

August 4, 2010

Mr. Christopher Meyer
CEC Project Manager
Attn: Docket No. 08-AFC-13
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

DOCKET	
08-AFC-13	
DATE	<u>AUG 04 2010</u>
RECD.	<u>AUG 04 2010</u>

RE: Calico Solar (formerly Solar One) Project (08-AFC-13)
Applicant's Submittal of Requested Changes to Specific Biological Resources Conditions

Dear Mr. Meyer:

Tessera Solar hereby submits the Applicant's Requested Changes to Specific Biological Resources Conditions. I certify under penalty of perjury that the foregoing is true, correct, and complete to the best of my knowledge.

Sincerely,



Felicia L. Bellows
Vice President of Development

BIO-12 SPECIAL-STATUS PLANT IMPACT AVOIDANCE AND MINIMIZATION

This condition contains the following five sections:

- **Section A: White-margined Beardtongue Avoidance and Minimization Measures** describes measures to protect all white-margined beardtongue plants located within the project ~~area or within 250 feet of its boundaries, to the extent feasible~~ (including access roads, staging areas, laydown areas, parking and storage areas) from accidental and indirect impacts during construction, operation, and closure.
- **Section B: Conduct Late Season Botanical Surveys** describes guidelines for conducting summer-fall 2010 surveys to detect special-status plants that would have been missed during the spring 2010 surveys.
- **Section C: Avoidance Requirements for Special-Status Plants Detected in the Summer/Fall 2010 Surveys** outlines the level of avoidance required for plants detected during the summer-fall surveys, based on the species' rarity and status codes.
- **Section D: Off-Site Compensatory Mitigation for Special-Status Plants** ~~describes surveys on all lands that will be acquired as part of the desert tortoise compensatory mitigation requirements and public lands for any CNPS List 1 or List 2 plants detected during late summer/fall season surveys that could not be avoided, and additional surveys that may be conducted within suitable habitat on public lands, describes performance standards for mitigation for a range of options for compensatory mitigation through acquisition, restoration/ enhancement, or a combination of acquisition and restoration/enhancement, or in lieu fees.~~
- **Section E: Conformance with BLM and San Bernardino County Plant Protection Policies** describes measures to ~~salvage and transplant or replace with nursery stock on- or off-site inventory~~ certain cactus, yucca, and other species in conformance with BLM and San Bernardino County policies.

"Project Disturbance Area" encompasses all areas to be temporarily and permanently disturbed by the Project, including the plant site, linear facilities, and areas disturbed by temporary access roads, fence installation, construction work lay-down and staging areas, parking, storage, or by any other activities resulting in disturbance to soil or vegetation.

"Special Status plants" means CNPS List 1 or List 2 species.

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

Section A: White-margined Beardtongue Avoidance and Minimization Measures.

To protect all white-margined beardtongue plants located within the project area ~~or within 250 feet of its boundaries, to the extent feasible~~ (including access roads, staging areas, laydown areas, parking and storage areas) from accidental and indirect impacts during construction, operation, and closure, the Project owner shall implement the following measures:

1. Designated Botanist. An experienced botanist who meets the qualifications

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described in Section B-2 below shall oversee compliance with all special-status plant avoidance, minimization, and compensation measures described in this condition throughout construction, operation, and closure. The Designated Botanist shall oversee and train all other Biological Monitors tasked with conducting botanical survey and monitoring work.

