construction and operations as normally administered by the County of Riverside. The DESCP must ensure proper protection of water quality and soil resources, demonstrate no increase in off-site flooding potential, include provisions for sediment and stormwater retention from both the power block, solar fields and transmission right of way to meet any Riverside County requirements, address exposed soil treatments in the solar fields for both road and non-road surfaces, and identify all monitoring and maintenance activities. The DESCP shall contain, at minimum, the elements presented below that outline site management activities and erosion and sediment-control Best Management Practices (BMP) to be implemented during site mobilization, excavation, construction, and post construction (operating) activities.

A. **Vicinity Map** – A map(s), at a minimum scale 1 inch to 500 feet, shall be provided indicating the location of all Project elements (construction sites, laydown area, pipelines) with depictions of all significant geographic features including swales, storm drains, and sensitive areas.

B. **Site Delineation** – All areas subject to soil disturbance for the proposed Project (Project phases, laydown area, all linear facilities, landscaping areas, and any other Project elements) shall be delineated showing boundary lines of all construction areas and the location of all existing and proposed structures, pipelines, roads, and drainage facilities.

C. **Watercourses and Critical Areas** – The DESCP shall show the location of all nearby watercourses including swales, storm drains, and drainage ditches. It shall indicate the proximity of those features to the proposed Project construction, laydown, and landscape areas and all transmission and pipeline construction **corridors.**

D. **Drainage Map** – The DESCP shall provide a topographic site map(s), at a minimum scale of 1 inch to 200 feet, showing existing, interim, and proposed drainage swales and drainage systems and drainage-area boundaries. On the map, spot elevations are required where relatively flat conditions exist. The spot elevations and contours shall be extended off site for a minimum distance of 100 feet.

E. **Drainage of Project Site Narrative** – The DESCP shall include a narrative of the drainage measures necessary to protect the site and potentially affected soil and water resources within the

drainage downstream of the site. The narrative shall include the summary pages from the hydraulic analysis prepared by a professional engineer and erosion control specialist. The narrative shall state the watershed size(s) in acres that was used in the calculation of drainage features.

F. **Clearing and Grading Plans** – The DESCP shall provide a delineation of all areas to be cleared of vegetation and areas to be preserved. The plan shall provide elevations, slopes, locations, and extent of all proposed grading as shown by contours, cross sections, or other means. The locations of any disposal areas, fills, or other special features shall also be shown. Existing and proposed topography shall be illustrated by tying in proposed contours with existing topography.

G. **Clearing and Grading Narrative** – The DESCP shall include a table with the estimated quantities of material excavated or filled for the site and all Project elements (Project site, laydown area, transmission and pipeline corridors, roadways, and bridges) whether such excavation or fill is temporary or permanent, and the amount of such material to be imported or exported.

H. **Soil Wind and Water Erosion Control -** The plan shall address exposed soil treatments to be used during construction and operation of the proposed Project for both road and non-road surfaces including specifically identifying all chemical based dust palliatives, soil bonding, and weighting agents appropriate for use at the proposed Project site that would not cause adverse effects to vegetation. BMPs shall include measures designed to prevent wind and water erosion including application of chemical dust palliatives after rough grading to limit water use. All dust palliatives, soil binders, and weighting agents shall be approved by the CPM prior to use.

I. **Best Management Practices Plan –** The DESCP shall identify on the topographic site map(s) the location of the site specific BMPs to be employed during each phase of construction (initial grading, Project element excavation and construction, and final grading/stabilization). BMPs shall include measures designed to control dust, stabilize construction access roads and entrances, and control storm water runoff and sediment transport.

J. **Best Management Practices Narrative –** The DESCP shall show the location (as identified in (I) above), timing, and maintenance schedule of all erosion- and sediment-control BMPs to be used prior to initial grading, during all Project element (site, pipelines) excavations and construction, final grading/stabilization, and operation. Separate BMP implementation schedules shall be provided for each Project element for each phase of construction. The maintenance schedule shall include post-construction

maintenance of structural-control BMPs, or a statement provided about when such information would be available.

K. **Project Schedule –** The DESCP shall identify on the topographic site map the location of the site-specific BMPs to be employed during each phase of construction (initial grading, Project element construction, and final grading/stabilization). Separate BMP implementation schedules shall be provided for each Project element for each phase of construction.

L. **Erosion Control Drawings –** The erosion-control drawings and narrative shall be designed, stamped and sealed by a professional engineer or erosion control specialist.

M. **Agency Comments –** The DESCP shall include copies of recommendations, conditions, and provisions from the California Department of Fish and Game (CDFG) and Colorado River Basin Regional Water Quality Control Board (CRBWQCB).

N. **Monitoring Plan:** Monitoring activities shall include routine measurement of the volume of accumulated sediment in the onsite drainage ditches, and storm water diversions. The monitoring plan shall be part of the Channel Maintenance Program, **SOIL&WATER-15.**

**Verification:** No later than thirty (30) days prior to start of site mobilization, the project owner shall submit a copy of the final DESCP to the CPM for review and comment and to the County of Riverside and the CRBWQCB if required. The CPM shall consider comments if received by the county and CRBRWQCB before approval of the DESCP.

