

**STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION**

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08-AFC-2	
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In the Matter of:

Beacon Solar, LLC's)
Application for Certification of the)
Beacon Solar Energy Project)
_____)

Docket No. 08-AFC-2

**BEACON SOLAR ENERGY PROJECT'S POST-WORKSHOP REVISIONS TO
BIOLOGICAL RESOURCES CONDITIONS OF CERTIFICATION**

February 2, 2010

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BIOLOGICAL RESOURCES

Recognizing the sensitivity of natural resources in the desert, Beacon worked diligently to select a location for its proposed solar project that would minimize biological impacts. The selected site for the BSEP is located on previously farmed lands that remain substantially disturbed today. The Plant Site would be located entirely within this disturbed area that is predominantly devoid of vegetation and does not provide suitable habitat for special status listed species.

Beacon respectfully requests that Staff review the recommended changes and the rationale for the proposed revisions provided below, and reconsider the FSA's Conditions of Certification as proposed.

Requested Changes to the Conditions of Certification for Biological Resources

Beacon's proposed changes to several Conditions are presented below.

DESIGNATED BIOLOGIST SELECTION¹

BIO-1 The project owner shall assign at least one Designated Biologist to the project. The project owner shall submit the resume of the proposed Designated Biologist, with at least three references and contact information, to the Energy Commission Compliance Project Manager (CPM) for approval in consultation with the California Department of Fish and Game (CDFG) and U.S. Fish and Wildlife Service (USFWS).

The Designated Biologist must meet the following minimum qualifications:

1. bachelor's degree in biological sciences, zoology, botany, ecology, or a closely related field;
2. three years of experience in field biology or current certification of a nationally recognized biological society, such as The Ecological Society of America or The Wildlife Society;
3. at least one year of field experience with biological resources found in or near the project area;
4. meet the current USFWS Authorized Biologist qualifications criteria (USFWS 2008) and demonstrate familiarity with protocols and guidelines for the desert tortoise, and be approved by the USFWS; and
5. possess a recovery permit for desert tortoise and a California ESA Memorandum of Understanding pursuant to Section 2081(a) for desert tortoise and Mohave ground squirrel or have adequate experience and qualifications to obtain these authorizations.

In lieu of the above requirements, the resume shall demonstrate to the satisfaction of the CPM, in consultation with CDFG and USFWS, that the proposed Designated Biologist or alternate has the appropriate training and background to effectively implement the conditions of certification.

¹ USFWS <www.fws.gov/ventura/speciesinfo/protocols_guidelines/docs/dt> designates biologists who are approved to handle tortoises as "Authorized Biologists." Such biologists have demonstrated to USFWS that they possess sufficient desert tortoise knowledge and experience to handle and move tortoises appropriately, and have received USFWS approval. Authorized Biologists are permitted to then approve specific monitors to handle tortoises, at their discretion. The California Department of Fish and Game (CDFG) must also approve such biologists, potentially including individual approvals for monitors approved by the Authorized Biologist. Designated Biologists are the equivalent of Authorized Biologists. Only Designated Biologists and certain Biological Monitors who have been approved by the Designated Biologist would be allowed to handle desert tortoises.

Verification: The project owner shall submit the specified information at least 90 days prior to the start of any ~~construction-related ground disturbance, grading, boring or trenching project-related site disturbance activities~~. No ~~construction-related ground disturbance, grading, boring or trenching site or related facility activities~~ shall commence until an approved Designated Biologist is available to be on site.

If a Designated Biologist needs to be replaced, the specified information of the proposed replacement must be submitted to the CPM at least 10 working days prior to the termination or release of the preceding Designated Biologist. In an emergency, the project owner shall immediately notify the CPM to discuss the qualifications and approval of a short-term replacement while a permanent Designated Biologist is proposed to the CPM for consideration.

Designated Biologists shall complete a USFWS Qualifications Form (USFWS 2008) (www.fws.gov/ventura/speciesinfo/protocols_guidelines) and submit it to the USFWS and CPM within 60 days prior to ground breaking for review and final approval.

RATIONALE

Consistency with General Conditions Definitions, page 7-1.

DESIGNATED BIOLOGIST DUTIES

BIO-2 The project owner shall ensure that the Designated Biologist performs the following during any ~~site mobilization activities, construction-related ground disturbance, grading, boring or trenching activities~~, and ~~site (or related facilities) mobilization, ground disturbance, grading, construction, operation,~~ and closure activities. The Designated Biologist may be assisted by the approved Biological Monitor(s) but remains the contact for the project owner and CPM. The Designated Biologist duties shall include the following:

1. Advise the project owner's Construction and Operation Managers on the implementation of the biological resources conditions of certification;
2. Consult on the preparation of the Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP) to be submitted by the project owner;
3. Be available to supervise, conduct, and coordinate mitigation, monitoring, and other biological resources compliance efforts, particularly in areas requiring avoidance or containing sensitive biological resources, such as special-status species or their habitat;
4. Clearly mark sensitive biological resource areas and inspect these areas at appropriate intervals for compliance with regulatory terms and conditions;
5. Inspect active construction areas where animals may have become trapped prior to construction commencing each day. At the end of the day, inspect for the installation of structures that prevent entrapment or allow escape during periods of construction inactivity. Periodically inspect areas with high vehicle activity (e.g., parking lots) for animals in harm's way;
6. Notify the project owner and the CPM of any non-compliance with any biological resources condition of certification;
7. Respond directly to inquiries of the CPM regarding biological resource issues;
8. Maintain written records of the tasks specified above and those included in the BRMIMP. Summaries of these records shall be submitted in the Monthly Compliance Report and the Annual Compliance Report;

9. Train the Biological Monitors as appropriate, and ensure their familiarity with the BRMIMP, Worker Environmental Awareness Program (WEAP) training, and USFWS guidelines on desert tortoise surveys and handling procedures <www.fws.gov/ventura/speciesinfo/protocols_guidelines>, and
10. Maintain the ability to be in regular, direct communication with representatives of CDFG and USFWS, including notifying these agencies of dead or injured listed species and reporting special-status species observations to the California Natural Diversity Data Base.

Verification: The Designated Biologist shall submit in the Monthly Compliance Report to the CPM copies of all written reports and summaries that document biological resources compliance activities. If actions may affect biological resources during operation a Designated Biologist shall be available for monitoring and reporting. During project operation, the Designated Biologist shall submit record summaries in the Annual Compliance Report unless his/her duties cease, as approved by the CPM.

RATIONALE

Consistency with General Conditions Definitions, page 7-1.

BIOLOGICAL MONITOR QUALIFICATIONS

BIO-3 The project owner's CPM-approved Designated Biologist shall submit the resume, at least three references, and contact information of the proposed Biological Monitors to the CPM for approval in consultation with CDFG and USFWS. The resume shall demonstrate, to the satisfaction of the CPM, the appropriate education and experience to accomplish the assigned biological resource tasks. Biological Monitors involved in any aspect of desert tortoise surveys or handling must meet the criteria to be considered a USFWS Authorized Biologist (USFWS 2008) and demonstrate familiarity with the most recent protocols and guidelines for the desert tortoise.

Biological Monitor(s) training by the Designated Biologist shall include familiarity with the conditions of certification, BRMIMP, WEAP, USFWS guidelines on desert tortoise surveys and handling procedures <www.fws.gov/ventura/speciesinfo/protocols_guidelines> and all permits.

Verification: The project owner shall submit the specified information to the CPM for approval at least 30 days prior to the start of any [site mobilization or construction-related ground disturbance, grading, boring and trenching project-related site disturbance](#) activities. The Designated Biologist shall submit a written statement to the CPM confirming that individual Biological Monitor(s) has been trained including the date when training was completed. If additional biological monitors are needed during construction the specified information shall be submitted to the CPM for approval at least 10 days prior to their first day of monitoring activities.

RATIONALE

Consistency with General Conditions Definitions,,page 7-1.

BIOLOGICAL MONITOR DUTIES

BIO-4 The Biological Monitors shall assist the Designated Biologist in conducting surveys and in monitoring of mobilization, ground disturbance, grading, construction, operation, and closure activities. The Designated Biologist shall remain the contact for the project owner and CPM.

Verification: The Designated Biologist shall submit in the Monthly Compliance Report to the CPM copies of all written reports and summaries that document biological resources compliance activities, including those conducted or monitored by Biological Monitors. If actions may affect biological resources during operation a Biological Monitor, under the supervision of the Designated Biologist, shall be available for

monitoring and reporting. During project operation, the Designated Biologist shall submit record summaries in the Annual Compliance Report unless his/her duties cease, as approved by the CPM.

RATIONALE

No change

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 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, construction~~ 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;
3. Notify the CPM if there is a halt of any activities and advise the CPM of any corrective actions that have been taken or will be instituted as a result of the work stoppage, and
4. 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. 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 will be made by the CPM within five working days after receipt of notice that corrective action is completed, or the project owner will be notified by the CPM that coordination with other agencies will require additional time before a determination can be made. Continuation of any work stoppage is not required during this time, provided the Designated Biologist has determined that activities can resume.

RATIONALE

Consistency with General Conditions Definitions, page 7-1.

Verification change is to provide clarification that the DB may allow work to resume prior to a determination by the CPM regarding the success or failure of any corrective action. Beacon is concerned that work could be stopped for five days while waiting for the CPM to provide the direction to continue work. If the DB finds a problem and the problem is addressed, Beacon does not want an extended delay in construction if it is not necessary to protect the species. Therefore, if Staff would like the CPM instead of the DB to be the individual able to restart construction, the CPM needs to be available to make that determination as soon as the corrective action has been completed. Project construction cannot wait five days to restart.

WORKER ENVIRONMENTAL AWARENESS PROGRAM (WEAP)

BIO-6 The project owner shall develop and implement BSEP-specific Worker Environmental Awareness Program (WEAP) and shall secure approval for the WEAP from USFWS, CDFG, and the CPM. The WEAP shall be administered to all on-site personnel including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors,

inspectors, subcontractors, and delivery personnel. The WEAP shall be implemented during ~~site mobilization, ground disturbance, grading preconstruction~~, construction, operation, and closure activities. 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 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;
3. place special emphasis on desert tortoise and Mohave ground squirrel, including information on physical characteristics, distribution, behavior, ecology, sensitivity to human activities, legal protection, penalties for violations, reporting requirements, and protection measures;
4. present the meaning of various temporary and permanent habitat protection measures;
5. identify whom to contact if there are further comments and questions about the material discussed in the program; and
6. include a training acknowledgment form to be signed by each worker indicating that he/she 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 60 days prior to the start of any ~~project construction~~-related site ground disturbance activities, the project owner shall provide to the CPM a copy of the draft 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 site and related facilities mobilization~~, the project owner shall submit two copies of the CPM-approved final WEAP.

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

Throughout the life of the project, the ~~WEAP worker education program~~ 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 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.

RATIONALE

Consistency with General Conditions Definitions, page 7-1 and other terminology.

BIOLOGICAL RESOURCES MITIGATION IMPLEMENTATION AND MONITORING PLAN

BIO-7 The project owner shall develop a Biological Resources Mitigation Implementation and Monitoring Plan (BRMIMP), ~~shall and~~ submit two copies of the proposed BRMIMP to the CPM (for review and approval) and shall implement the measures identified in the approved BRMIMP. The BRMIMP shall incorporate impact avoidance and minimization measures described in final versions of the Raven Monitoring, Management, and Control Plan, the Desert Tortoise Relocation/Translocation Plan, the Mohave Ground Squirrel Relocation

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Translocation Plan, Burrowing Owl Mitigation and Monitoring Plan, Sensitive Plant Protection Plan, and the Closure Plan.