2. White-margined Beardtongue Impact Avoidance and Minimization Plan. The Project owner shall prepare and implement a White-margined Beardtongue Impact Avoidance and Minimization Plan and shall incorporate the Plan into the BRM IMP (BIO-7). The Plan shall be designed to prevent direct or indirect effects of project construction and operation to all white-margined beardtongue occurrences within the project boundary, and to any other special status plants including small-flowered androstephium located within Environmentally Sensitive Areas (defined below). The Plan shall include the following elements:
 - a. Designate Environmentally Sensitive Areas (ESAs). Before construction, designate ESAs to protect all known white-margined beardtongue locations on the project site or or within 250 feet of site boundaries Project Disturbance Areas, as practicable. The ESAs shall include at a minimum, the 55.7 acres of white margined beardtongue occurrences identified on Applicant's Exhibit 57, Alternative Site Layout #2. The locations of ESAs shall be clearly depicted on construction drawings, which shall also include all avoidance and minimization measures on the margins of the construction plans. The boundaries of the ESAs shall be provide a minimum of 250 feet buffer area between white-margined beardtongue plant locations and any ground-disturbing project activity. The ESAs shall be clearly delineated in the field with permanent fencing and signs prohibiting movement of the fence under penalty of work stoppages and additional compensatory mitigation. ESAs shall also be permanently marked (with signage or other markers) to ensure that avoided plants are not inadvertently harmed during construction, operation, or closure.
 - ~~a.~~ Baseline data. Document baseline conditions, including numbers and areal extent of white-margined beardtongue and any other special-status plant occurrences (other than small-flowered androstephium for which the SSA concludes that impacts are less than significant) within the ESAs;
 - ~~d.~~ Success criteria. Specify success standards for protection of special-status plant occurrences within the ESAs, and identify specific triggers for remedial action (e.g., numbers of plants dropping below a threshold);
 - ~~e.~~ Literature review. Describe and reference any available information about microhabitat preferences and fecundity, essential pollinators, reproductive biology, and propagation and culture requirements for white-margined beardtongue and any other special-status species within the ESAs;

f.e. Protection and avoidance measures. Describe measures (e.g., fencing, signage) to avoid direct and indirect construction and operation impacts to special-status plants within the ESAs; these shall include but shall not be limited to: (1) training components specific to protection of white-margined beardtongue and surrounding habitat buffer area, which shall be incorporated into the WEAP described in BIO-6; (2) detailed specifications for avoiding herbicide and soil stabilizer drift, and shall include a list of herbicides and soil stabilizers that may be used on the Project with manufacturer's guidance on appropriate use; the Plan shall reference the Weed Management Plan (see Condition of Certification BIO-1 1) and shall be consistent with provisions of that Plan; (3) measures to ensure that erosion and sediment control does not inadvertently impact special-status plants located within an ESA (e.g., by using invasive or non-native plants in seed mixes, introducing pest plants through contaminated seed or straw, etc.). Where applicable, these measures shall be incorporated in the Weed Management Plan and Storm Water Pollution Prevention Plan. Also, designate spoil areas; equipment, vehicle, and materials storage areas; parking; equipment and vehicle maintenance areas, and; wash areas at least 100 feet from boundaries of any ESAs, as practicable;

g.f. Monitoring and Reporting Requirements. The Designated Botanist shall conduct weekly monitoring of the ESAs during any construction, operation, or and decommissioning activities within 100 feet of the ESAs, and quarterly monitoring for the remainder of construction during operations. ~~The Project owner shall also conduct annual monitoring of the avoided occurrences on site, and off-site occurrences that are adjacent to the Project, for the life of the Project~~ (see Verification, below).

h.g. Remedial Action Measures. Specify remedial action measures to be implemented if success standards (above) are not met at any time during the life of the project;

i.h. Seed Collection. Over the life of the project, the project owner shall collect a small proportion of any seed produced by white-margined beardtongue plants protected on-site within ESAs. The collection technique shall follow seed collection and storage guidelines contained in (Wall 2009a; Bainbridge 2007). Collection of seed shall be done by the Rancho Santa Ana Botanic Garden (RSABG) Conservation Program staff or other qualified seed or restoration specialist. The Project owner shall be responsible for all costs associated with seed collection and storage. All seed storage shall occur at RSABG or other qualified research institution and at least 40% of the collected seed shall remain in long-term storage at RSABG Seed Conservation Program, San Diego Natural History Museum, or other qualified seed conservation program;

i. Propagation research. ~~The project own shall be responsible for evaluating potential white-margined beardtongue propagation and reintroduction methods for eventual implementation on-site or off-site; a portion of seed (above) shall be made available for propagation research which may at~~

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some time inform contingency propagation efforts on the project site or elsewhere; propagation experimentation shall be funded by the project owner and conducted by a qualified research institution such as Rancho Santa Ana Botanic Garden.