The DESCP shall be consistent with the grading and drainage plan as required by Condition of Certification **CIVIL-1**, and relevant portions of the DESCP shall clearly show approval by the chief building official. ~~The DESCP shall be a separate plan from the SWPPP developed in conjunction with any National Pollution Discharge Elimination System (NPDES) permit for Construction Activity.~~ The project owner shall provide in the monthly compliance report ~~with~~ a narrative on the effectiveness of the drainage, erosion, and sediment-control measures and the results of monitoring and maintenance activities. Once operational, the project owner shall update and maintain the DESCP for the life of the Project and shall provide in the annual compliance report information on the results of monitoring and maintenance activities.

***82. Page 347, Condition of Certification SOIL & WATER-5:***

**Groundwater Level Monitoring, Mitigation, and Reporting Plan**

**SOIL&WATER-5:** The project owner shall submit a Groundwater Level Monitoring, Mitigation, and Reporting Plan to the CPM for review and approval in advance of using onsite wells to supply groundwater for construction activities. The Groundwater Level Monitoring, Mitigation, and Reporting Plan shall provide detailed methodology for monitoring background and site groundwater levels. Monitoring shall include pre-construction, construction, and operational water use. The plan shall establish pre-construction groundwater level trends from

available data that can be quantitatively used as a baseline to establish pre-Project water level trends and to subsequently compare to operational Project pumping water level data.

**A. Prior to Project Construction:**

1. A well reconnaissance shall be conducted to investigate and document the condition of existing water supply wells as established by the groundwater model and condition A.2 below, provided that access is granted by the well owners. The reconnaissance shall include sending notices by registered mail to all property owners for wells identified under condition A.2 below.
2. The monitoring network for offsite wells shall be defined by the groundwater model developed for the AFC, using the lower transmissivity value derived from aquifer testing on the site, so as to provide a conservative estimate of the potential impact, and to identify the area predicted to show a water level change of 1 feet or more at the end of construction and at the end of operation.
3. Monitor to establish preconstruction conditions. The network of monitoring wells shall make use of existing wells in the basin that are accessible and would satisfy the requirements for the monitoring program. The monitoring network shall also include any monitoring wells that are installed to comply with Waste Discharge Requirements (see **SOIL&WATER-7**). Provided access is granted, additional wells located outside of the area defined by the model and Condition A.2 above will be located to serve as background monitoring wells. Abandoned wells, or wells no longer in use, that are accessible and provide reliable water level data within the potentially impacted area may also be included as part of the monitoring network. A site reconnaissance will be performed to identify wells that could be accessible for monitoring. As access to these wells is available, historic water level, water quality, well construction and well performance information shall be obtained for both pumping and non-pumping conditions.
4. As access allows, in advance of using onsite wells to supply groundwater for construction activities, groundwater levels will be measured from the off-site and on-site wells within the network and background wells to provide initial groundwater levels for pre-project trend analysis. The installation and monitoring of water levels using pressure transducers shall be done in selected wells to provide an assessment of seasonal trends.
5. Construct water level maps within the PVMGB within the area encompassed by all monitoring wells in A.1, 2, 3 and 4 above prior to construction. As data is available, the Project owner shall prepare trend plots, perform statistical analyses using the Mann-Kendall test (or other CEC-approved statistical analysis method) for trend to assess pre-project water level trends.

**B. During Construction:**

1. Collect water levels on a quarterly basis throughout the construction period and at the end of the construction period. Perform statistical trend analysis for water levels using the Mann-Kendall test (or other CEC-approved statistical analysis method). Assess the significance of an apparent trend and estimate the magnitude of that trend.

**C. During Operation:**

1. On a quarterly basis for the first year of operation and semi-annually thereafter for the following four years, collect water level measurements from any wells identified in the groundwater monitoring program to evaluate operational influence from the Project. Quarterly operational parameters (i.e., pumping rate) of the water supply wells shall be monitored as access allows for those wells within the monitoring network. Wells outside the network and their influence on pumping within the network shall be evaluated on a quarterly basis to understand well interference from sources of pumping outside the Project area.
2. On an annual basis, perform statistical trend analysis for water levels data and comparison to predicted water level declines due to project pumping. Analysis of the significance of an apparent trend shall be determined and the magnitude of that trend estimated. Pressure transducer data from groundwater level measuring devices will be used to assess seasonality and diurnal trends in the water level data. Based on the results of the statistical trend analyses and comparison to predicted water level declines due to Project pumping, the project owner shall determine the area where the Project pumping has induced a drawdown in the water supply at a level of 5 feet or more below the baseline trend.
3. If water levels have been lowered more than 5 feet below pre-site operational trends, and monitoring data provided by the project owner show these water level changes are different from background trends or other groundwater pumping and are caused by Project pumping, then the project owner shall provide mitigation to the impacted well owner(s). Mitigation shall be provided to the impacted well owners that experience 5 feet or more of Project-induced drawdown if the CPM's inspection of the well monitoring data confirms changes to water levels and water level trends relative to measured pre-project water levels, and the well (private owners well in question) yield or performance has been significantly affected by Project pumping. The type and extent of mitigation shall be determined by the amount of water level decline induced by the Project, the type of impact, and site specific well construction and water use characteristics. If an impact is determined to be caused by drawdown from more than one source, the level of mitigation provided shall be proportional to the amount of drawdown induced by the Project relative to other sources. In order to be eligible,

a well owner must provide documentation of the well location and construction, including pump intake depth, and that the well was constructed and usable before Project pumping was initiated. The mitigation of impacts shall be determined as follows:

a. If Project pumping has lowered water levels by 5 (five) feet or more and increased pumping lifts, increased energy costs shall be calculated. Payment or reimbursement for the increased costs shall be provided on an annual basis. In the absence of specific electrical use data supplied by the well owner, the project owner shall use **SOIL&WATER-6** to calculate increased energy costs.