The BRMIMP shall be prepared in consultation with the Designated Biologist and shall include 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 any federal agency terms and conditions, ~~including those provided in the USFWS Habitat Conservation Plan/Implementing Agreement (HCP/IA)~~;
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. a detailed description of measures that shall be taken to avoid or mitigate temporary disturbances from construction activities;
7. all locations on a map, at an approved scale, of sensitive biological resource areas subject to disturbance and areas requiring temporary protection and avoidance during construction;
8. aerial photographs, at an approved scale, of all areas to be disturbed during project construction activities; include one set prior to any preconstruction site mobilization and construction-related ground disturbance, grading, boring, and trenching, site or related facilities mobilization disturbance and one set subsequent to completion of project construction. Provide planned timing of aerial photography and a description of why times were chosen. Provide a final accounting of the before/after acreages and a determination of whether additional habitat compensation is necessary in the Construction Termination Report;
9. duration for each type of monitoring and a description of monitoring methodologies and frequency;
10. performance standards to be used to help decide if/when proposed mitigation is or is not successful;
11. all performance standards and remedial measures to be implemented if performance standards are not met;
12. a discussion of biological resources-related facility closure measures including a description of funding mechanism(s); and
13. a process for proposing plan modifications to the CPM and appropriate agencies for review and approval.
14. 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 (CNDDDB) per CDFG requirements.

Verification: The project owner shall submit the BRMIMP to the CPM at least 60 days prior to start of any preconstruction site mobilization and construction-related ground disturbance, grading, boring, and trenching project-related site disturbance activities. The CPM, in consultation with other appropriate agencies, will determine the BRMIMP's acceptability within 45 days of receipt. 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 the CPM's approval of the final BRMIMP.

The project owner shall notify the CPM no less than five working days before implementing any modifications to the approved BRMIMP to obtain CPM approval. Any changes to the approved BRMIMP must also be approved by the CPM in consultation with appropriate agencies to ensure no conflicts exist.

Implementation of BRMIMP measures (construction activities that were monitored, species observed) will 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 site mobilization, ground disturbance, grading, and construction phases; and which mitigation and monitoring items are still outstanding.

RATIONALE

General - Consistency with General Conditions Definitions, page 7-1.

"Translocation" was changed to "relocation" to be consistent with BIO-9.

Point No. 3 – The specific reference to an HCP/IA was removed in favor of a more general requirement for compliance with all federal agency permit terms and conditions.

Point No. 8 – The sentence regarding aerial photography was deleted. Aerial photography timing is based on daylight hours depending upon the time of year and weather conditions. The time of year is based on when construction starts and weather conditions will determine specific days and times.

Point No. 14 is added to replace language previously included in BIO-18.

IMPACT AVOIDANCE AND MINIMIZATION MEASURES

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

1. Limit Disturbance Area. 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 flagged prior to construction activities in consultation with the Designated Biologist. Spoils 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, 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 will do so within the planned impact area or in previously disturbed areas. Where new access is required outside of existing roads (e.g. new spur roads) or the construction zone, the route will 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 BSEP site.
4. Monitor During Construction. In areas that have not been fenced with desert tortoise exclusion fencing and cleared, the Designated Biologist or Biological Monitor shall be present at the construction site during all project activities that have potential to disturb soil, vegetation, and wildlife and, in areas that have not been fenced with tortoise exclusion fencing and cleared, the USFWS-approved Designated Biologist or Biological Monitor shall walk immediately ahead of equipment during brushing and grading activities.

5. Minimize Impacts of Transmission/Pipeline Alignments, Roads, 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) *Suggested Practices for Avian Protection on Power Lines* (APLIC 2006) 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. ~~Road surfacing and sealants as well as~~ 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. Avoid Vehicle Impacts to Desert Tortoise. Parking and storage shall occur within the 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, it will be left to move on its own. If it does not move within 15 minutes, a Biological Monitor may remove and relocate the animal to a safe location if temperatures are within the range described in the USFWS protocol (www.fws.gov/ventura/speciesinfo/protocols_guidelines and Desert Tortoise Council 1999).
9. Avoid Wildlife Pitfalls. At the end of each work day, the Designated Biologist shall ensure that all potential wildlife pitfalls (trenches, bores, and other excavations) outside the permanently fenced area 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 tortoise-exclusion fencing. All trenches, bores, and other excavations outside the areas permanently fenced with desert tortoise exclusion fencing shall be inspected periodically throughout and at the end of each workday 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 to a safe location. Any wildlife encountered during the course of construction shall be allowed to leave the construction area unharmed.
10. Avoid Entrapment of Desert Tortoise. Any construction pipe, culvert, or similar structure with a diameter greater than 3 inches, stored less than 8 inches above ground and within desert tortoise habitat (i.e., outside the permanently fenced area) for one or more days/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 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 attract desert tortoise, common ravens, and other wildlife to the site and shall take appropriate action to reduce water application where necessary.

12. 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.
13. 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.
14. Avoid Spread of Noxious Weeds. The project owner shall implement the following Best Management Practices during construction and operation to prevent the spread and propagation of noxious weeds:
- Limit the size of any vegetation and/or ground disturbance to the absolute minimum and limit ingress and egress to defined routes;
 - Prevent spread of non-native plants via vehicular sources by implementing Trackclean™ or other methods of vehicle cleaning for vehicles coming and going from construction sites. Earth-moving equipment shall be cleaned prior to transport to the construction site;
 - Use only weed-free straw, hay bales, and seed for erosion control and sediment barrier installations, and
 - Avoid using invasive non-native species in landscaping plans and erosion control.
- ~~15. Stockpile Topsoil. To increase chances for revegetation success, topsoil shall be stockpiled from the project site and along project linear features for use in revegetation. Native topsoil from the least disturbed locations and only areas that are relatively free of noxious weeds shall be used as a source of topsoil. Approximately 6-8 inches of topsoil shall be scraped from the borrow sites and stockpiled, with the top 1 inch from the borrow site used as top-dressing in revegetation areas. All other elements of topsoil use shall be as described in *Rehabilitation of Disturbed Lands in California* (Newton and Claassen 2003, pp. 39-40).~~
16. 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 shall be stabilized to reduce erosion potential.
17. Monitor Ground Disturbing Activities Prior to Pre-Construction Site Mobilization. If ~~pre-construction site mobilization requires~~ ground-disturbing activities ~~are required prior to site mobilization~~, 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.

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

RATIONALE

General – Consistency with General Conditions Definitions, page 7-1.

Point Nos. 4 and 17 – Clarifications were made to reflect more accurate timings and locations for measures.

Point No. 6 – Road surfacing and sealants are not used on unpaved roads; clarified to refer to soil bonding agents only.

Point No. 15 – It is requested that this point be deleted. This measure applies to success criteria for rerouted Pine Tree Creek Wash, and the project owner will utilize appropriate measures to meet the success criteria as necessary.

DESERT TORTOISE RELOCATION PLAN, CLEARANCE SURVEYS AND EXCLUSION FENCING

BIO-9

The project owner shall undertake appropriate measures to manage construction at the plant site and linear facilities in a manner to avoid or minimize impacts to desert tortoise. Methods for clearance surveys, fence installation, tortoise handling, artificial burrow construction, egg handling and other procedures shall be consistent with those described in the [current USFWS guidelines \(USFWS 2009\)](#) or more current guidance provided by CDFG and USFWS. The project owner shall also implement terms and conditions developed as part of the Habitat Conservation Plan process with USFWS. These measures include, but are not limited to, the following:

Deleted: Guidelines for Handling Desert Tortoise During Construction Projects (Desert Tortoise Council 1999)

1. **Fence Installation.** Prior to [construction-related](#) ground disturbance [activities](#), the entire plant site (~~east of the railroad tracks~~) shall be fenced with permanent desert tortoise-exclusion fence. To avoid impacts to desert tortoise during fence construction, the proposed fence alignment shall be flagged and the alignment surveyed within 24 hours prior to fence construction. Surveys shall be conducted by the Designated Biologist using techniques approved by the USFWS and CDFG. Biological Monitors may assist the Designated Biologist under his or her supervision. These surveys shall provide 100 percent coverage of all areas to be disturbed during fence construction and an additional transect along both sides of the proposed fence line. This fence line transect shall cover an area approximately 90 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 USFWS-approved protocol.
 - a. **Timing, Supervision of Fence Installation.** The exclusion fencing shall be installed prior to the onset of site clearing and grubbing. 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.** Tortoise exclusionary fencing shall [be constructed per USFWS specifications](#), (USFWS 2008a, Appendix D).
 - c. **Security Gates.** Security gates shall be designed with minimal ground clearance to deter ingress by tortoises, including gates that would exclude public access to the transmission line maintenance road at SR 14. The gates shall remain closed except during vehicle passage and may be electronically activated to open and close immediately after vehicle(s) have entered or exited to prevent extended periods with

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open gates, which might lead to a tortoise entering. Cattle grating designed to safely exclude desert tortoise shall be installed at the gated entries to discourage tortoises from gaining entry.

d. Utility Corridor Fencing. Utility corridors and tower locations may be temporarily fenced with tortoise exclusion fencing to prevent desert tortoise entry during construction, or monitored by a biologist during construction activity. ~~Temporary fencing must follow guidelines for permanent fencing and supporting stakes shall be sufficiently spaced to maintain fence integrity.~~

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e. Fence Inspections. Following installation of the desert tortoise exclusion fencing in the utility corridors, the fencing shall be regularly inspected. Permanent fencing shall be inspected monthly and during/following all major rainfall events. Any damage to the fencing shall be temporarily repaired immediately to keep tortoises out of the site, and permanently repaired within two days of observing damage. Inspections of permanent site fencing shall occur for the life of the project. Temporary fencing must be inspected weekly and, where drainages intersect the fencing, during and immediately 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 utility corridor or tower site for tortoise.

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2. Desert Tortoise Clearance Surveys. Following construction of the tortoise exclusionary fencing around the Plant Site, all fenced areas shall be cleared of tortoises by the Designated Biologist, who may be assisted by Biological Monitors. Clearance surveys shall adhere to the current USFWS clearance survey protocols.

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To facilitate seeing the ground from different angles, a second clearance survey shall be walked at 90 degrees to the orientation of the first clearance pass or be offset from transects on the first pass. Surveys where tortoises might be present must coincide with heightened desert tortoise activity from late March through May and during September or October. At BSEP, there are also broad, barren areas that would be highly unlikely to host tortoises. These could be segregated from vegetated portions of the site by temporary tortoise exclusion fencing and cleared during winter when tortoises are inactive (winter) or during summer when tortoises spend less time aboveground than in spring and fall. If any tortoises were found, they would be relocated in accordance with the approved Relocation/Translocation Plan or simply allowed to move offsite through a removed portion of fence. In all cases, monitoring would follow any tortoise that either moves off the Project of its own accord or is relocated or translocated, per procedures outlined in the Relocation/Translocation Plan. All burrows (presumably mostly rodent) would be excavated by hand and collapsed (see No. 5, below). Active kangaroo rat burrows during summer would be excavated in the late afternoon or early evening only, to permit these nocturnal rodents to escape safely. Dormant tortoises found in burrows would be relocated to newly dug burrows outside the permanent perimeter fence.

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3. Relocation for Desert Tortoise West of SR 14. If desert tortoises are detected during clearance surveys within the project impact area west of SR 14, the Designated Biologist shall move the tortoise the shortest possible distance, keeping it out of harm's way but still within its home range. Desert tortoise encountered during construction of any of the utility corridors shall be similarly treated in accordance with the Relocation Plan. Any relocation efforts shall be in accordance with techniques described in the *Guidelines for Handling Desert Tortoise during Construction Projects* (Desert Tortoise Council 1999) or more current guidance on the USFWS website.

4. Relocation/Translocation for Desert Tortoise East of SR-14. To address desert tortoise encountered during clearance surveys within the project impact area east of SR 14, the

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project owner shall develop and implement a desert tortoise Relocation/Translocation Plan. The Relocation/Translocation Plan shall be consistent with current USFWS approved guidelines, and shall be approved by Energy Commission staff in consultation with the USFWS and CDFG. The Relocation/Translocation Plan shall designate a relocation/translocation site as close as possible to the project impact area east of SR 14 that, and which provides suitable conditions for long-term survival of the relocated/translocated desert tortoise.