j. Off-site sand transport monitoring and management. The White-margined Beardtongue Impact Avoidance and Minimization Plan shall include a sand transport monitoring and management to document and manage project effects to eastward sand transport to occupied white-margined beardtongue aeolian sand habitat off-site to the east. At minimum, the plan shall include the following elements (1) quantify baseline eastward sand transport from the project area into the adjacent BLM Pisgah Crater ACEC, following methods described by Etyomesian et al. (2010); (2) specify methods and schedule for annual sand transport monitoring throughout the first five years of the project's life; (3) identification of thresholds which would trigger remediation requirements; and (4) development of adaptive management strategies to supplement eastward sand transport into the ACEC if needed. These strategies may include revisions to project fencing design, importing sand from off-site, or transporting sand across the project site for further dispersal. No sand transport remediation work would be permitted to cause new land disturbance outside the project area as analyzed in this SSA.

k.i. Off-site weed monitoring and management. The White-margined Beardtongue Impact Avoidance and Minimization Plan shall include methods and schedule to monitor and manage weed abundance in occupied and suitable white-margined beardtongue habitat to the east. At minimum, the plan shall (1) quantify baseline weed abundance in the portion of the ACEC adjacent BLM Pisgah Crater ACEC, adjacent to and within 500 m of the eastern project boundary, north of the BNSF railroad tracks; (2) weed abundance monitoring schedule and methods to implement throughout that area by collecting and analyzing quantitative weed abundance during every year of average or greater rainfall throughout the life of the project; (3) identify weed abundance thresholds which would trigger remediation requirements; and (4) specify weed control methods to be implemented as needed in occupied and suitable white-margined beardtongue habitat throughout the area described above.

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Section B: Conduct Late-Season Botanical Surveys

The Project owner shall conduct late-summer/fall botanical surveys for late-season special-status plants as described below:

1. Survey Timing. To the extent feasible, surveys shall be timed to detect: a) summer annuals triggered to germinate by the warm, tropical summer storms (which may occur any time between June and October), and b) fall-blooming perennials that respond to the cooler, later season storms that originate in the Pacific northwest (typically beginning in September or October) shall only be required if blooms and seeds are necessary for identification or the species are

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~~summer-deciduous and require leaves for identification.~~ The survey dates shall be based on plant phenology and the timing of a significant storm (i.e., a 10 mm or greater rain or ~~multiple storm events of sufficient volume to trigger germination,~~ as measured at or within 1 mile of the Project site) if an event is recorded. ~~Surveys for summer annuals shall be timed to occur approximately 4 to 7 weeks following a warm, tropical storm. Re-surveys shall occur as many times as necessary to ensure that surveys are conducted during at the appropriate time to capture the characteristics necessary to identify identification period for the target taxa, which may be blooms, fruit, seed characteristics, or vegetative characteristics, depending on the taxon.~~ However, due to the undependable nature and scattered patterns of summer and early fall rainfall, it is possible that no suitable rain event will be documented in the area. Nevertheless, the project own shall be responsible for conducting late-season botanical surveys along washes and other lowland areas on-site due to the possibility that rainstorms in the Cady Mountains may go undetected, but may initiate summer or fall blooms.

2. Surveyor Qualifications and Training. Surveys shall be conducted by a qualified botanist knowledgeable in the complex biology of the local flora, and consistent with CDFG (2009) and BLM (2009) protocols. The botanical survey crew shall be prepared to mobilize quickly to conduct appropriately timed surveys. Each field botanist shall be equipped with a GPS unit and record a complete tracklog; these data shall be compiled and submitted along with the Summer-Fall Survey Botanical Report (described below). Prior to the start of surveys, all crew members shall, at a minimum, visit reference sites (where available) and/or review herbarium specimens of all BLM Sensitive plants, CNPS List 1 B or 2 (Nature Serve rank S1 and S2) or proposed List 1 B or 2 taxa, and any new reported or documented taxa, to obtain a search image. Because ~~the potential for range extensions are likely to be found is unknown,~~ the list of potentially occurring special-status plants shall include all special-status taxa ~~known from the central portion of the Mojave Desert in California~~ reasonably expected to occur in the project area. The list shall also include taxa with bloom seasons that begin in fall and extend into the early spring as many of these are reported to be easier to detect in fall, following the start of the fall rains.
3. Survey Coverage. ~~The survey coverage or intensity shall be in accordance with BLM Survey Protocols (issued July 2009), which specify that intuitive controlled surveys shall only be accomplished by botanists familiar with the habitats and species that may reasonably be expected to occur in the project area. At a minimum, the Applicant shall conduct comprehensive surveys (i.e., 100% visual coverage) of the washes, dune swales, and other lowlands within the project site. In the intervening uplands (e.g., bajadas and rock outcrops) surveys shall be conducted to ensure a 25% visual coverage. Other special or unique habitats associated with rare plants (such as dunes, washes, and chenopod scrubs) shall also be surveyed at 100% visual coverage. Transects shall be "intuitive controlled" (per BLM 2009b) to ensure a focus on habitat most likely to support rare plants (such as desert washes or dunes), rather than on pre-defined, evenly spaced survey grids.~~