b. If groundwater monitoring data indicate Project pumping has lowered water levels below the top of the well screen, and the well yield is shown to have decreased by 10 percent or more of the pre-Project average seasonal yield, compensation shall be provided for the diagnosis and maintenance to treat and remove encrustation from the well screen. Reimbursement shall be provided at an amount equal to the customary local cost of performing the necessary diagnosis and maintenance for well screen encrustation. Should the well yield reductions be recurring, the project owner shall provide payment or reimbursement for periodic maintenance throughout the life of the Project. If with treatment the well yield is incapable of meeting 110 percent of the well owner's historic operational maximum daily demand, dry season demand, or annual demand, or the wells sustainable maximum yield demonstrated through well testing, the well owner should be compensated by reimbursement or well replacement as described under 3.c. below.

c. If Project pumping has lowered water levels to significantly impact well yield so that it can no longer meet its intended purpose, causes the well to go dry, or cause casing collapse, payment or reimbursement of an amount equal to the cost of deepening or replacing the well shall be provided to accommodate these effects. Payment or reimbursement shall be at an amount equal to the customary local cost of deepening the existing well or constructing a new well of comparable design and yield (only deeper). The demand for water, which determines the required well yield, shall be determined on a per well basis using well owner interviews, historic well operational records and well testing data, field verification of property conditions and water requirements that are compiled as part of the pre-project well reconnaissance. Well yield shall be considered significantly impacted if it is incapable of meeting 110 percent of the well owner's historical operational maximum daily demand, dry-season demand, or annual demand as documented by the pre-Project historical operational records or 100 percent of the maximum sustainable well yield as provided in historic well testing data. If historic well testing data indicates the capacity of the well is higher than the operational data suggests,

the well shall be operated for a sufficient period of time acceptable to the CPM, Project owner and well owner to demonstrate that its maximum sustainable yield has been impacted solely by the Project pumping. If by comparison the well is incapable of meeting 100 percent of the historic maximum sustainable yield demonstrated by the testing, and the reduction in capacity is solely related to the Project pumping, the well owner ~~should~~ shall be compensated for the lost capacity. Compensation for lost capacity in lieu of well replacement shall be in the form of a lump sum payment equal to the cost of deepening the well to a depth sufficient to return the well yield to its maximum sustainable yield.

d. The project owner shall notify any owners of the impacted wells within one month of the CPM approval of the compensation analysis for increased energy costs.

e. Pump lowering – In the event that groundwater is lowered as a result of Project pumping to an extent where pumps are exposed but well screens remain submerged the pumps shall be lowered to maintain production in the well. The Project shall reimburse the impacted well owner for the costs associated with lowering pumping in proportion to the Project contribution to the impact.

f. Deepening of wells – If the groundwater is lowered enough as a result of Project pumping that well screens and/or pump intakes are exposed, and pump lowering is not an option, such affected wells shall be deepened or new wells constructed. The Project shall reimburse the impacted well owner for all costs associated with deepening existing wells or construction of a new well in proportion to the Project contribution to the impact.

4. After the first five-year operational and monitoring period the CPM shall evaluate the data and determine if the monitoring program for water level measurements should be revised or eliminated. Revision or elimination of any monitoring program elements shall be based on the statistically verifiable datasets and trend analysis. The determination of whether the monitoring program should be revised or eliminated shall be made by the CPM.

5. If mitigation includes monetary compensation, the project owner shall provide documentation to the CPM that compensation payments have been made by March 31 of each year of Project operation. Within thirty (30) days after compensation is paid, the project owner shall submit to the CPM a compliance report describing compensation for increased energy costs necessary to comply with the provisions of this condition.

6. At the end of every subsequent five-year monitoring period, the collected data shall be evaluated by the CPM and they shall determine if the sampling frequency should be revised or eliminated.

7. During the life of the Project, the project owner shall provide to the CPM all monitoring reports, complaints, studies and other relevant data within ten (10) days of being received by the Project owner.

**Verification:** The project owner shall do all of the following:

a. At least thirty (30) days in advance of using onsite wells to supply groundwater for Project construction, a Groundwater Monitoring and Reporting Plan shall be submitted to the CPM for review and approval before completion of Condition of Certification SOIL&WATER-3 (Well Installation). The Groundwater Monitoring and Reporting Plan shall provide the methodology for monitoring background and site groundwater levels.

b. At least fifteen (15) days in advance of using onsite wells to supply groundwater for Project construction activities, the project owner shall submit to the CPM, a comprehensive report presenting all the data and information required in item A above. The CPM will provide comments to the plan following submittal. CPM approval of the plan is required prior to operation of the site groundwater supply wells. The project owner shall also submit to the CPM all calculations and assumptions made in development of the report data and interpretations.

c. During Project construction, the project owner shall submit to the CPM quarterly reports presenting all the data and information required in item B above. The quarterly reports shall be provided thirty (30) days following the end of the quarter. The project owner shall also submit to the CPM all calculations and assumptions made in development of the report data and interpretations.

d. No later than March 31 of each year of construction or sixty (60) days prior to Project operation, the project owner shall provide to the CPM for review and approval, documentation showing that any mitigation to private well owners during Project construction was satisfied, based on the requirements of the property owner as determined by the CPM.

e. During Project operation, the project owner shall submit to the CPM, applicable quarterly, semi-annual and annual reports presenting all the data and information required in item C above. Quarterly reports shall be submitted to the CPM thirty (30) days following the end of the quarter. The fourth quarter report shall serve as the annual report and will be provided on January 31 in the following year.

f. The project owner shall submit to the CPM all calculations and assumptions made in development of report data and interpretations, calculations, and assumptions used in development of any reports.

g. After the first five year operational and monitoring period, the project owner shall submit a 5-year monitoring report to the CPM that includes all monitoring data collected and a summary of the findings. The CPM will determine if the water level measurements and water quality sampling frequencies should be revised or eliminated.