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5. Burrow Inspection. All potential desert tortoise burrows, including rodent burrows that may host juvenile tortoises, within the fenced area shall be searched for presence. In some cases, a fiber optic scope may be needed to determine presence or absence within a deep burrow. To prevent reentry by a tortoise or other wildlife, all burrows shall be collapsed once absence has been determined. Tortoises excavated from burrows shall be relocated/translocated to unoccupied natural or artificial burrows in accordance with procedures outlined in the Relocation/Translocation Plan.

6. Burrow Excavation. Burrows inhabited by tortoises shall be excavated by the Designated Biologist using hand tools, and then collapsed or blocked to prevent re-occupation. If excavated during May through July, the Designated Biologist shall search for desert tortoise nests/eggs. All desert tortoise handling and removal, and burrow excavations, including nests, shall be conducted by the Designated Biologist in accordance with the USFWS-approved protocol (Desert Tortoise Council 1999) or more current guidance on the USFWS website.

7. Monitoring Following During Clearing. Following desert tortoise clearance removal from the plant site, and relocation/translocation to a new site, heavy equipment shall be allowed to enter the project site to perform earth work such as clearing, grubbing, leveling, and trenching. A Biological Monitor shall be on call onsite during initial clearing and grading activities. Should a tortoise be discovered, it shall be relocated/translocated as described above in accordance with the Relocation Plan.

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8. Reporting. The Designated Biologist shall record the following information for any desert tortoises handled: a) the locations (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 for future identification as described in *Guidelines for Handling Desert Tortoise during Construction Projects* (Desert Tortoise Council 1999) or more current guidance on the USFWS website. Digital photographs of the carapace, plastron, and fourth costal scute shall be taken. Scutes shall not be notched for identification.

Verification: Within 90 60 days prior to start of any pre-construction site mobilization activities, the project owner of publication of the Energy Commission Decision the project owner shall submit to Energy Commission Staff, USFWS and CDFG a draft Desert Tortoise Relocation/Translocation Plan. At least 60 days prior to start of any construction project-related ground disturbance activities, the project owner shall provide the CPM with the final version of a Relocation/Translocation Plan that has been approved by Energy Commission staff in consultation with USFWS and CDFG. The CPM will determine the plan's acceptability within 15 days of receipt of the final plan. All modifications to the approved Desert Tortoise Relocation/Translocation Plan must be made only after approval by the Energy Commission staff in consultation with USFWS and CDFG. The project owner shall notify the CPM no fewer than 5 working days before implementing any CPM-approved modifications to the Relocation/Translocation Plan.

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

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Within 30 days of completion of desert tortoise clearance surveys the Designated Biologist shall submit a report to the CPM, USFWS, and CDFG describing how each of the mitigation measures described above has been satisfied. 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.

RATIONALE

General – Consistency with General Conditions Definitions, page 7-1. Consistency was also made regarding desert tortoise “translocation” vs. “relocation.”

Point No. 1 – Transect spacing has changed in new guidelines (USFWS 2009).

Point Nos. 1b and 1d – More details on temporary fencing have been added to 1b to clarify permanent versus temporary fencing and temporary fencing construction details were removed from 1d as they are more appropriate in 1b.

Point No. 2 – This point has been deleted based on the disturbed nature of the plant site and the absence of any desert tortoise sign.

MOHAVE GROUND SQUIRREL CLEARANCE SURVEYS

BIO-10 The project owner shall undertake appropriate measures to manage construction at the plant site and linear facilities in a manner to avoid or minimize impacts to Mohave ground squirrel. These measures include, but are not limited to, the following:

1. ~~Clearance Survey~~. After the installation of the desert tortoise exclusion fence and prior to any construction-related ground disturbance on the plant site, the Designated Biologist(s) ~~or Biological Monitors shall examine potential burrows within the fenced area for Mojave ground squirrel in coordination with the desert tortoise burrow inspection and excavation. All excavations will be conducted by the Designated Biologist or Biological Monitor using hand tools, and burrows will then be collapsed or blocked to prevent re-occupation. In addition to preconstruction activities, a Biological Monitor will be on call during construction-related ground disturbing activities. shall examine the area to be disturbed for Mohave ground squirrels and their burrows. The survey shall provide 100 percent coverage of the Project limits. Potentially occupied burrows shall be fully excavated by hand by the Designated Biologist(s).~~
2. ~~Relocation Translocation Plan~~. ~~If Mojave ground squirrels are captured via trapping or burrow excavation, they will be relocated by a qualified biologist to an adjacent offsite area with potential Mojave ground squirrel habitat. The project owner shall develop and implement a Mohave ground squirrel translocation plan to address the handling and disposition of any Mohave ground squirrels encountered during the clearance surveys. The Translocation Plan shall be approved by Energy Commission staff in consultation with CDFG. The Translocation Plan shall designate a translocation site as close as possible to the project, and which provides suitable conditions for long-term survival of the relocated Mohave ground squirrel.~~
3. ~~Records of Capture~~. If Mohave ground squirrels are captured via trapping or burrow excavation, the Designated Biologist shall maintain a record of each Mohave ground squirrel handled, including: a) the locations (Global Positioning System [GPS]

coordinates and maps) and time of capture and/or observation as well as release; b) sex; c) approximate age (adult/juvenile); d) weight; e) general condition and health, noting all visible conditions including gait and behavior, diarrhea, emaciation, salivation, hair loss, ectoparasites, and injuries; and f) ambient temperature when handled and released.

Verification: Within ~~90~~ 60 days ~~prior to start of any pre-construction site mobilization activities, the project owner of publication of the Energy Commission Decision the project owner~~ shall submit to Energy Commission Staff and CDFG a draft Mohave Ground Squirrel ~~Relocation Translocation~~ Plan. At least 60 days prior to start of any ~~construction project~~-related ground disturbance activities, the project owner shall provide the CPM with the final version of a Mohave Ground Squirrel ~~Relocation Translocation~~ Plan that has been approved by Energy Commission staff in consultation with CDFG. The CPM will determine the plan's acceptability within 15 days of receipt of the final plan. All modifications to the approved ~~Relocation Translocation~~ Plan must be made only after approval the Energy Commission staff in consultation with CDFG. The project owner shall notify the CPM no fewer than 5 working days before implementing any CPM-approved modifications to the ~~Relocation Translocation~~ Plan.

Within 30 days of completion of Mohave ground squirrel clearance surveys the Designated Biologist shall submit a report to the CPM and CDFG describing how ~~the~~ mitigation measures described above have been satisfied. The report shall include the Mohave ground squirrel survey results, capture and release locations of any relocated squirrels, and any other information needed to demonstrate compliance with the measures described above.

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

RATIONALE

CEC Condition BIO-10 requires the implementation of clearance surveys and translocation protocols for the Mojave ground squirrel (MGS). The Plant Site does not include MGS habitat and is not anticipated to support populations of MGS. The Applicant has sought incidental take coverage under the California Endangered Species Act for the potential take of transient MGS that may occur during project construction and operation and has agreed to fully mitigate the potential loss of two transient MGS with the acquisition of 115 or 117.4 acres of offsite MGS habitat.

Condition BIO-10 requires the Applicant to conduct a clearance survey of the Plant Site subsequent to the construction of the desert tortoise exclusionary fence and prepare a translocation plan for any MGS found during the clearance survey. The Applicant has consulted with its MGS expert regarding these requirements and has confirmed that this measure does not provide realistic mitigation, particularly given that the site does not support MGS habitat. In addition, the exclusionary fence will not exclude MGS from the plant site and any MGS that may be present are only anticipated to consist of transient individuals from surrounding areas with potential habitat.

DESERT TORTOISE AND MOHAVE GROUND SQUIRREL HABITAT COMPENSATORY MITIGATION BIO-11

To fully mitigate for habitat loss and potential take of desert tortoise and Mohave ground squirrel, the project owner shall acquire, in fee or in easement, no less than 115 acres of land suitable for these species and shall provide funding for the enhancement and long-term management of these compensation lands. 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 Mojave Desert habitat conservation, subject to approval by the CPM, in consultation with CDFG and USFWS prior to land acquisition or management activities. If habitat disturbance exceeds that described in this analysis, the project owner shall be responsible for acquisition and management of

additional compensation lands or additional funds required to compensate for any additional habitat disturbances. Additional funds shall be based on the adjusted market value of compensation lands at the time of construction to acquire and manage habitat. The acquisition and management of compensation lands shall include the following elements:

1. Selection Criteria for Compensation Lands. The compensation lands selected for acquisition shall:
 - a. be in the western Mojave Desert;
 - b. provide moderate to good quality habitat for Mohave ground squirrel and desert tortoise ~~with capacity to improve in quality and value for these species;~~
 - c. be a contiguous block of land (preferably) or located so they result in a contiguous block of protected habitat;
 - d. be adjacent to, or in close proximity to, larger blocks of lands that are already protected such that there is connectivity between the acquired lands and the protected lands;
 - e. be connected to, or in close proximity to, lands for which there is reasonable evidence (for example, recent (<15 years) CNDDDB occurrences on or immediately adjacent to the proposed lands) suggesting current occupation by desert tortoise and Mohave ground squirrel, ideally with populations that are stable, recovering, or likely to recover;
 - f. not have a history of intensive recreational use, grazing, or other disturbance that might make habitat recovery and restoration infeasible;
 - g. 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; and
 - h. not be encumbered by easements or uses that would preclude fencing of the site or preclude or unacceptably constrain management of the site for the primary benefit of the species and their habitat for which compensation mitigation lands were secured.
2. Review and Approval of Compensation Lands Prior to Acquisition. A minimum of three months prior to acquisition of the property, the project owner, or a third-party approved by the CPM, in consultation with CDFG and USFWS, shall submit a formal acquisition proposal to the CPM, CDFG, and USFWS 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 and Mohave ground squirrel in relation to the criteria listed above. Approval from the CPM, in consultation with USFWS and CDFG, shall be required for acquisition of all parcels comprising the 115.0 acres in advance of purchase.
3. Mitigation Security for Compensation Lands and Avoidance/Minimization Measures. The project owner or an approved third party shall complete acquisition of the proposed compensation lands prior to initiating construction-related ground ~~disturbance -disturbing~~ project activities. If Security is provided, the project owner, or an approved third party, shall complete the proposed compensation lands acquisition within 12 months of the start

of ~~project construction-related~~ ground ~~disturbance -disturbing~~ activities. The project owner shall also provide financial assurances to the CPM, with copies of the document(s) to CDFG and USFWS, to guarantee that an adequate level of funding is available to implement all impact avoidance, minimization, and compensation measures described in Conditions of Certification BIO-9 through BIO-12. Financial assurance shall be provided to the CPM in the form of an irrevocable letter of credit or another form of security ("Security") approved by the CPM, prior to initiating ~~construction-related~~ ground ~~disturbance -disturbing-project~~ activities. If necessary to draw on these funds, such funds shall be used solely for implementation of the measures associated with the project.