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4. Documenting Occurrences. If a special-status plant is detected, the full extent of the population ~~shall be assessed, both onsite and offsite shall be recorded using GPS in accordance with BLM survey protocols. Additionally, the extent of the population within one mile of project boundaries shall be assessed at least qualitatively to facilitate an accurate estimation of the proportion of the population affected by the project. For populations that are very dense or very large, the population size may be estimated by simple sampling techniques. When populations are very extensive or locally abundant, the survey must provide some basis for this assertion and roughly map the extent on a topographic map. The number of individuals shall be counted (or sub-sampled and the population size estimated in the event of large populations). The boundaries of all occurrences shall be recorded with hand-held GPS units of one meter or better accuracy and then plotted on aerial photo base maps of a scale similar to that used in the AFC (SES-2008).~~ All but the smallest populations (e.g., a population occupying less than 100 square feet) shall be recorded as area polygons; small populations may be recorded as point features. All GPS-recorded occurrences shall include: the number of plants, phenology, observed threats (e.g., OHV or invasive exotics), and habitat or community type. The map of occurrences submitted with the ~~progress reports and~~ final botanical report shall be prepared to ensure consistency with ~~mapping protocol and~~ definitions of an occurrence in by CNDDBCNPS-, i.e., occurrences found within 0.25 miles of another occurrence of the same taxon, and not separated by significant habitat discontinuities, shall be combined into a single 'occurrence.' The Project Owner shall also submit the raw GPS shape files and metadata, ~~and completed CNDDBCNDB forms for each 'occurrence' (as defined by CNDDBCNDB).~~
5. Reporting. ~~Progress Reports shall be submitted during surveys (as described below in verification), and shall include: a) the raw GPS data and metadata; b) a spreadsheet of the data (from the 'dbf' file), and c) a map of the data showing occurrence locations (labeled with their corresponding occurrence number from the GPS files) and Project features on a USGS topographic base map. Raw GPS data, metadata, and CNDDDB field forms shall be provided to the CPM within two weeks of the completion of each the survey. If surveys are split into two or more periods (e.g., a late summer survey and a fall survey), then a summary letter shall be submitted following each survey period.~~

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

- a. the BLM designation, NatureServe Global and State Rank of each species or taxon found (or proposed rank, or CNPS List);
- b. the number or percent of the occurrence that will be directly affected, and indirectly affected by changes in drainage patterns or altered geomorphic processes;
- c. the habitat or plant community that supports the occurrence and the total acres of that habitat or community type that occurs in the Project Disturbance Area;

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- d. an indication of whether the occurrence has any local or regional significance (e.g., if it exhibits any unusual morphology, occurs at the periphery of its range in California, represents a significant range extension or disjunct occurrence, or occurs in an atypical habitat or substrate);
- e. a completed CNDDDB field form for every occurrence (occurrences of the same species within 0.25 mile or less of each other will be combined as one occurrence, consistent with CNDDDB methodology), and;
- f. two maps: one that depicts the raw GPS data (as collected in the field) on a topographic base map with Project features; and a second map that follows the CNDDDB protocol for occurrence mapping, which lumps two or more occurrences of the same species within one-quarter mile or less of each other into one occurrence.