***83.*** **Page 356, Verification, Condition of Certification SOIL&WATER-10**

**Verification:** At least ~~sixty (60)~~ ***thirty (30)*** days prior to the start of site mobilization or alternate date as agreed to with BLM, the project owner shall submit decommissioning

plans to the CPM ***for review and to BLM's Authorized Officer for review and*** approval. The project owner shall amend these documents as necessary, with approval from the CPM, should the decommissioning scenario change in the future.

***84. Page 359, Condition of Certification SOIL & WATER-14***

**Channel Erosion Protection**

**SOIL&WATER–14:** The project owner must provide revised preliminary Grading and Drainage Plans which incorporate the items and information as listed below for the channels designated as North, West, South, Southeast and Central on the existing plans ~~(AECOM2010a)~~.

A. Soil cement bank protection must be provided such that the channels are adequately protected from bank erosion and lateral headcutting. The extents of the proposed bank protection must be shown on the revised Grading and Drainage Plans. Typical sections for these channels must show the layout of the bank protection including thickness, width and toe-down location and depth consistent with the scour calculation provided in the revised Drainage Report.

B. Soil cement bank protection shall be provided on both channel banks wherever 10-year channel flow velocity exceeds 5 ft/s. It shall be provided on the outer channel bank wherever offsite topography and a detailed FLO-2D analysis indicate surface flow would enter the collector channels.

C. Soil cement bank protection shall be provided at all channel confluences of otherwise unlined channels where the result of the detailed hydraulic analysis presented in the revised Drainage Report indicate the increased potential for erosion due to adverse angles of confluence. Detailed plans for each confluence showing the extents of the soil cement based on specific hydraulic conditions shall be provided in the formal Grading and Drainage Plans.

D. Other methods of channel stabilization, such as dumped riprap or gabions, will not be permitted. Bio-stabilization measures are not permitted.

E. Earthen berms used on the outside of collector channels to guide flow to discreet points of discharge into a channel shall not be utilized in lieu of soil cement on the outside bank of collector channels. Offsite flows shall discharge directly into collector channels.

F. The possible exception to the requirements of **SOIL&WATER-13** would be along the North Channel for a total distance of approximately 14,000 feet. Along this reach, earthen berms and channel drop inlets might be utilized as opposed to soil cement along the upstream face of the collector channels. The berms would start at a point approximately 4,825 feet east of the western property boundary (just east of the natural wash) and extend to a point approximately 18,710 feet east of the west property boundary (where the north collector channel bottom width transitions from 100 feet to 150 feet wide). The use of berms and channel drop inlets may

be justified along this reach as available topography indicates that the predominate flow pattern is roughly parallel to the channel and that inflows would be minimal. This condition as well as the actual extents of where berms may be utilized will be based on the results of the post-development FLO-2D analysis.

The use of unlined berms will require that the post-development FLO-2D analysis for the 100-year flow event demonstrate non-erosive flow velocities based on site specific soils characteristics. Lining of the outside of the berm with gunite or other approved material will be required along reaches where the 100-year flow velocities are shown to be erosive. In the absence of more specific data, 100-year flow velocities in excess of 5.0 ft/s will be considered erosive. Drop inlets must be fully protected from erosion, sized appropriately for the anticipated 100-year flow, and be designed for complete interception of the upstream flows to eliminate the potential for bypass flow to the subsequent downstream drop inlet structure. These structures must also to be fully protected from erosion and failure related to the 100-year discharge within the north collector channel.

G. The height of the proposed berms must be at least three feet and must provide a minimum of 1 foot of freeboard based on the flow depths determined in the post-development FLO-2D analysis. The maximum discharge to be collected at any single channel drop inlet should not be greater than 50 cfs based on the results of the post- development FLO-2D analysis.

H. Design and construction criteria for the use of soil cement on the site shall be prepared by the Owner/Developer's engineer in conjunction with the design methodology established by the Geotechnical Engineer of Record. The design and construction criteria shall be based on local and/or regional requirements and specifications. The design and construction criteria, the geotechnical design for the soil cement, the site specific specifications for the soil cement, the method of installation for the soil cement, and the local or regional standards being used for the design criteria shall be provided to the CPM for review and approval consistent with the verification requirements for this Condition of Certification. The slope requirements that are proposed for use (3:1 or 4:1), and the associated method of installation (i.e., 8 inch lift versus slope application) shall be fully documented for review and approval by the CPM prior to any field installation of soil cement.

I. A soils report indicating the suitability of the Project soils for use in the production of soil cement to the Project specifications shall be submitted with the revised Grading and Drainage Plans.

J. The bottom of engineered collector channels may be left earthen or fully lined at the discretion of the engineer. Fully lined channels will have higher allowable velocities and Froude numbers assuming hydraulic jumps are modeled and considered in the channel design.