Prior to initiation of ground disturbance, the Security shall be provided by the project owner and approved by the CPM, in consultation with CDFG, to ensure funding in the amount of \$529,000.00. These Security amounts were calculated as follows and may be revised upon completion of a Property Analysis Record (PAR) or PAR-like analysis of the proposed compensation lands:

- a. land acquisition costs for compensation lands, calculated at \$3,000/acre for 115 acres: \$345,000.00;
 - b. costs of enhancing compensation lands, calculated at \$250/acre for 115 acres: \$28,750; and
 - c. costs of establishing an endowment for long-term management of compensation lands, calculated at \$1,350/acre for 115 acres: \$155,250.
4. Compensation Lands Acquisition Conditions. The project owner shall comply with the following conditions relating to acquisition of compensation lands after the CPM, in consultation with CDFG and USFWS, has approved the proposed compensation lands and received Security, if any, as described above.
- 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 documents for the proposed 115 acres. All documents conveying or conserving compensation lands and all conditions of title/easement are subject to a field review and approval by the CPM, in consultation with CDFG and USFWS, California Department of General Services and, if applicable, the Fish and Game Commission and/or the Wildlife Conservation Board.
 - b. Title/Conveyance: The project owner shall transfer fee title or a conservation easement to the 115 acres of compensation lands to CDFG under terms approved by CDFG. Alternatively, a non-profit organization qualified to manage compensation lands (pursuant to California Government Code section 65965) and approved by CDFG and the CPM may hold fee title or a conservation easement over the ~~habitat compensation mitigation~~ lands. If the approved non-profit organization holds title, a conservation easement shall be recorded in favor of CDFG in a form approved by CDFG. If the approved non-profit holds a conservation easement, CDFG shall be named a third party beneficiary. If a Security is provided, the project owner or an approved third party shall complete the proposed compensation lands acquisition within 12 months of the start of ~~project construction-related~~ ground ~~disturbance -disturbing~~ activities.
 - c. Enhancement Fund. The project owner shall fund the initial protection and enhancement of the 115 acres by providing the enhancement funds to the CDFG. Alternatively, a non-profit organization may hold the enhancement funds if they are qualified to manage the compensation lands (pursuant to California Government

Code section 65965) and if they meet the approval of CDFG and the CPM. If CDFG takes fee title to the compensation lands, the enhancement fund must go to CDFG where it will be held in the special deposit fund established pursuant to California Government Code section 16370.

- d. Endowment Fund. Prior to construction-related ground disturbance -disturbing-project activities, the project owner shall provide to CDFG a capital endowment in the amount determined through the Property Analysis Record (PAR) or PAR-like analysis that will be conducted for the 115 acres of compensation lands. Alternatively, a non-profit organization may hold the endowment fees if they are qualified to manage the compensation lands (pursuant to California Government Code section 65965) and if they meet the approval of CDFG and the CPM. If CDFG takes fee title to the compensation lands, the endowment must go to CDFG, where it will be held in the special deposit fund established pursuant to California Government Code section 16370. If the special deposit fund is not used to manage the endowment, the California Wildlife Foundation shall manage the endowment for CDFG and with CDFG guidance.
- a. The project owner and the CPM shall ensure that an agreement is in place with the endowment holder/manager to ensure the following conditions:
- Interest. Interest generated from the initial capital endowment 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 designed to protect or improve the habitat values of the compensation lands.
 - Withdrawal of Principal. The endowment principal shall not be drawn upon unless such withdrawal is deemed necessary by the CDFG or the approved third-party endowment manager to ensure the continued viability of the species on the 115 acres. 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 pursuant to Government Code section 16370. If the special deposit fund is not used to manage the endowment, the California Wildlife Foundation will manage the endowment for CDFG with CDFG guidance.
 - Pooling Endowment Funds. CDFG, or a CPM- and CDFG-approved non-profit organization qualified to hold endowments pursuant to California Government Code section 65965, may pool the endowment with other endowments for the operation, management, and protection of the 115 acres for local populations of desert tortoise and Mohave ground squirrel. However, for reporting purposes, the endowment fund must be tracked and reported individually.
- e. Reimbursement Fund. The project owner shall provide reimbursement to the CDFG or approved third party for reasonable expenses incurred during title, easement, and documentation review; expenses incurred from other state agency reviews; and overhead related to providing compensation lands.

The project owner is responsible for all compensation lands acquisition/easement costs, including but not limited to, title and document review costs, as well as expenses incurred from other state agency reviews and overhead related to providing compensation lands to CDFG the department or an approved third party; escrow fees or costs; environmental contaminants clearance; and other site clean up measures.

Verification: No less than 90 days prior to acquisition of the property, the project owner, or a third-party approved by the CPM, in consultation with CDFG and USFWS, shall submit a formal acquisition proposal to the CPM, CDFG, and USFWS describing the parcel(s) intended for purchase.

Draft agreements to delegate compensation lands acquisition to CDFG or an approved third party and agreements to manage compensation lands shall be submitted to Energy Commission staff for review and approval (in consultation with CDFG) prior to compensation lands acquisition. Such agreements shall be mutually approved and executed at least 60 days prior to start of any construction project-related ground disturbance activities. The project owner shall provide written verification to the CPM that the compensation lands and/or conservation easements have been acquired and recorded in favor of the approved recipient(s). Alternatively, before beginning project ground-disturbing activities, the project owner shall provide Security in accordance with this condition. Within 90 days after the compensation lands purchase, as determined by the date on the title, the project owner shall provide the CPM with a management plan for review and approval, in consultation with CDFG, for the compensation lands and associated funds.

Within 90 days after completion of project construction, the project owner shall provide to the CPM verification that disturbance to Mojave creosote scrub habitat west of State Route 14 did not exceed 5.0 acres, and that construction activities at the plant site and along the gas pipeline alignment did not result in impacts to Mojave creosote scrub habitat adjacent to work areas. If habitat disturbance exceeded that described in this analysis, the CPM shall notify the project owner of any additional funds required or lands that must be purchased to compensate for any additional habitat disturbances at the adjusted market value at the time of construction to acquire and manage habitat.

RATIONALE

General – Consistency with General Conditions Definitions, page 7-1. Consistency was also added by changing “mitigation lands” to “compensation lands” throughout.

Point No. 1 – The criteria “in proximity to” has been added to avoid eliminating potential compensation lands that would add value to the protected species and still provide connectivity. Beacon believes the agencies have discretion on whether to approve or disapprove mitigation lands because the proposed lands must be approved by the CPM, in consultation with USFWS and CDFG, prior to purchase. Beacon does not understand why the agencies would not want to maintain flexibility for themselves in the selection of mitigation lands.

Point 4c – Clarification was added to clarify the deposit account conditions.

DESERT TORTOISE AND MOHAVE GROUND SQUIRREL COMPLIANCE VERIFICATION

BIO-12 The project owner shall provide staff, CDFG, and USFWS with reasonable access to the project site and compensation mitigation lands 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 project owner shall hold harmless the Designated Biologist, the Energy Commission and staff, and any other agencies with regulatory requirements addressed by the Energy Commission’s sole permitting authority for any costs the project owner incurs in complying with the management measures, including stop work orders issued by the CPM or the Designated Biologist. The Designated Biologist shall do or supervise all of the following:

1. Notification. Notify the CPM, CDFG, and USFWS at least 14 calendar days before initiating construction-related ground-disturbing disturbance activities. Immediately notify the CPM, CDFG, and USFWS 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. CDFG shall be notified at their Central Region Headquarters Office, 1234 E. Shaw Avenue, Fresno, CA 93710; (559) 243-4005. USFWS shall be notified at their Ventura office at 2493 Portola Road, Suite B, Ventura, CA 93003; (805) 644-1766

2. Monitoring During Grading. Remain on site daily while grubbing and grading are taking place outside of the desert tortoise exclusionary fenced areas to avoid or minimize take of listed species, to check for compliance with all impact avoidance and minimization measures, and to check all exclusion zones to ensure that signs, stakes, and fencing are intact and that human activities are restricted in these protected zones.
3. Fence Monitoring. During construction maintain and check desert tortoise exclusion fences on a daily basis to ensure the integrity of the fence is maintained. The Designated Biologist shall be present on site to monitor construction and determine fence placement during fence installation. During operation of the project fence inspections shall occur at least once per month throughout the life of the project, and more frequently after storms or other events that might affect the integrity and function of desert tortoise exclusion fences. Fence repairs shall occur within two days (48 hours) of detecting problems that affect the functioning of the desert tortoise exclusion fencing.
4. 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 CPM, USFWS and CDFG during construction, as required under COMPLIANCE-4. All observations of listed species and their sign shall be reported to the Designated Biologist for inclusion in the monthly compliance report as required under COMPLIANCE-4.
5. ~~Annual Listed Species Status Report. No later than January 31 of every year the BSEP facility remains in operation, provide the CPM, USFWS and CDFG an annual Listed Species Status Report, which shall include, at a minimum: 1) a general description of the status of the project site and construction/operation activities, including actual or projected completion dates, if known; 2) a copy of the table in the BRMIMP with notes showing the current implementation status of each mitigation measure; 3) an assessment of the effectiveness of each completed or partially completed mitigation measure in minimizing and compensating for project impacts, and 4) recommendations on how effectiveness of mitigation measures might be improved.~~
6. Final Listed Species Mitigation Report. No later than 45 days after initiation of project operation provide the CPM a Final Listed Species Mitigation Report that shall include, 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.
7. 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. 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 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/Mohave Ground Squirrel Fatality. If a desert tortoise or Mohave ground squirrel is killed by project-related activities during construction or operation, or if a desert tortoise or Mohave ground squirrel is otherwise found dead, submit a written report with the same information as an injury report. 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.
8. 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 two calendar days following the above-required notification of a sighting, kill, injury, 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 the sighting, 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 January 31st~~ of As part of the annual compliance report (COMPLIANCE-4) every year the BSEP facility remains in operation, provide the CPM an annual Listed Species Status ~~Report~~ Summary, and a summary of desert tortoise exclusion fence inspections and repairs conducted in the course of the year.

RATIONALE

General – Consistency with General Conditions Definitions, page 7-1. Consistency was also added by changing “mitigation lands” to “compensation lands” throughout.

Point No. 4 – Clarification has been added to be consistent with reports required under COMPLIANCE-4.

Point No. 5 – This point has been deleted and the language in the verification has been rewritten to be consistent with COMPLIANCE-4.

RAVEN MONITORING, MANAGEMENT, AND CONTROL PLAN

BIO-13 The project owner shall design and implement a Raven Monitoring, Management, and Control Plan (Raven Plan) that is consistent with the most current USFWS-approved raven management guidelines and that meets the approval of the USFWS, CDFG, and the Energy Commission. The Raven Plan shall: identify conditions associated with the project that might provide raven subsidies or attractants; describe management practices to avoid or minimize conditions that might increase raven numbers and predatory activities; describe control practices for ravens; address monitoring during construction and for the life of the project;

and discuss reporting requirements. For the first year of reporting the project owner shall provide quarterly reports describing implementation of the Raven Plan. Thereafter the reports shall be submitted annually for the life of the project. The Raven Plan shall also include a requirement for payment of an in-lieu fee to a third-party account established by the USFWS to support a regional raven monitoring and management plan (USFWS 2009).

Verification: At least 60 days prior to start of any ~~construction project~~-related ground disturbance activities, the project owner shall provide the CPM, USFWS, and CDFG with the final version of the Raven Plan that has been reviewed and approved by USFWS and CDFG. The CPM shall determine the plan's acceptability within 15 days of receipt of the final plan. All modifications to the approved Raven Plan must be made only after consultation with the Energy Commission staff, USFWS, and CDFG. The project owner shall notify the CPM no less than five working days before implementing any CPM-approved modifications to the Raven Plan.

Within 30 days after completion of project construction, the project owner shall provide to the CPM for review and approval a report identifying which items of the Raven 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.

RATIONALE

General – Consistency with General Conditions Definitions, page 7-1.