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

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

Mitigation for CNDDBCNPS Rank 1 Plants (Critically Imperiled) – 75% Avoidance Required: If species with a CNDDBCNPS rank of 1 are detected within the Project Disturbance Area ~~or are otherwise directly impacted by discharges from or the diversion of streams around the Project~~, the Project owner shall implement avoidance measures to protect at least 75% of the local population of this species. If after agency consultation, avoidance would not satisfy the long-term viability of the plant population, compensatory mitigation alone would be allowed. The local population shall be measured by the number of individuals occurring on the Project site and within the immediate watershed of the project for wash-dependent species or species of unknown dispersal mechanism, or the within the local sand transport corridor for wind-dispersed species. Avoidance shall include protection of the ecosystem processes essential for maintenance of the protected plant occurrence, as practicable. Plant individuals within the ESAs established pursuant to Section A above are considered to be protected. ~~However, isolated 'islands' of protected plants disconnected by the Project from natural fluvial or aeolian processes shall not be considered to be protected and shall not be credited as contributing to the 75% avoidance requirement because such isolated populations are not sustainable.~~ The Project owner shall provide compensatory mitigation as described below in Section D for Project impacts to CNDDBCNPS Rank 1 plants (impacts cannot exceed 25% of the local population) that could not be avoided.

Mitigation for CNDDBCNPS Rank 2 Plants (Imperiled) – 75% Avoidance Where Feasible: If species with a CNDDBCNPS rank of 2 are detected within the Project Disturbance Area, the Project owner shall implement avoidance measures where feasible to protect 75% of the local population of this species with the exception of small-flowered androstephium and Utah vine milkweed, which impacts have been determined to be not significant. Avoidance is feasible if avoidance results in 10 percent or less loss of electrical output. The Project owner shall provide compensatory mitigation as described

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below in Section D for impacts to [CNPS list 2](#) plants other than [small-flowered androstephium](#) that could not be avoided.

Mitigation for [CNDDBCNPS](#) Rank 3 Plants (Vulnerable) – No On-Site

Mitigation for [CNDDBCNPS](#) Avoidance Required Unless Local or Regional Significance: If species with a [CNDDBCNPS](#) rank of 3 are detected within the Project Disturbance Area, no onsite avoidance or compensatory mitigation shall be required unless the occurrence has local or regional significance, in which case the plant occurrence shall be treated as a [CNDDBCNPS](#) 2 ranked plant. A plant occurrence would be considered to have local or regional significance if:

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- a. It occurs at the outermost periphery of its range in California;
- b. It occurs in an atypical habitat, region, or elevation for the taxon that suggests that the occurrence may have genetic significance (e.g., that may increase its ability to survive future threats), or;
- c. It exhibits any unusual morphology that is not clearly attributable to environmental factors that may indicate a potential new variety or subspecies.

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

Preservation of the Germplasm of Affected Special-Status Plants. For all significant impacts to special-status plants, regardless of whether compensatory mitigation is required, mitigation shall include seed collection from the affected special-status plants on-site prior to construction to conserve the germplasm and provide a seed source for restoration efforts. The seed shall be collected under the supervision or guidance of a reputable seed storage facility such as the Rancho Santa Ana Botanical Garden Seed Conservation Program, San Diego Natural History Museum, or the Missouri Botanical Garden. The costs associated with the long-term storage of the seed shall be the responsibility of the Project owner. Any efforts to propagate and reintroduce special-status plants from seeds in the wild shall be carried out under the direct supervision of specialists such as those listed above and as part of a Habitat Restoration/Enhancement Plan approved by the CPM.

Section D: Off-Site Compensatory Mitigation for Special-Status Plants [Taken from REAT document dated July 30 in Ivanpah case]

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Surveys on Acquired and Public Lands: Where compensatory mitigation is required under the terms of Section C, above, the project owner shall conduct floristic surveys for any CNPS List 1 or List 2 plants detected during late summer/fall season surveys that could not be avoided, on all lands that will be or have been acquired as part of the desert tortoise compensatory mitigation requirements (see Condition of Certification BIO-17). The goal of the surveys shall be to identify at least the same number of occurrences on off-site compensation or public lands as the number of occurrences in the project area excluding the occurrences in the 55.7 acres of white margined beardtongue occurrences identified on Applicant's Exhibit 57, Alternative Site Layout #2. If this goal is not met by surveys on proposed acquisition lands, additional surveys shall