K. If modifications to the existing drainages to allow construction of and future access to linear facilities require stabilization of the channel in the vicinity of those modifications, location of disturbance to the existing drainages shall be stabilized consistent with best engineering practice to eliminate future negative impacts to those drainages upstream and downstream of the linear facility in the form of downcutting, erosion and headcutting. The use of "non-engineered" culvert crossings shall not be allowed. All structures to be utilized in existing drainages along linear facilities shall be documented in the project drainage report and reflected in the project improvement plans. Channel erosion mitigation measures along linear facilities shall be subject to all the requirements of this Condition of Certification where applicable.

**Verification:** The required information and criteria shall be incorporated into the Grading and Drainage Plans and with all subsequent submittals as required in **SOIL&WATER-11** and **SOIL&WATER-12**. The project owner shall address all comments by the CPM related to the channel erosion protection design through final plan approval.

***85. Page 366, Verification, Condition of Certification SOIL&WATER – 18:***

Add a third paragraph to the Verification:

The Project Owner shall comply with the provisions of Soil & Water Appendices B, C and D of the July 7, 2010 Supplemental Staff Assessment (Ex. 202): ***Wastewater Discharge Program: Facts for Waste Discharge, Requirements for Waste Discharge, and Monitoring & Reporting Program.***

## CULTURAL RESOURCES

***86. Page 369, third paragraph:***

The proposed Blythe Solar Power Project (BSPP) would be located approximately two miles to the north of Interstate 10 (I-10), 8 miles west of Blythe, California. The footprint of the proposed project is 5,950 acres, while the total disturbance area, including linear facilities and drainage channels, is 7,043~~3~~25 acres. The land occupied by the plant site would be entirely public land, managed by the Bureau of Land Management~~, except for three private in holdings totaling 320 acres~~ . (Ex. 203, p. C.3-6.)

***87. Page 370, List of equipment in each power block***

Each power block would include:

- a steam turbine generator;
- a natural gas-fired auxiliary boiler;
- a generator step-up transformer;
- ~~a 500-kV switchyard,~~ a heat transfer fluid (HTF) system ~~(including a HTF freeze-protection heat exchanger)~~;
- an air-cooled condenser;

- two groundwater wells;
- water treatment facilities;
- a service/fire water storage tank;
- two 4-acre, 9-foot-deep evaporation ponds;
- a septic system and leach field; and
- an operations and maintenance building.

All four units would share:

- perimeter fencing (8-foot tall chain-link security fencing along the north and south sides of the plant and 30-foot tall wind fencing, comprised of A-frames and wire mesh, along the east and west sides of each solar field);
- an access road;
- an office building with parking (and a septic system with a leach field);
- a 230 kV ~~central~~ switchyard;
- a warehouse/maintenance facility (with two additional groundwater wells and a septic system with a leach field); and
- bioremediation units (totaling 16 acres in size) for the treatment of HTF-contaminated soil.

***88. Page 378, first partial paragraph, lines 7 - 10:***

resources located within the BSPP PAAs. Staff has included in that list the other resource located on the private in-holding because ~~it is staff's understanding that the BSPP applicant is negotiating the purchase of the in-holding and so~~ the project owner could have eventual responsibility for that land ~~the site~~.

***89. Page 399. CUL-3, Verification, clause 4, first sentence:***

At least 20 days prior to data recovery on known archaeological sites, the CRS shall provide a letter naming anticipated field crew members for the project and attesting that the identified field crew members meet the minimum qualifications ~~for cultural resources data recovery~~ required by this Condition.

***90. Page 399. CUL-4, first paragraph, first sentence:***

Prior to the start of ground disturbance, the project owner shall provide ~~the,~~ the CRS, the PPA, and the PHA with copies of the AFC, data responses, confidential cultural resources documents, the Revised Staff Assessment (RSA), and the RSA Supplement/Errata, if any, for the project.

***91. Page 400. CUL-4, Verification, first clause, second paragraph:***

~~Rationale: Proposed schedule change is in accordance with the project time-line.~~

***92. Page 405. CUL-5, Verification, clause 3, second paragraph:***

~~Rationale: Proposed schedule changes are in accordance with the project timeline.~~

***93. Page 407. CUL-6, number 4, part a, part x:***

Draw conclusions from the collected data, if possible, on whether the merging of the quarries and the thermal cobble features in a district is valid.

***94. Page 408. CUL-6, "Geophysical Survey for Subsurface PQAD Contributing Thermal Cobble Features:," part ii:***

Use criteria to derive the sample ~~to derive the sample~~ that the CRS, the PPA, and the CPM shall agree upon and that reflect the spatial variability in the physical material character and in the chronology of the PQAD, as such variability is presently known from the field investigations;

***95.* Page 408. CUL-6, "Geophysical Survey for Subsurface PQAD Contributing Thermal Cobble Features," part iv:**

Inform the ~~CMP~~ CPM of the results of the survey;

***96. Page 412. CUL-6, number 8, first paragraph:***

The project owner shall ensure that the PPA prepares a CRHR nomination and a NRHP nomination for the PQAD, including both the contributors located within the boundaries of the BSPP and such contributors, entire and partial, located beyond the boundaries of the BSPP, as are known or posited. The nominations should be the PPA's best estimate of a boundary for the district, a boundary that the PPA shall derive on the basis of the results of the PQAD evaluation and data recovery program and present in the final report for that program.