EVAPORATION POND NETTING AND MONITORING

BIO-14 The project owner shall cover the evaporation ponds prior to any discharge with ~~4.5-inch mesh~~-netting designed to exclude birds and other wildlife from drinking or landing on the water of the ponds. The netted ponds shall be monitored regularly to verify that the netting remains intact, is fulfilling its function in excluding birds and other wildlife from the ponds, and does not pose an entanglement threat to birds and other wildlife. The ponds shall include a visual deterrent in addition to the netting, and the pond shall be designed such that the netting will never contact the water. Monitoring of the evaporation ponds shall include the following:

- The Designated Biologist or Biological Monitor shall regularly survey the ponds at least once per month starting with the first month of operation of the evaporation ponds. The purpose of the surveys shall be to determine if the netted ponds are effective in excluding birds, and to determine if the nets pose an entrapment hazard to birds and wildlife. Surveys shall be of sufficient duration and intensity to provide an accurate assessment of bird and wildlife use of the ponds during all seasons. Surveyors shall be experienced with bird identification and survey techniques. Operations staff at the BSEP site shall also report finding any dead birds or other wildlife at the evaporation ponds to the Designated Biologist within one day of the detection of the carcass. The Designated Biologists shall report any bird or other wildlife deaths or entanglements within two days of the discovery to the CPM, CDFG, and USFWS.
- If dead or entangled birds are detected, the Designated Biologist shall take immediate action to correct the source of mortality or entanglement. The Designated Biologist shall make immediate efforts to contact and consult the CPM, CDFG, and USFWS by phone and electronic communications prior to taking remedial action upon detection of the problem, but the inability to reach these parties shall not delay taking action that would, in the judgment of the Designated Biologist, prevent further mortality of birds or other wildlife at the evaporation ponds.

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- If after 12 consecutive monthly site visits no bird or wildlife deaths or entanglements are detected by or reported to the Designated Biologist, monitoring can be reduced to quarterly visits.
- If after 12 consecutive quarterly site visits no bird or wildlife deaths or entanglements are detected by or reported to the Designated Biologist, [future surveys can be conducted by the Environmental Compliance Manager](#) and the site visits can be reduced to two surveys per years, during spring and fall migration.

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Verification: No less than 30 days prior to operation of the evaporation ponds the project owner shall provide to the CPM as-built drawings and photographs of the ponds indicating that the bird exclusion netting has been installed. The Designated Biologist ~~shall provide information submit annual monitoring reports to the CPM, CDFG, and USFWS~~ describing the dates, durations and results of site visits conducted at the evaporation ponds ~~for inclusion in the annual compliance report for the site (per COMPLIANCE-4)~~. The annual reports shall fully describe any bird or wildlife death or entanglements detected during the site visits or at any other time, and shall describe actions taken to remedy these problems. ~~The report shall be submitted to the CPM, CDFG, and USFWS no later than January 31st of every year for the life of the project.~~

RATIONALE

General – Consistency with General Conditions Definitions, page 7-1.

Main – The mesh size has been removed from the condition because it will be dependent upon the best feasible technology available.

Bullet 1 – The Designated Biologist was deleted and the Environmental Compliance Manager was added. With the netting installed, the DB should not be required to do surveys and the ECM should be able to identify if birds are trapped within the netting. If birds are trapped, information can be collected for identification.

Bullet 4 – It is unreasonable to expect surveys for the life of the project if netting is required. A limit has been added for semi-annual surveys subsequent to the condition of quarterly surveys.

Verification – Clarification has been added to be consistent with reports required under COMPLIANCE-4.

PRE-CONSTRUCTION NEST SURVEYS AND IMPACT AVOIDANCE MEASURES FOR MIGRATORY BIRDS

BIO-15 Pre-construction nest surveys shall be conducted if construction activities will occur from February 1 through August 1. The Designated Biologist or Biological Monitor conducting the surveys shall be experienced bird surveyors and familiar with standard nest-locating techniques such as those described in Martin and Guepel (1993). Surveys shall be conducted in accordance with the following guidelines:

1. Surveys shall cover all potential nesting habitat in the project site and within 500 feet of the boundaries of the plant site and linear facilities;
2. At least two pre-construction surveys shall be conducted, separated by a minimum 10-day interval. One of the surveys needs to be conducted within the 14-day period preceding initiation of construction activity. Additional follow-up surveys may be required if periods of construction inactivity exceed three weeks in any given area, an interval during which birds may establish a nesting territory and initiate egg laying and incubation;
3. If active nests are detected during the survey, a no-disturbance buffer zone (protected area surrounding the nest, the size of which is to be determined by the Designated Biologist in consultation with CDFG and USFWS) and monitoring plan shall be developed. Nest locations shall be mapped using GPS technology and submitted, along with a weekly report stating the survey results, to the CPM; and

4. The Designated Biologist shall monitor the nest until he or she determines that nestlings have fledged and dispersed; activities that might, in the opinion of the Designated Biologist, disturb nesting activities, shall be prohibited within the buffer zone until such a determination is made.

Verification: At least 10 days prior to the start of any construction project-related ground disturbance activities, the project owner shall provide the CPM a letter-report describing the findings of the pre-construction nest surveys, including the time, date, and duration of the survey; identity and qualifications of the surveyor(s); and a list of species observed. If active nests are detected during the survey, the report shall include a map or aerial photo identifying the location of the nest and shall depict the boundaries of the no-disturbance buffer zone around the nest.

RATIONALE

General – Consistency with General Conditions Definitions, page 7-1.

AMERICAN BADGER AND DESERT KIT FOX IMPACT AVOIDANCE AND MINIMIZATION MEASURES

BIO-16 To avoid direct impacts to American badgers and desert kit fox, pre-construction surveys shall be conducted for these species concurrent with the desert tortoise surveys. Surveys shall be conducted as described below:

Biological Monitors shall perform pre-construction surveys for badger and kit fox dens in the project area, including areas within 250 feet of all project facilities, utility corridors, and access roads. If dens are detected each den shall be classified as inactive, potentially active, or definitely active.

Inactive dens that would be directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by badgers or kit fox. Potentially and definitely active dens that would be directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand. If tracks are observed, the den shall be progressively blocked with natural materials (rocks, dirt, sticks, and vegetation piled in front of the entrance) for the next three to five nights to discourage the badger or kit fox from continued use. After verification that the den is unoccupied it shall then be excavated and backfilled by hand to ensure that no badgers or kit fox are trapped in the den.

Verification: The project owner shall submit a report to the CPM and CDFG within 30 days of completion of badger and kit fox surveys. The report shall describe survey methods, results, avoidance and minimization mitigation measures implemented, and the results of those measures the mitigation.

RATIONALE

Verification – Mitigation is not required. The surveys are for avoidance and minimization.

BURROWING OWL IMPACT AVOIDANCE, MINIMIZATION, AND COMPENSATION MEASURES

BIO-17 The project owner shall implement the following measures to avoid and offset impacts to burrowing owls:

1. Pre-Construction Surveys. Concurrent with desert tortoise clearance surveys, the Designated Biologist shall conduct pre-construction surveys for burrowing owls within the project site and along all linear facilities in accordance with CDFG guidelines (California Burrowing Owl Consortium 1993). If burrowing owls are detected within the impact area or within 500 feet of any proposed construction activities, the Designated Biologist shall

prepare a Burrowing Owl Monitoring and Mitigation Plan in consultation with CDFG, USFWS, and Energy Commission staff. This plan shall include detailed measures to avoid and minimize impacts to burrowing owls in and near the construction areas and shall be consistent with CDFG guidance (CDFG 1995).

2. Artificial Burrow Installation. Prior to any ground-disturbing activities, the project owner shall install no less than four artificial burrows, or at least two burrows for each owl displaced by the project, in the proposed relocation area immediately north of the project site, a 6-acre area within the 14.39-acre parcel owned by Beacon Solar, LLC, (APN 469-14-011). Design of the artificial burrows shall be consistent with CDFG guidelines (CDFG 1995). The Designated Biologist shall survey the site selected for artificial burrow construction to verify that such construction will not affect desert tortoise or Mohave ground squirrel. The design of the burrows shall be approved by the CPM in consultation with CDFG and USFWS.
3. Surveys of Relocation Area. The Designated Biologist shall survey the relocation area during the nesting season to assess use of the artificial burrows by owls using methods consistent with Phase II and Phase III Burrowing Owl Consortium Guideline protocols (CBOC 1993). Surveys shall start upon completion of artificial burrow construction and shall continue for a period of five years. ~~If survey results indicate burrowing owls are not nesting on the relocation area, remedial actions shall be developed and implemented in consultation with the CPM, CDFG and USFWS to correct conditions at the site that might be preventing owls from nesting there. A report describing survey results and remedial actions taken shall be submitted to the CPM, CDFG and USFWS no later than January 31st of each year for five years.~~
4. Protect and Manage 6-Acre Relocation Area. The project owner shall provide a mechanism to protect 6 acres of the 14.39-acre relocation area in perpetuity as habitat for burrowing owls, either in fee title, or as a permanent deed restriction. The project owners shall prepare a draft Burrowing Owl Relocation Area Management Plan for review and approval by the CPM in consultation with CDFG. The overall objective of the plan shall be to manage the 6-acre relocation parcel for the benefit of burrowing owls, with the specific goals of:
 - a. Maintaining the functionality of at least four artificial or natural burrows; and
 - b. Minimizing the occurrence of weeds (species considered “moderate” or “high” threat to California wildlands as defined by CAL-IPC [2006] and noxious weeds rated “A” or “B” by the California Department of Food and Agriculture and any federal-rated pest plants [CDFA 2009]) at less than 10 percent cover of the shrub and herb layers.

The Burrowing Owl Relocation Area Management Plan shall include monitoring and maintenance requirements, details on methods for measuring compliance goals and remedial actions to be taken if management goals are not met. ~~A report describing results of monitoring and management of the relocation area shall be submitted to the CPM, CDFG and USFWS no later than January 31st of each year for the life of the project.~~

5. Acquire 20 Acres of Burrowing Owl Habitat. In addition to protecting the 6 acre relocation area north of the project site, the project owner shall acquire, in fee or in easement, 20 acres of land suitable to support a resident population of burrowing owls and shall provide funding for the enhancement and long-term management of these compensation lands. 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 Mojave Desert 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. Agreements to delegate land acquisition to CDFG or an approved third party and to manage compensation lands shall be implemented within 12 months of the Energy Commission's License Decision.

- a. Burrowing Owl Compensation Lands Mitigation Criteria. The terms and conditions of this acquisition or easement shall be as described in BIO-11, with the additional criteria to include: 1) the 20 acres of mitigation land must provide suitable habitat for burrowing owls, and 2) the acquisition lands must be either capable of currently supporting burrowing owls or be no farther than 5 miles from an active burrowing owl nesting territory. The 20 acres of burrowing owl compensation mitigation lands may be included with the 115 acres of desert tortoise and Mohave ground squirrel compensation mitigation lands ONLY if these two burrowing owl criteria are met.
- b. Security. If the 20 acres of burrowing owl compensation mitigation land is separate from the 115 acres required for desert tortoise and Mohave ground squirrel compensation lands the project owner or an approved third party shall complete acquisition of the proposed compensation lands prior to initiating construction-related ground disturbance -disturbing project activities. Alternatively, 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 construction-related ground disturbance -disturbing project activities. Prior to submittal to the CPM, the Security shall be approved by the CPM, in consultation with CDFG, to ensure funding in an amount determined by a Property Analysis Record (PAR) or PAR-like analysis of the proposed compensation lands.

Verification: Within 60 days prior to start of any construction project-related ground disturbance activities of publication of the Energy Commission Decision, the project owner shall submit to the CPM, CDFG and USFWS a draft Burrowing Owl Relocation Area Management Plan. Within 30 days pPrior to any construction-related ground disturbance -disturbing activities on the project site the project owner shall submit to the CPM a final Burrowing Owl Relocation Area Management Plan that reflects review and approval by Energy Commission staff in consultation with CDFG and USFWS.

If pre-construction surveys detect burrowing owls within 500 feet of proposed construction activities, the Designated Biologist shall provide to CDFG, USFWS, and the CPM a Burrowing Owl Monitoring and Mitigation Plan at least 30 days prior to the start of any project-related site disturbance activities. The project owner shall report monthly to CDFG, USFWS, and the CPM for the duration of construction on the implementation of burrowing owl avoidance and minimization measures described in the Burrowing Owl Monitoring and Mitigation Plan. Within 30 days after completion of construction the project owner shall provide to the CDFG and CPM a written construction termination report identifying how mitigation measures described in the plan have been completed.