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be conducted within suitable habitat on public lands. To be counted toward fulfillment of the goal, the occurrences must reflect new data not previously documented in other survey efforts. The survey requirements shall include the following:

- All surveys shall be conducted by a qualified botanist in accordance with BLM, CDFG, and CNPS plant survey guidelines;
- Surveys shall occur the first spring after construction begins and continue each year for a maximum of ten years until the same number of special-status plant occurrences are identified on acquisition lands and/or public lands as located outside the ESAs designated pursuant to Section A above;
- For each year surveys are conducted yearly survey results shall be provided to the CPM, BLM's Authorized Officer and CDFG, and shall include CNPS field survey forms for all special-status plant species encountered during the surveys;
- All field survey forms shall be submitted to the CNDDDB at the time of submittal to the CPM, BLM and CDFG; and
- The project owner's qualified botanist shall submit a completion report documenting fulfillment of the target goals and which describe the number of new, previously undiscovered occurrences identified and mapped. Locations shall be reported with GPS coordinates compatible with inclusion in a GIS database.

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Where compensatory mitigation is required under the terms of Section C, above, the Project owner shall mitigate Project impacts to special-status plant occurrences with compensatory mitigation. Compensatory mitigation shall consist of acquisition of habitat supporting the target species, restoration/enhancement of populations of the target species, or a combination of acquisition and restoration/enhancement as provided within this Condition. Finally, if the project owner chooses, an in-lieu fee can be paid to satisfy these requirements. If all or a portion of the acquired habitat compensation lands for Bio-17 provide for the replacement of the Special-Status Plants impacted, then the requirements of this condition will be reduced by that amount. Compensatory mitigation shall be at a 3:1 ratio for CNDDDB Rank 1 plants, with three acres of habitat acquired or restored/enhanced for every acre of special-status plant habitat disturbed by the Project Disturbance Area. The Project owner shall provide funding for the acquisition and/or restoration/enhancement, initial improvement, and long-term maintenance and management of the acquired or restored lands or pay in lieu fees to satisfy this requirement. The actual costs to comply with this condition will vary depending on the Project Disturbance Area, the actual costs of acquiring compensation habitat, the actual costs of initially improving the habitat, the actual costs of long-term management as determined by a Property Analysis Record (PAR) report, and other transactional costs related to the use of compensatory mitigation.

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

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

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

1. Occupied Habitat, No Habitat Threats. The compensation lands selected for acquisition shall be occupied by the target plant population and shall be characterized by site integrity and habitat quality that are required to support the target species, and shall be of equal or better habitat quality than that of the affected occurrence. The occurrence of the target special-status plant on the proposed acquisition lands should be viable, stable or increasing (in size and reproduction).
2. Occupied Habitat, Habitat Threats. Occupied compensation lands characterized by habitat threats may also be acquired as long as the population could be reasonably expected to recover with minor restoration (e.g., OHV or grazing exclusion, pest plant removal) and is accompanied by a Habitat Enhancement/Restoration Plan as described in Section D.II, below.
3. Unoccupied but Adjacent. The Project owner may also acquire habitat for which occupancy by the target species has not been documented, if the proposed acquisition lands are adjacent to occupied habitat. The Project owner shall provide evidence that acquisitions of such unoccupied lands would improve the defensibility and long-term sustainability of the occupied habitat by providing a protective buffer around the occurrence and by enhancing connectivity with undisturbed habitat.

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

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

Integrating Special Status Plant Mitigation with Other Mitigation Lands. If all or any portion of the acquired Desert Tortoise, Waters of the State, or other required compensation lands meets the criteria above for special-status plant compensation lands, the portion of the other species' or habitat compensation.