***97. Page 412. CUL-6, number 9, heading:***

Outreach Initiatives ~~i~~If PTNCL is ~~n~~Not ~~e~~Eligible

***98. Page 413. CUL-6, Verification, clause 2, first sentence:***

At least 90 days prior to the onset of BSPP construction-related ground disturbance in Unit 1 east of Historic Road SMB-H-6~~10~~01, the project owner shall ensure that the PPA completes the geophysical test and that the CRS and PPA consult with the CPM, via telephone, to arrive at an agreement on the reliability of the use of magnetometry to locate buried PQAD thermal cobble features and how to proceed with the subsurface survey.

***99. Page 413. CUL-6, Verification, clause 4:***

At least 30 days prior to the start of BSPP construction-related ground disturbance in Unit 1 east of Historic Road SMB-H-601, the project owner shall notify the CPM that the CRS has initiated the data recovery phases of the data recovery program.

***100. Page 414. CUL-6, Verification, clause 6, second paragraph:***

~~Rationale: Proposed schedule changes are in accordance with the project time-line.~~

***101. Page 414. CUL-6, Verification, clause 9, first sentence:***

No longer than 90 days after the end of all construction-related ground disturbance, the project owner shall ensure that the CRS completes the requisite material analyses ~~for,~~ and prepares~~,~~ and submits, for the approval of the CPM, the final cultural resources report for the Blythe cultural resources data recovery and monitoring activities.

***102. Page 415. CUL-7, third sentence:***

The data recovery plan shall include use of the CARIDAP protocol on qualifying sites, how to proceed if features or other buried deposits are encountered, and the materials analyses and laboratory artifact analyses that will be used.

***103. Page 415. CUL-7, fifth sentence:***

Prior to the start of ground disturbance within 30 meters of the site~~s~~ boundaries of each of these sites, the project owner shall then ensure that the CRS, the PPA, and/or archaeological team members implement the plan, if allowed by the BLM, which, for sites where CARIDAP does not apply, shall include, but is not limited to the following tasks:

***104. Page 417. CUL-7, Verification, clause 1, second paragraph:***

~~Rationale: Proposed schedule change is in accordance with the project time-line.~~

***105. Page 417. CUL-8, first paragraph, third sentence:***

The data recovery plan shall include ~~use of the CARIDAP protocol on qualifying sites,~~ how to proceed if features or other buried deposits are encountered~~,~~ and the materials analyses and laboratory artifact analyses that will be used.

***106. Page 418. CUL-8, first paragraph, fifth sentence:***

Prior to the start of ground disturbance within 30 meters of the site~~s~~ boundaries of each of these sites, the project owner shall then ensure that the CRS, the PPA, and/or archaeological team members implement the plan, if allowed by the BLM, which shall include, but is not limited to the following tasks:

***107. Page 418. CUL-8, number 10, first sentence:***

The project owner shall ensure that the PHA analyzes all recovered data and writes or supervis~~e~~ors the writing of a comprehensive final report. This report shall be included in the CRR (**CUL-18**).

***108.* Page 419. CUL-8, Verification, clause 1, second paragraph:**

~~Rationale: Proposed schedule change is in accordance with the project time-line.~~

***109. Page 420. CUL-9, first paragraph, third sentence:***

The data recovery plan shall include ~~use of the CARIDAP protocol on qualifying sites,~~ how to proceed if features or other buried deposits are encountered~~,~~ and the materials analyses and laboratory artifact analyses that will be used.

***110. Page 420. CUL-9, first paragraph, fifth sentence:***

Prior to the start of ground disturbance within 30 meters of the site~~s~~ boundaries of each of these sites, the project owner shall then ensure that the CRS, the PPA, and/or archaeological team members implement the plan, if allowed by the BLM, which shall include, but is not limited to the following tasks:

***111.* Page 421. CUL-9, number 7:**

The project owner shall ensure a systematic metal detector survey be completed at each site, and that each —"hit□" is investigated. All artifacts and features thus found must be mapped, measured, photographed, and fully described in writing.

***112. Page 421. CUL-9, number 8 and number 9:***

8. The project owner shall ensure that all structures are mapped, measured, photographed, and fully described in writing, and that all associated features having subsurface elements are excavated by a qualified historical archaeologist. All features and contents must be mapped, measured, photographed, and fully described in writing. [insert line space]

9. The project owner shall ensure that the details of what is found at each site shall be presented in a letter report from the CRS or PHA ,which shall serve as a preliminary report, that details what was found at each site, as follows:

***113. Page 422. CUL-9, Verification, clause 1, second paragraph:***

~~Rationale: Proposed schedule change is in accordance with the project time-line.~~

***114. Page 422. CUL-10, first paragraph, first sentence:***

The project owner shall ensure the CRMMP includes a data recovery plan for the resource type "historic-period dump sites," consisting of sites SMB-H-171, SMB-H-178, SMB-H-224, SMB-H- 403, and SMB-H-427 on the proposed plant site and sites SMB-H-261/262 and SMB-H-522/525 along the linear facilities corridor if impacts to the latter cannot be avoided by spanning.

***115. Page 422. CUL-10, first paragraph, third sentence:***

The data recovery plan shall include ~~use of the CARIDAP protocol on qualifying sites,~~ how to proceed if features or other buried deposits are encountered~~,~~ and the materials analyses and laboratory artifact analyses that will be used.