No less than 90 days prior to acquisition of compensation lands the property, the project owner, or a third-party approved by the CPM, in consultation with CDFG and USFWS, shall submit a formal acquisition proposal to the CPM, and CDFG, and USFWS describing the 20-acre parcel intended for purchase. Prior to start of any construction project-related ground disturbance activities the project owner shall provide written verification to the CPM that the 20 acres of compensation lands and/or conservation easements have been acquired and recorded in favor of the approved easement holder(s). Alternatively, before beginning construction-related project ground disturbance -disturbing activities, the project owner shall provide Security to the CPM in accordance with this condition. Within 90 days of the compensation land or easement purchase, as determined by the date on the title, the project owner shall provide the CPM with a management plan for review and approval, in consultation with CDFG, for the compensation lands and associated funds.

The annual compliance report (per COMPLIANCE-4) shall include information describing results of surveys, monitoring and management of the relocation area.

If the 20 acres of burrowing owl compensation mitigation land is separate from the 115 acres required for desert tortoise and Mohave ground squirrel compensation lands, the project owner shall fulfill the requirements described in BIO-11, including submittal of a formal acquisition proposal no less than 90 days prior to acquisition, and a management plan within 30 days after the compensation land purchase.

RATIONALE

General – Consistency with General Conditions Definitions, page 7-1. Consistency was also added by changing “mitigation lands” to “compensation lands” throughout.

Point No. 3 – The statement regarding success of the relocation area being based upon successful nesting in the burrows has been deleted. This is an unreasonable criteria for success because WBO may be using other burrows within their home range, and they may use burrows for wintering but not nesting.. The WBO population in the area also is not dense, which provides WBOs in the area with more opportunity to pick and choose amongst available burrows. Therefore the use of burrows in the relocation area – whether artificial or natural – is not a biologically appropriate measure of relocation success. Furthermore, the 6-acre conservation area is being provided for relocation and not for compensatory mitigation. An additional 20 acres of compensation lands are being acquired to fully mitigate impacts to WBO. In accordance with the 1993 CBOC Guidelines and CDFG 1995 guidelines, WBO impacts are mitigated by the acquisition of offsite acreage at a rate commensurate with the number of pairs/individuals impacted and the quality of habitat acquired. The Project is proposing to acquire occupied habitat offsite to compensate for impacts to 2 pairs of WBO (based on survey data), based on 6.5 acres per pair, which is equivalent to a 13-acre compensatory mitigation requirement. The project is acquiring 20 acres for WBO, more than required.

Point 4 – The information should be provided in the Annual Compliance Report per COMPLIANCE-4. This information was removed and added to the verification as part of the timing of the measure.

Verification – Timing has been adjusted to what is considered reasonable based upon anticipated activities and successful species avoidance and minimization measures.

STREAMBED IMPACT MINIMIZATION AND COMPENSATION MEASURES

BIO-18 The project owner shall compensate for permanent impacts to waters of the state by constructing a new channel that replicates the hydrological and biological functions of the impacted drainages, and shall establish a channel maintenance program. The channel created by the applicant shall: be designed to be geomorphologically equivalent to a typical desert wash system; maintain existing hydrological connections and levels of sediment transport; provide conditions that would support recruitment and maintenance of native vegetation, provide wildlife habitat, ~~and maintain the biological functions and values of a natural desert wash ecosystem~~; be designed, constructed and maintained such that it would not create a movement barrier or hazard for desert tortoise or other wildlife, or be a source of invasive weeds. The project owner shall also implement Best Management Practices and other measures described below to protect jurisdictional waters of the State occurring along linear alignments. The project owner shall implement the following measures to compensate for impacts to waters of the state:

1. **Submit Channel Design for Review:** No later than 60 days prior to start of site mobilization, the project owner shall submit channel design and construction drawings for review and approval by the CPM in consultation with CDFG, as described in Soil&Water-5. The channel shall be designed such that it would remain accessible to desert tortoise and other wildlife at all times (i.e., all side slopes 3:1 or more gradual, with textured soil cement that would enhance traction for tortoise), and would promote a slightly

aggradational (depositional) pattern of sediment deposition to allow for natural geomorphic processes;

2. Prepare a Desert Wash Revegetation Plan that follows the outline provided for rehabilitation plans described in Newton and Claassen (2003), *Appendix C: Sample Outline for a Rehabilitation Plan*. The Desert Wash Revegetation Plan shall meet the following criteria at the end of the 10-year revegetation period²:
 - a. Establishment of at least 15 percent native desert wash shrub cover within the channel bottom (6.2 acres total within the 41.5-acre channel bottom, and under no circumstances less than 4.8 acres);
 - b. Establishment of at least 7 percent native desert wash shrub cover on each of the 11 channel reaches between drop structures;
 - c. Maintain percent cover of noxious weeds (defined as non-native species that pose a "moderate" or "high" threat to California wildlands as defined by CAL-IPC (2006) within the channel) below 2 percent within the channel bottom (less than 0.8 total within the 41.5-acre channel bottom);
3. ~~Review and Submittal of Plan and Cost Estimate: Within 60 days of publication of the Energy Commission Decision, the project owner shall submit to the CPM and CDFG a draft Desert Wash Revegetation Plan and a draft estimate of costs to fully implement the plan. Prior to any ground-disturbing activities within waters of the State, the project owner shall submit to the CPM a final Desert Wash Revegetation Plan and a final cost estimate for implementation that reflects review and approval by Energy Commission staff in consultation with CDFG.~~
4. Acquire Off-Site Desert Wash: If at the end of the 10-year revegetation period the success criteria defined in the Desert Wash Revegetation Plan have not been achieved, the project owner shall acquire, in fee or in easement, land that includes at least 16 acres of desert wash state jurisdictional waters ~~and their immediate watershed and floodplain~~. Prior to acquisition the applicant shall prepare an acquisition proposal for review and approval by Energy Commission staff and CDFG describing the 16 acres of state waters ~~and the surrounding watershed and floodplain, and shall ensure that the acquired parcel(s) include sufficient area to manage the lands~~. 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-profit organization dedicated to Mojave Desert habitat conservation, subject to approval by the CPM, in consultation with CDFG and RWQCB 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. The terms and conditions of this acquisition or easement shall be as described in **BIO-11**, with the additional criteria that the desert wash mitigation lands: 1) include at least 16 acres of state jurisdictional waters; 2) be characterized by similar soil permeability and hydrological and biological functions as the impacted wash; and 3) be within the same watershed as the impacted wash.
5. Review and Approval of Compensation Lands Prior to Acquisition. A minimum of three months prior to acquisition of the ~~compensation lands property~~, the project owner, or a third-party approved by the CPM, in consultation with CDFG, shall submit a formal acquisition proposal to the CPM and CDFG describing the parcel(s) intended for purchase. This acquisition proposal shall include a description and delineation of waters of the state within the parcel(s); ~~and~~ shall

² The 10-year revegetation period begins upon completion of construction of the new channel.

describe the floodplain and immediate watershed in the vicinity of the drainage; ~~and shall identify the area of lands surrounding the drainage needed to adequately manage the waters of the state to protect and enhance their biological functions and values.~~ Approval from the CPM, in consultation with CDFG, shall be required for acquisition of all parcels comprising the compensation lands in advance of purchase.

6. Security for Implementation of Mitigation: A security in the form of an irrevocable letter of credit, pledged savings account, or certificate of deposit for the amount of all mitigation measures pursuant to this condition of certification shall be submitted to, and approved by, the CPM, in consultation with CDFG, prior to commencing project activities within waters of the state. The security shall be approved by the CPM, in consultation with CDFG's legal advisors, prior to its execution, and shall allow the CPM at its discretion to recover funds immediately if the CPM, in consultation with CDFG, determines there has been a default. Security shall include an amount equal to the final cost estimate for implementation of the Desert Wash Revegetation Plan, as described above in item 2. In addition, security shall include the costs of purchasing sufficient land to ensure acquisition of a minimum of 16 acres of desert wash state jurisdictional waters ~~plus the immediate watershed and floodplain.~~

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Prior to initiation of ground disturbance, the security shall be approved by the CPM, in consultation with CDFG, to ensure funding in the amount of \$230,000 plus the final estimated cost of implementing the Desert Wash Revegetation Plan over a ten year period. The security amounts shall include the costs of implementing the Desert Wash Revegetation Plan over a ten-year period, and the costs of acquisition of ~~50 acres that includes at least~~ sufficient acreage to ensure acquisition of 16 acres of desert wash state jurisdictional waters. ~~The required acreage may be less than 50 acres, and will depend on the area of adjacent watershed and floodplain needed to adequately protect and manage the 16 acres of waters of the state.~~ The security amount is based on 50 acres, an estimated amount of acreage needed for acquisition of 16 acres of state jurisdictional waters. Security costs for land acquisition were calculated as follows and may be revised upon completion of a Property Analysis Record (PAR) or PAR-like analysis of the proposed compensation lands:

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- land acquisition costs for compensation lands, calculated at \$3,000/acre for ~~50 acres:~~ \$150,000;
 - costs of enhancing compensation lands, calculated at \$250/acre for ~~50 acres:~~ \$12,500; and
 - costs of establishing an endowment for long-term management of compensation lands, calculated at \$1,350/acre for ~~50 acres:~~ \$67,500.
7. Long-Term Biological Monitoring and Management. Long-term ~~biological~~ monitoring and management of the channel shall begin at the end of the 10-year revegetation period and shall continue for the life of the project as described in SOIL&WATER-8, and shall occur regardless of the success or failure of the revegetation effort. The goals of the long-term monitoring shall be to:
- a. Maintain percent cover of noxious weeds (defined as non-native species that pose a "moderate" or "high" threat to California wildlands as defined by CAL-IPC (2006) within the channel) below 2 percent within the channel bottom (less than 0.8 total within the 41.5-acre channel bottom).
 - b. Maintain the channel as safe for desert tortoise and other wildlife by maintaining slopes at 3:1 or less where accessible to desert tortoise or wildlife. ~~At no time shall the channel pose an entrapment hazard to desert tortoise and other wildlife. An entrapment hazard is~~

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~~defined as a depression, pit or trench with a depth of one foot or greater and a slope steeper than 3:1.~~

Inspections to assess percent weed cover within the channel shall be conducted by the Designated Biologist no less than once per year and only within the peak growing season for weedy annual herbs (February 1 through April 30th). Inspections to assess ~~entrapment wildlife safety~~ hazards for desert tortoise and other wildlife shall occur within 1 day of major storm events. The same remedial actions for managing weeds and ~~entrapment wildlife safety~~ hazards described in the Desert Wash Revegetation Plan shall be employed during the long-term monitoring. ~~Entrapment Wildlife safety~~ hazards shall be corrected immediately upon detection. ~~The Designated Biologist shall prepare an annual report describing the methods and results of the inspections, as well as any remedial actions taken, and shall submit these annual reports to the CPM and CDFG no later than January 31st.~~