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

- a. Preliminary Report. The Project owner, or an approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary or requested documents for the proposed compensation land to the CPM. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPM. For conveyances to the State, approval may also be required from

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the California Department of General Services, the Fish and Game Commission and the Wildlife Conservation Board.

b. Title/Conveyance. The Project owner shall acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement, as required by the CPM. Any transfer of a conservation easement or fee title must be to CDFG, a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM or other public agency approved by the CPM. If an approved non-profit organization holds fee title to the compensation lands, a conservation easement shall be recorded in favor of CDFG or another entity approved by the CPM. If an entity other than CDFG holds a conservation easement over the compensation lands, the CPM may require that CDFG or another entity approved by the CPM, in consultation with CDFG, be named a third party beneficiary of the conservation easement. The Project owner shall obtain approval of the CPM of the terms of any transfer of fee title or conservation easement to the compensation lands.

c. Initial Protection and Habitat Improvement. The Project owner shall fund activities that the CPM requires for the initial protection and habitat improvement of the compensation lands. These activities will vary depending on the condition and location of the land acquired, but may include trash removal, construction and repair of fences, invasive plant removal, and similar measures to protect habitat and improve habitat quality on the compensation lands. The costs of these activities are estimated to be \$750 per acre (\$250 per acre, using the estimated cost per acre for Desert Tortoise mitigation as a best available proxy, at a 3:1 ratio, but actual costs will vary depending on the measures that are required for the compensation lands). A non-profit organization, CDFG or another public agency may hold and expend the habitat improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965), if it meets the approval of the CPM in consultation with CDFG, and if it is authorized to participate in implementing the required activities on the compensation lands. If CDFG takes fee title to the compensation lands, the habitat improvement fund must be paid to CDFG or its designee.

d. Property Analysis Record. Upon identification of the compensation lands, the Project owner shall conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the CPM before it can be used to establish funding levels or management activities for the compensation lands.

e. Long-term Maintenance and Management Funding. The Project owner shall provide money to establish an account with non-wasting capital that will be used to fund the long-term maintenance and management of the compensation lands. The amount of money to be paid will be determined through an approved PAR or PAR-like analysis conducted for the compensation lands. Until an approved PAR or PAR-like analysis is conducted for the compensation lands, the amount of required funding is initially estimated to be \$4,350 for every acre of compensation

Comment [A1]: ??? are we fighting this??

Comment [R2]: Yes, but not here. Bigger overarching notion.

lands, using as the best available proxy the estimated cost of \$1,450 per acre for Desert Tortoise compensatory mitigation, at a 3:1 ratio. If compensation lands will not be identified and a PAR or PAR-like analysis completed within the time period specified for this payment (see the verification section at the end of this condition), the Project owner shall either: (i) provide initial payment equal to the amount of \$4,350 multiplied by the number of acres the Project owner proposes to acquire for compensatory mitigation; or (ii) provide security to the Energy Commission under subsection (g), "Mitigation Security," below, in an amount equal to \$4,350 multiplied by the number of acres the Project owner proposes to acquire for compensatory mitigation. The amount of the required initial payment or security for this item shall be adjusted for any change in the Project Disturbance Area as described above. If an initial payment is made based on the estimated per-acre costs, the Project owner shall deposit additional money as may be needed to provide the full amount of long-term maintenance and management funding indicated by a PAR or PAR-like analysis, once the analysis is completed and approved. If the approved analysis indicates less than \$4,350 per acquired acre (at a 3:1 ratio) will be required for long-term maintenance and management, the excess paid will be returned to the Project owner. The Project owner must obtain the CPM's approval of the entity that will receive and hold the long-term maintenance and management fund for the compensation lands. The CPM will consult with CDFG before deciding whether to approve an entity to hold the Project's long-term maintenance and management funds.

The Project owner shall ensure that an agreement is in place with the long-term maintenance and management fund holder/manager to ensure the following requirements are met:

- I. Interest. Interest generated from the initial capital long-term maintenance and management fund shall be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and any other action that is approved by the CPM and is designed to protect or improve the habitat values of the compensation lands.
- II. Withdrawal of Principal. The long-term maintenance and management fund principal shall not be drawn upon unless such withdrawal is deemed necessary by the CPM or by the approved third-party long-term maintenance and management fund manager, to ensure the continued viability of the species on the compensation lands.
- III. Pooling Long-Term Maintenance and Management Funds. An entity approved to hold long-term maintenance and management funds for the Project may pool those funds with similar non-wasting funds that it holds from other projects for long-term maintenance and management of compensation lands for special-status plants. However, for reporting purposes, the long-term maintenance and management funds for this Project must be tracked and reported individually to the CPM.