***116. Page 422. CUL-10, first paragraph, fifth sentence:***

Prior to the start of ground disturbance within 30 meters of the site~~s~~ boundaries of each of these sites, the project owner shall then ensure that the CRS, the PPA, and/or archaeological team members implement the plan, if allowed by the BLM, which shall include, but is not limited to the following tasks:

***117. Page 424. CUL-10, Verification, clause 1, second paragraph:***

~~Rationale: Proposed schedule change is in accordance with the project time-line.~~

***118. Page 424–25. CUL-11, first paragraph, third sentence:***

The data recovery plan shall include ~~use of the CARIDAP protocol on qualifying sites,~~ how to proceed if features or other buried deposits are encountered~~,~~ and the materials analyses and laboratory artifact analyses that will be used.

***119. Page 425. CUL-11, first paragraph, fifth sentence:***

Prior to the start of ground disturbance within 30 meters of the site~~s~~ boundaries of each of these sites, the project owner shall then ensure that the CRS, the PPA, and/or archaeological team members implement the plan, if allowed by the BLM, which shall include, but is not limited to the following tasks:

***120. Page 426. CUL-11, number 6:***

6. ~~The project owner shall ensure that all structures are mapped, measured, photographed, and fully described in writing, and that all associated features having subsurface elements are excavated by a qualified historical archaeologist. All features and contents must be mapped, measured, photographed, and fully described in writing.~~ ~~8.~~The project owner shall ensure that the details of what is found at each site shall be presented in a letter report from the CRS or PHA~~,~~ ~~,~~which shall serve as a preliminary report, that details what was found at each site, as follows:

***121. Page 426. CUL-11, number 8, first sentence:***

The project owner shall ensure that the PHA analyzes all recovered data and writes or supervis<u>e</u>~~or~~s the writing of a comprehensive final report.

***122. Page 426. CUL-11, Verification, clause 1, second paragraph:***

~~Rationale: Proposed schedule change is in accordance with the project time line.~~

***123. Page 435. CUL-18, Verification, clause 2:***

Within 180 days after completion of ground disturbance (including landscaping), the project owner shall submit the final CRR to the CPM for review and approval and to the BLM Palm Springs Field Office archaeologist for review and approval. If any reports have previously been sent to the CHRIS, then receipt letters from the CHRIS or other verification~~:~~ of receipt shall be included in an appendix.

**<u>LAND USE</u>**

***124. Page 452, First Paragraph, last sentence:***

Approximately 320 acres of private lands within the site***,*** <u>which are not part of the proposed BSPP</u>***,*** are under Riverside County jurisdiction, designated as open space and rural desert.

**<u>TRAFFIC AND TRANSPORTATION</u>**

***125. Page 467, First Paragraph***

Therefore, Condition of Certification **TRANS-2** is included, to require the applicant ~~for both the BSPP and the PSPP to work with Genesis Solar LLC/NextEra to formulate a transportation control plan for the BSPP that would include measures designed to maintain LOS C or better on I-10 for all three projects.~~ to prepare a Traffic Control Plan (TCP) for the BSPP construction and operation traffic. The TCP shall address the movement of workers, vehicles, and materials, including arrival and departure schedules, and designated workforce and delivery routes. (Exs. 200, p. C.10-14; 202, pp. A-55 and A-56.)

***126. Page 469, b. Glint and Glare***

Insert the following between paragraphs 1 and 3:

Applicant contends that glint and glare would be unlikely to cause flash blindness or any other disturbance to pilots. Applicant commissioned an aircraft fly-by of the Kramer Junction solar facility, which uses parabolic trough solar technology similar to the proposed project and is in the Mojave Desert. Howard Ballentine was a passenger on the flight and Douglas Moss was the pilot. Both submitted declarations regarding their observations during the flight, which took place on June 1, 2010. (Ex. 52.) Based upon their observations, and the orientation of the Blythe Airport runways to the McCoy mountains, both concluded that the proposed project would not pose a hazard to general aviation traffic operating at traffic pattern altitudes. (Ex. 52, Traffic and Transportation Opening Testimony, pp. 16 – 20.) Staff's witnesses were more conservative, opining that there was a potential for flash blindness under certain conditions.

***127. Page 478, Verification to Condition of Certification TRANS-8***

Replace the term "start of construction" with "operation of any phase of the project".

***128.* <u>Page 479, Condition of Certification TRANS-9</u>**

Replace with the following:

**TRANS-9** To reduce glint and glare from the Project, the Project Owner shall implement the following measures during operation of any Unit.

- Ensure the mirrors are (1) brought out of stowage before sunrise and are aligned to catch the first rays of the morning sun; and (2) returned to stow position after sunset.
- Mirror function shall be continuously monitored both by operators and by system controls. The field control system shall be designed such that in all cases of a malfunctioning mirror the field control system will automatically turn a malfunctioning mirror east in a manner so that there is no reflection from the sun as the sun continues west. The Project owner shall establish and implement procedures to consistently move mirrors to the east vertical plus 1 degree if looking west and to east stow if looking east. The movement to a non glare position shall take no more than 10 minutes.
- To the extent feasible the mirrors in the southern portion of Units 3 and 4 shall not be rotated off axis during daylight hours when the azimuth angle of the sun is east or north of east.

**<u>Verification:</u>** No less than 90 days prior to the start of operation of any Unit of the Project, the Project owner shall prepare and submit to the CPM for review and approval a plan describing the measures to be taken to reduce glint and glare. Upon approval, the Project owner shall implement the plan.