8. Equipment Laydown Plan: The project owner shall develop a Storm Water Pollution Prevention Plan for construction activities that includes an engineered plan for the proposed equipment laydown area within the existing wash, as described in Soil&Water 3. This engineered plan shall describe protective structures, procedures for moving equipment, fuels and materials, and plan for conveyance of stormflows, during a rainfall event. Prior to initiation of any project activities in jurisdictional areas and no later than 60 days after publication of the Energy Commission Decision, the project owner shall submit this plan for review and approval by the CPM in consultation with CDFG.
9. Right of Access and Review for Compliance Monitoring: The CPM reserves the right to enter the project site and/or allow CDFG to enter the project site at any time to ensure compliance with these conditions. The project owner herein grants to the CPM and to CDFG employees and/or their representatives the right to enter the project site at any time, to ensure compliance with the terms and conditions and/or to determine the impacts of storm events, maintenance activities, or other actions that might affect the restoration and revegetation efforts. The CPM and CDFG may, at the CPM's discretion, review relevant documents maintained by the operator, interview the operator's employees and agents, inspect the work site, and take other actions to assess compliance with or effectiveness of mitigation measures.
- ~~10. Reporting of Special-Status Species: If any special-status species are observed on or in proximity to the project site, or during project surveys, the project owner shall submit California Natural Diversity Data Base (CNDDDB) forms and maps to the CNDDDB within five working days of the sightings and provide the regional CDFG office with copies of the CNDDDB forms and survey maps. The CNDDDB form is available online at: www.dfg.ca.gov/whdab/pdfs/natspec.pdf. This information shall be mailed within five days to: California Department of Fish and Game, Natural Diversity Data Base, 1807 13th Street, Suite 202, Sacramento, CA 95814, (916) 324-3812. A copy of this information shall also be mailed within five days to CDFG and the CPM.~~
- ~~11. Notification: The project owner shall notify the CPM and CDFG, in writing, at least five days prior to initiation of project activities in jurisdictional areas as noted and at least five days prior to completion of project activities in jurisdictional areas. The project owner shall notify the CPM and CDFG of any change of conditions to the project, the jurisdictional impacts, or the mitigation efforts, if the conditions at the site of a proposed project change in a manner which changes risk to biological resources that may be substantially adversely affected by the proposed project. The notifying report shall be provided to the CPM and CDFG no later than seven days after the change of conditions is identified. As used here, change of condition refers to the process, procedures, and methods of operation of a project; the biological and physical characteristics of a project area; or the laws or regulations pertinent to the project as~~

defined below. A copy of the notifying change of conditions report shall be included in the annual reports:

- a. ~~Biological Conditions: a change in biological conditions includes, but is not limited to, the following: 1) the presence of biological resources within or adjacent to the project area, whether native or non-native, not previously known to occur in the area; or 2) the presence of biological resources within or adjacent to the project area, whether native or non-native, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.~~
- b. ~~Physical Conditions: a change in physical conditions includes, but is not limited to, the following: 1) a change in the morphology of a river, stream, or lake, such as the lowering of a bed or scouring of a bank, or changes in stream form and configuration caused by storm events; 2) the movement of a river or stream channel to a different location; 3) a reduction of or other change in vegetation on the bed, channel, or bank of a drainage, or 4) changes to the hydrologic regime such as fluctuations in the timing or volume of water flows in a river or stream.~~
- c. ~~Legal Conditions: a change in legal conditions includes, but is not limited to, a change in Regulations, Statutory Law, a Judicial or Court decision, or the listing of a species, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.~~

12. Code of Regulations: The project owner shall provide a copy of the Energy Commission License Decision to all contractors, subcontractors, and the applicant's project supervisors. Copies shall be readily available at work sites at all times during periods of active work and must be presented to any CDFG personnel or personnel from another agency upon demand. The CPM reserves the right to issue a stop work order or allow CDFG to issue a stop work order after giving notice to the project owner and the CPM, if the CPM in consultation with CDFG, determines that the project owner has breached any of the terms or conditions or for other reasons, including but not limited to the following:
 - a. The information provided by the applicant regarding streambed alteration is incomplete or inaccurate;
 - b. New information becomes available that was not known to it in preparing the terms and conditions;
 - c. The project or project activities as described in the Final Staff Assessment have changed; or
 - d. The conditions affecting biological resources changed or the CPM, in consultation with CDFG, determines that project activities will result in a substantial adverse effect on the environment.
13. Construction Schedule: Pine Tree Creek and the unnamed desert wash shall not be altered until the new channel is constructed and deemed by the CPM ready to accept stormwater flows.
14. Best Management Practices: The applicant shall also comply with the following conditions:
 - a. The project owner shall not allow water containing mud, silt, or other pollutants from grading, aggregate washing, or other activities to enter a lake or flowing stream or be placed in locations that may be subjected to high storm flows.

- b. The project owner shall comply with all litter and pollution laws. All contractors, subcontractors, and employees shall also obey these laws, and it shall be the responsibility of the operator to ensure compliance.
- c. Spoil sites shall not be located within a drainage or locations that may be subjected to high storm flows, where spoil shall be washed back into a drainage or lake.
- d. Raw cement/concrete or washings thereof, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to vegetation or wildlife resources, resulting from project-related activities, shall be prevented from contaminating the soil and/or entering waters of the state. These materials, placed within or where they may enter a drainage or lake, by project owner or any party working under contract or with the permission of the project owner shall be removed immediately.
- e. No broken concrete, debris, soil, silt, sand, bark, slash, sawdust, rubbish, cement or concrete or washings thereof, oil or petroleum products or other organic or earthen material from any construction or associated activity of whatever nature shall be allowed to enter into, or placed where it may be washed by rainfall or runoff into, waters of the state.
- f. When operations are completed, any excess materials or debris shall be removed from the work area. No rubbish shall be deposited within 150 feet of the high water mark of any drainage.
- g. No equipment maintenance shall occur within or near any stream channel where petroleum products or other pollutants from the equipment may enter these areas under any flow.

Verification: Within 60 days ~~prior to any construction-related ground disturbance activities of publication of the Energy Commission Decision~~, the project owner shall submit to the CPM and CDFG a draft Desert Wash Revegetation Plan and a draft estimate of costs to fully implement the plan. ~~Within 30 days p~~Prior to any ~~construction-related ground disturbance -disturbing~~ activities within waters of the State, the project owner shall submit to the CPM a final Desert Wash Revegetation Plan and a final cost estimate for implementation of revegetation monitoring and management activities that reflects review and approval by Energy Commission staff in consultation with CDFG.

No later than 60 days prior to ~~any construction-related ground disturbance activities start of site mobilization~~, the project owner shall submit channel design and construction drawings for review and approval by the CPM in consultation with CDFG, as described in **Soil&Water-5**.

No fewer than 30 days prior to the start of any ~~construction-related ground disturbance site or related facilities mobilization~~-activities, the project owner shall implement the mitigation measures described above. No fewer than 30 days prior to the start of work ~~in jurisdictional areas potentially affecting waters of the state~~, the project owner shall provide written verification (i.e., through incorporation into the BRMIMP) to the CPM that the above best management practices will be implemented and provide a discussion of work in ~~jurisdictional areas waters of the state~~ in Compliance Reports for the duration of the project. Compliance reports shall be monthly for the first five years following completion of construction of the channel, and thereafter shall be submitted ~~every six months annually per COMPLIANCE-4. The annual compliance report, per COMPLIANCE-4, shall include information describing wash revegetation and mitigation efforts.~~

No less than 90 days prior to acquisition of the desert wash compensation acreage the project owner, or a third-party approved by the CPM, in consultation with CDFG, shall submit a formal acquisition proposal to the CPM and CDFG describing the parcel(s) intended for purchase.

After completion of the 10-year monitoring period for the Desert Wash Revegetation Plan, the project owner shall thereafter ~~include related information in the submit an~~ annual ~~compliance~~ report ~~to the CPM~~

and CDFG. The information to be included in the report shall describe the methods and results of the long term biological monitoring inspections for weed and entrapment hazards within the channel as well as. The report also shall include a discussion of any remedial actions taken, if any, and shall be included in the annual compliance report submitted no later than January 31st of every year for the life of the project. If any entrapped animals/carcasses are detected CDFG and USFWS shall be notified in writing within 48 hours.

The project owner shall notify the CPM and CDFG, in writing, at least five days prior to initiation of project activities in jurisdictional areas as noted and at least five days prior to completion of project activities in jurisdictional areas. The project owner shall notify the CPM and CDFG of any change of conditions to the project, the jurisdictional impacts, or the mitigation efforts, if the conditions at the site of a proposed project change in a manner which changes risk to biological resources that may be substantially adversely affected by the proposed project. The notifying report shall be provided to the CPM and CDFG no later than seven days after the change of conditions is identified. As used here, change of condition refers to the process, procedures, and methods of operation of a project; the biological and physical characteristics of a project area; or the laws or regulations pertinent to the project as defined below. A copy of the notifying change of conditions report shall be included in the annual reports.

- a. Biological Conditions: a change in biological conditions includes, but is not limited to, the following: 1) the presence of biological resources within or adjacent to the project area, whether native or non-native, not previously known to occur in the area; or 2) the presence of biological resources within or adjacent to the project area, whether native or non-native, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.
- b. Physical Conditions: a change in physical conditions includes, but is not limited to, the following: 1) a change in the morphology of a river, stream, or lake, such as the lowering of a bed or scouring of a bank, or changes in stream form and configuration caused by storm events; 2) the movement of a river or stream channel to a different location; 3) a reduction of or other change in vegetation on the bed, channel, or bank of a drainage, or 4) changes to the hydrologic regime such as fluctuations in the timing or volume of water flows in a river or stream.
- c. Legal Conditions: a change in legal conditions includes, but is not limited to, a change in Regulations, Statutory Law, a Judicial or Court decision, or the listing of a species, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations.

RATIONALE

General – Consistency with General Conditions Definitions, page 7-1. Consistency was also added by replacing “mitigation lands” with “compensation lands” throughout.

General – Language has been deleted from the introduction to reflect that the rerouted wash is intended to mitigate for impacts to the existing washes, and not to achieve conditions that are equivalent to a natural desert wash.

General – All references to off-site compensation lands exceeding 16-acres have been removed. The project is being required to attempt onsite mitigation that includes success criteria for the wash. If these conditions are not met, the applicant is being required to acquire offsite compensation for those onsite impacts. Offsite compensation therefore should mitigate onsite impacts to 16-acres of state waters (of which only 2.4 is vegetated). The text has been updated to differentiate between the mitigation requirement and the need for funding that would support the acquisition of sufficient land to meet the potential offsite mitigation requirement.

Point Nos. 3, 7, and 11 – These have been moved to the verification because they relate to timing of the measures. In addition, reporting requirements have been modified to reflect the annual compliance report, as required per COMPLIANCE-4, to consolidate compliance information in a single report.

Point No. 7b – The language regarding entrapment has been deleted and the text rewritten to address wildlife safety hazards.

Point No. 10 – This point has been deleted because the language has been revised and moved to BIO-7.

CLOSURE PLAN MEASURES

BIO-19 The project owner shall implement and incorporate into the facility closure plan measures to address the local biological resources related to facility closure. A funding mechanism shall be developed in consultation with the Energy Commission staff to ensure sufficient funds are available for revegetation, reclamation, and decommissioning. The facility closure plan shall address biological resources-related mitigation measures. In addition to these measures, the plan must include the following:

1. removal of transmission conductors when they are no longer used and useful;
2. removal of all above-ground and subsurface power plant site facilities and related facilities;
3. methods for restoring wildlife habitat and promoting the re-establishment of native plant and wildlife species;
4. revegetation of the project site and other disturbed areas utilizing appropriate methods for establishing native vegetation;
5. a cost estimate to complete closure-related activities.

In addition, the project owner shall secure funding to ensure implementation of the plan and provide to the CPM written evidence of the dedicated funding mechanism(s).

Verification: Prior to initiating construction-related ground disturbance -disturbing project activities the project owner shall provide financial assurances to the CPM to guarantee that an adequate level of funding will be available to implement decommissioning and closure activities described above. The financial assurances may be in the form of an irrevocable letter of credit, a performance bond, a pledged savings account, or another equivalent form of security, as approved by the CPM.

At least 12 months prior to commencement of planned closure activities, the project owner shall address all biological resources-related issues associated with facility closure, and provide final measures, in a Biological Resources Element. The draft planned permanent or unplanned closure measures shall be submitted to the CPM for comment by staff, CDFG, and USFWS. After revision, final measures shall comprise the Biological Resources Element, which shall include the items listed above as well as written evidence of the dedicated funding mechanism(s) for these measures. The final Biological Resources Element shall become part of the facility closure plan, which is submitted to the CPM within 90 days of the permanent closure or another period of time agreed to by the CPM.

In the event of an unplanned permanent closure, the project owner shall notify the CPM, as well as other responsible agencies, by telephone, fax, or e-mail, within 24 hours and shall take all necessary steps to implement the on-site contingency plan (see **Compliance** Conditions of Certification).