***129. Page 480, Condition of Certification TRANS-10***

Replace with the following:

**TRANS-10** Throughout the construction and operation of the project, the project owner shall document, investigate, evaluate, and attempt to resolve all project-related glare complaints. The project owner or authorized agent shall:

- Provide copies of the Glare Complaint Resolution Form (below) to the Blythe Airport operator, along with the toll-free number required pursuant to Condition of Certification **COMPLIANCE-9**.
- Use the Complaint Resolution Form, or functionally equivalent procedure acceptable to the CPM, to document and respond to each complaint.
- Attempt to contact the person or persons making the complaint within 24 hours. If not contacted within 24 hours, attempt to contact the person or persons for a reasonable time period, to be determined by the CPM.
- Conduct an investigation to determine the source of glare related to the complaint.
- If the glare is project related, take all feasible measures to reduce the glare at its source.
- As soon as the complaint has been resolved to the complainant's satisfaction, submit to the CPM a report in which the complaint as well as the actions taken to resolve the complaint are documented. The report shall include (1) a complaint summary, including the name and address of the complainant; (2) final results of glare reduction efforts; and (3) a signed statement by the complainant, if obtainable, in which complainant states that the glare problem is resolved to his or her satisfaction.

**Verification**: Thirty days prior to the start of mirror installation, the project owner shall provide copies of the Glare Complaint Resolution Form to the Blythe Airport operator, along with the toll-free number required pursuant to Condition of Certification **COMPLIANCE-9**. Within five business days of receiving a glare complaint, the project owner shall file with the City of Blythe Development Services Department, the Riverside County Planning Department, the Federal Aviation Administration, the Riverside County Airport Land Use Commission, and the CPM a copy of the Glare Complaint Resolution Form, documenting the resolution of the complaint. If mitigation is required to resolve a complaint and the complaint is not resolved within three business days, the project owner shall submit an updated Glare Complaint Resolution Form when the mitigation is implemented.

***130. Page 497, First Paragraph***

This Noise Ordinance also limits the hours of noisy construction activities within one quarter mile of a residence to the following hours:

***131. Page 509, first Paragraph, first sentence:***

The project site consists primarily of desert scrub ~~but also includes portions of McCoy Wash with desert dry wash woodlands~~.

Dated: September 14, 2010, at Sacramento, California.

KAREN DOUGLAS
Chair and Presiding Member
Blythe Solar AFC Committee

ROBERT B. WEISENMILLER
Commissioner and Associate Member
Blythe Solar AFC Committee

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT
COMMISSION OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

**APPLICATION FOR CERTIFICATION FOR THE *BLYTHE SOLAR POWER PLANT PROJECT***

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

***PROOF OF SERVICE***
**(Revised 8/27/10)**

**APPLICANT**
Alice Harron
Senior Director of Project Development
***1111 Broadway, 5th Floor**
**Oakland, CA 94607**
harron@solarmillennium.com

Elizabeth Ingram, Associate Developer, Solar Millennium, LLC
***1111 Broadway, 5th Floor**
**Oakland, CA 94607**
ingram@solarmillennium.com

Carl Lindner
AECOM Project Manager
1220 Avenida Acaso
Camarillo, CA 93012
carl.lindner@aecom.com

Ram Ambatipudi
Chevron Energy Solutions
150 E. Colorado Blvd., Ste. 360
Pasadena, CA 91105
rambatipudi@chevron.com

**Co-COUNSEL**
Scott Galati, Esq.
Marie Mills
Galati/Blek, LLP
455 Capitol Mall, Suite 350
Sacramento, CA 95814
sgalati@gb-llp.com
**mmills@gb-llp.com**

**Co-COUNSEL**
Peter Weiner
Matthew Sanders
Paul, Hastings, Janofsky & Walker LLP
55 2nd Street, Suite 2400-3441
San Francisco, CA 94105
peterweiner@paulhastings.com
matthewsanders@paulhastings.com

**INTERESTED AGENCIES**
California ISO
e-recipient@caiso.com

Holly L. Roberts, Project Manager
Bureau of Land Management
Palm Springs-South Coast Field Office
1201 Bird Center Drive
Palm Springs, CA 92262 Office
CAPSSolarBlythe@blm.gov

**INTERVENORS**
California Unions for Reliable Energy (CURE)
c/o: Tany A. Gulesserian,
Elizabeth Klebaner
Marc D. Joseph
Adams Broadwell Joseph & Cardozo
601 Gate Way Boulevard,
Suite 1000
South San Francisco, CA 94080
tgulesserian@adamsbroadwell.com
eklebaner@adamsbroadwell.com

**ENERGY COMMISSION**
KAREN DOUGLAS
Chairman and Presiding Member
kldougla@energy.state.ca.us

ROBERT WEISENMILLER
Commissioner and Associate Member
rweisenm@energy.state.ca.us

Raoul Renaud
Hearing Officer
rrenaud@energy.state.ca.us

Alan Solomon
Siting Project Manager
asolomon@energy.state.ca.us

Lisa DeCarlo
Staff Counsel
ldecarlo@energy.state.ca.us

Jennifer Jennings
Public Adviser's Office
*e-mail service preferred*
publicadviser@energy.state.ca.us

*indicates change

## DECLARATION OF SERVICE

I, Maggie Read, declare that on September 14, 2010, I served and filed copies of the attached Errata to the Presiding Member's Proposed Decision, dated September 14, 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;

_____ 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
docket@energy.state.ca.us

I declare under penalty of perjury that the foregoing is true and correct.

Maggie Read
Hearing Advisor's Office