Upon facility closure, the project owner shall implement measures in the Biological Resources Element and provide written status updates on all closure activities to the CPM at a frequency determined by the CPM.

RATIONALE

General – Consistency with General Conditions Definitions, page 7-1.

SPECIAL-STATUS PLANT SURVEYS/PROTECTION PLAN

BIO-20

To avoid impacts to special-status plant species (state-plants, or California Native Plant Society List 1A, 1B, 2, or 3 plants) that might occur along the proposed northern emergency access road or the Rosamond Alternative water pipeline alignment, pre-construction surveys shall be conducted in these areas in ~~the s~~Spring ~~2010~~, prior to anticipated construction. The surveys on the Rosamond Alternative water pipeline alignment would need to be conducted only if the Energy Commission elects to adopt this alternative. If special-status plant species are detected within 50 feet of the project footprint of the proposed northern emergency access road or the Rosamond Alternative alignment, the qualified botanist shall prepare a Sensitive Plant Protection Plan to avoid direct and indirect impacts. The project owner shall implement the following measures:

1. Pre-Construction Floristic Surveys. A qualified botanist shall conduct floristic surveys along the northern emergency access route and along the southern 23 miles of the Rosamond Alternative pipeline alignment. Surveys shall be conducted at the appropriate time of year and according to guidelines from the California Department of Fish and Game (CDFG 2000) and the California Native Plant Society (CNPS 2001).
2. Agency Notification: If state or federal listed plant species are detected during the pre-construction floristic surveys, the CPM and CDFG shall be notified in writing no more than 15 days from detection of the plants. The notification shall be prepared according to agency guidelines, and shall include submission of the GIS shape files and metadata for the plant occurrences. Concurrent with notification of the appropriate permitting agencies, the project engineer shall also be contacted to ensure adequate time for adjusting the alignment within the right-of-way or narrowing a reach of the project footprint to avoid direct and indirect impacts to the plant occurrence.
3. Sensitive Plant Protection Plan. If special status plant species are detected during pre-construction surveys a qualified botanist shall prepare a Sensitive Plant Protection Plan (Plan). The Plan shall include measures for avoiding direct impacts and accidental impacts during construction by establishing the plant occurrence and an appropriately-sized buffer as an Environmentally Sensitive Area, as described in BIO-21. The Plan would also include measures to avoid indirect impacts including: sedimentation from adjacent disturbed soils; alterations of the site hydrology from changes in the drainage patterns; dust deposition; displacement or degradation of the habitat from the introduction and spread of noxious weeds. The plan shall also include a discussion of monitoring and reporting requirements during and after construction.
4. Review and Submittal of Plan: The project owner shall submit to the CPM and CDFG a draft Sensitive Species Protection Plan. Prior to any ground-disturbing activities within 50 feet of the sensitive plant occurrences detected during the pre-construction floristic surveys, the project owner shall submit to the CPM a final Plan that reflects review and approval by Energy Commission staff in consultation with CDFG.

Verification: No later than July 31, following spring surveys the project owner shall submit a report describing the results of floristic surveys conducted along the proposed northern emergency access road and the ~~southern 23 miles of the~~ Rosamond Alternative pipeline alignment. The report shall be submitted to the CPM and CDFG and shall describe qualifications of the surveyor, survey methods including dates and times, a discussion of visits to reference sites, figures depicting the area(s) surveyed, and a list of plant species detected.

If special-status plant species were detected during the ~~2010 spring~~ surveys the project owner shall submit to the CPM and CDFG a Sensitive Species Protection Plan (Plan) at least 60 days prior to the start of any ground-disturbing activities within 500 feet of the Rosamond Alternative alignment or the northern emergency access road. The CPM will determine the Plan's acceptability in consultation with CDFG ~~and USFWS~~ within 15 days of receipt of the Plan. Any modifications to the approved Plan shall be

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made only after approval by Energy Commission staff in consultation with CDFG. The project owner shall notify the CPM no fewer than 5 working days before implementing any CPM-approved modifications to the Plan.

Within 30 days after completion of construction of the Rosamond Alternative pipeline and the northern emergency access road the project owner shall provide to the CPM and CDFG a construction termination report discussing how mitigation measures described in the Plan were implemented.

RATIONALE

General – Consistency with General Conditions Definitions, page 7-1. In addition, the 2010 requirement was removed to allow flexibility based on project timing but to retain the intent for spring surveys. Since the surveys are pre-construction surveys they should be conducted as close to the construction start date as possible. Construction of the emergency access road and a pipeline to Rosamond could begin in 2011 making pre-construction surveys in 2010 less valuable than pre-construction surveys in 2011.

ROSAMOND PIPELINE MITIGATION

BIO-21 The following condition would need to be implemented only if the Energy Commission elects to adopt the Rosamond Alternative. To avoid, minimize, and mitigate potential impacts to biological resources associated with construction of the Rosamond Alternative water pipeline, the project owner shall implement the following measures:

1. Establish Environmentally Sensitive Areas: Prior to any ground disturbing activities the Designated Biologist shall flag the Joshua trees depicted in Figure A-4 and the desert washes/drainages shown in Figures A-2a, and b as Environmentally Sensitive Areas (ESAs). Work shall not begin until the ESAs are delineated on the ground with orange safety netting established under supervision of the Designated Biologist. The ESAs for desert washes shall be delineated to protect all the drainages outside of permitted construction (i.e., at the edge of pavement or edge of ROW, depending on the segment), with fencing extending 20 feet out from the drainage along the edge of the construction footprint on both sides of the stream. The ESA fences for Joshua trees shall be installed 20 feet out from the base of the trunk, except where they occur on road edges; on this boundary, the fencing shall be installed at the edge of pavement. The ESA fences shall remain in place for the entire duration of construction. No earth-moving activities, vegetation removal, vehicles, heavy equipment, or other construction shall be permitted within the ESAs.
2. Identify and Avoid Noxious Weed Occurrences. The Designated Biologist shall identify and fence noxious weed occurrences within the construction footprint to prevent their spread into uninfested areas from contaminated tires and undercarriages, or by using the contaminated soil for backfill in other areas. Noxious weeds ranked as having a “high” threat to California wildlands as defined by CAL-IPC (2006), noxious weeds rated “A” by the California Department of Food and Agriculture, and any federal-rated pest plants (CDFA 2009) shall be fenced wherever they occur within the construction footprint; fencing shall be installed at the perimeter of the occurrence. If the occurrence cannot be avoided, the area shall be scraped of its upper 12 inches of soil and the contaminated soil disposed of at an appropriate landfill under the guidance or approval of the County Agricultural Commissioner.
3. Minimize Soil Compaction: Soil compaction shall be minimized in areas that support native vegetation, except on slopes greater than 5 percent and as necessary to prevent slope failure. In areas that would support natural revegetation the upper 6-12 inches of soil shall be loosened.

4. **Revegetate Disturbed Areas:** Upon completion of construction, all areas not previously disturbed areas shall be revegetated, excluding the road and roadbed. The following measures shall be implemented for the revegetation effort:
 - a. **Stockpile Native Topsoil:** Topsoil shall be stockpiled from the project site for use in revegetation of the disturbed soils of the trench. The upper 1 inch of topsoil which contains the seedbank shall be scraped and stockpiled for use as the top-dressing for the revegetation area. An additional 6 to 8 inches of soil below the top 1 inch of soil shall also be scraped and separately stockpiled for use in revegetation areas. All other elements of soil stockpiling shall be described on pages 39-40 of *Rehabilitation of Disturbed Lands in California* (Newton and Claassen 2003),
 - b. **Revegetate With Native Species:** Only seed from locally occurring species from shall be used for revegetation. Seeds shall contain a mix of short-lived early pioneer species such as native annuals and perennials and subshrubs (for example, squirreltail, cheesebush, matchweed, peppergrass, rabbitbrush, creosote bush, burro-weed, wolfberry, Nevada tea, needlegrass, rice grass, goldenhead). Seeding shall be conducted as described in Chapter 5 of *Rehabilitation of Disturbed Lands in California* (Newton and Claassen 2003). A list of plant species suitable for Mojave Desert region revegetation projects, including recommended seed treatments, are included in Appendix A-8 of the same report. The list of plants observed during the 2010 special-status plant surveys of the Rosamond Alternative can also be used as a guide to site-specific plant selection for revegetation.
5. **Acquire Habitat:** To fully mitigate for habitat loss and potential take of desert tortoise and Mohave ground squirrel, the project owner shall acquire, in fee or in easement, no less than 33.6 acres of land suitable for these species and shall provide funding for the enhancement and long-term management of these compensation lands. 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-profit organization dedicated to Mojave Desert habitat conservation, subject to approval by the CPM, in consultation with CDFG and USFWS prior to land acquisition or management activities. If habitat disturbance exceeds that described in this analysis, the project owner shall be responsible for acquisition and management of additional compensation lands or additional funds required to compensate for any additional habitat disturbances. Additional funds shall be based on the adjusted market value of compensation lands at the time of construction to acquire and manage habitat. The acquisition and management of compensation lands, including selection criteria, review and approval of lands prior to acquisition, and acquisition conditions shall be as described in staff's proposed Condition of Certification **BIO-11**.

Verification: Within 90 days after completion of project construction, the project owner shall provide to the CPM verification that disturbance to Mojave creosote scrub habitat did not result in impacts to Mojave creosote scrub habitat adjacent to work areas. If habitat disturbance exceeded that described in this analysis, the CPM shall notify the project owner of any additional funds required or compensation acreage that must be purchased to compensate for any additional habitat disturbances at the adjusted market value at the time of construction to acquire and manage habitat .

No less than 90 days prior to acquisition of the compensation lands property, the project owner, or a third-party approved by the CPM, in consultation with CDFG and USFWS, shall submit a formal acquisition proposal to the CPM, CDFG, and USFWS describing the parcel(s) intended for purchase.

Draft agreements to delegate land acquisition to CDFG or an approved third party and agreements to manage compensation lands shall be submitted to Energy Commission staff for review and approval (in consultation with CDFG) prior to land acquisition. Such agreements shall be mutually approved and executed at least 60 days prior to start of any project-related ground disturbance activities within 500 feet

of the Rosamond Alternative alignment or the northern emergency access road. The project owner shall provide written verification to the CPM that the compensation lands and/or conservation easements have been acquired and recorded in favor of the approved recipient(s). Alternatively, before beginning project ground-disturbing activities within 500 feet of the Rosamond Alternative alignment or the northern emergency access road or any other activities that could result in take in those areas, the project owner shall provide Security in accordance with this condition. Within 90 days after the compensation land and/or easement purchase, as determined by the date on the title, the project owner shall provide the CPM with a management plan for review and approval, in consultation with CDFG, for the compensation lands and associated funds.

RATIONALE

General – Consistency with General Conditions Definitions, page 7-1.

General – Clarification was made that timing is related to activities that may impact the pipeline or emergency access road by incorporating a buffer zone.

Point No. 4 – Clarification was made that revegetation only applies to areas not previously disturbed that are impacted by the pipeline.

**BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION
OF THE STATE OF CALIFORNIA**

**APPLICATION FOR CERTIFICATION FOR
THE BEACON SOLAR ENERGY PROJECT**

DOCKET NO. 08-AFC-2

PROOF OF SERVICE
(Revised 1/26/10)

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Declaration of Service

I, Lois Navarrot, declare that on February 2, 2010, I served and filed copies of the attached **Beacon Solar Energy Project's Post-Workshop Revisions to Biological Resources Conditions of Certification**. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at: www.energy.ca.gov/sitingcases/beacon. The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service List) and to the Commission's Docket Unit, in the following manner:

(check all that apply)

For Service to All Other Parties

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

by personal delivery or by depositing in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed as provided on the Proof of Service List above to those addresses **NOT** marked "email preferred."

AND

For Filing with the Energy Commission

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

OR

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

California Energy Commission
Attn: Docket No. 08-AFC-2
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.

/s/
Lois Navarrot