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

g. Mitigation Security. The Project owner shall provide financial assurances to the CPM to guarantee that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing Project activities. Because the project related impacts will occur in phases, the mitigation security will similarly be phased. Financial assurances shall be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or another form of security ("Security") approved by the CPM. The amount of the Security shall be \$10,503 per acre (\$3,501 per acre, using the estimated cost per acre for Desert Tortoise mitigation as a best available proxy, at a 3:1 ratio; see Biological Resources Tables 5 and 7) for every acre of habitat supporting the target special status plant species which is significantly impacted by the project. The actual costs to comply with this condition will vary depending on the actual costs of acquiring compensation habitat, the costs of initially improving the habitat, and the actual costs of long-term management as determined by a PAR report. Prior to submitting the Security to the CPM, the Project owner shall obtain the CPM's approval of the form of the Security. The CPM may draw on the Security if the CPM determines the Project owner has failed to comply with the requirements specified in this condition. The CPM may use money from the Security solely for implementation of the requirements of this condition. The CPM's use of the Security to implement measures in this condition may not fully satisfy the Project owner's obligations under this condition, and the Project owner remains responsible for satisfying the obligations under this condition if the Security is insufficient. The unused Security shall be returned to the Project owner in whole or in part upon successful completion of the associated requirements in this condition.

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

actual costs or PAR projections are less than the amount initially transferred by the applicant, the remaining balance shall be returned to the Project owner.

- i. The responsibility for acquisition of compensation lands may be delegated to a third party other than NFWF, such as a non-governmental organization supportive of desert habitat conservation, by written agreement of the Energy Commission. Such delegation shall be subject to approval by the CPM, in consultation with CDFG, BLM and USFWS, prior to land acquisition, enhancement or management activities. Agreements to delegate land acquisition to an approved third party, or to manage compensation lands, shall be executed and implemented within 18 months of the Energy Commission's certification of the Project.

II. Compensatory Mitigation by Habitat Enhancement/Restoration: As an alternative or adjunct to land acquisition for compensatory mitigation the Project owner may undertake habitat enhancement or restoration for the target special-status plant species. Habitat enhancement or restoration activities must achieve protection at a 3:1 ratio, with improvements applied to three acres of habitat for every acre special-status plant habitat directly or indirectly disturbed by the Project Disturbance Area. Examples of suitable enhancement projects include but are not limited to the following: i) control unauthorized vehicle use into an occurrence (or pedestrian use if clearly damaging to the species); ii) control noxious weeds that infest or pose an immediate threat to an occurrence; iii) exclude grazing by wild burros or livestock from an occurrence; or iv) restore lost or degraded hydrologic or geomorphic functions critical to the species by restoring previously diverted flows, removing obstructions to the wind sand transport corridor above an occurrence, or increasing groundwater availability for dependent species. If the Project owner elects to undertake a habitat enhancement project for mitigation, the project must meet the following performance standards: The proposed enhancement project shall achieve rescue of an off-site occurrence that is currently assessed, based on the NatureServe threat ranking system (Master et al. 2009; Morse et al. 2004) with one of the following threat ranks: a) long-term decline >30%; b) an immediate threat that affects >30% of the population, or c) has an overall threat impact that is High to Very High. "Rescue" would be considered successful if it achieves an improvement in the occurrence trend to "stable" or "increasing" status, or downgrading of the overall threat rank to slight or low (from "High" to "Very High").

If the Project owner elects to undertake a habitat enhancement project for mitigation, they shall submit a Habitat Enhancement/Restoration Plan to the CPM for review and approval, and shall provide sufficient funding for implementation and monitoring of the Plan. The amount of the Security shall be \$10,503 per acre (\$3,501 per acre, using the estimated cost per acre for Desert Tortoise mitigation as a best available proxy, at a 3:1 ratio) for every acre of habitat supporting the target special-status plant species which is directly or indirectly impacted by the project. The amount of the security may be adjusted based on the actual costs of implementing the enhancement, restoration and monitoring. The implementation and monitoring of the enhancement/restoration may be undertaken by an appropriate third party such as NFWF, subject to approval by the CPM. The Habitat Enhancement/Restoration Plan shall include each of the following:

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1. Goals and Objectives. Define the goals of the restoration or enhancement project and a measurable course of action developed to achieve those goals. The objective of the proposed habitat enhancement plan shall include restoration of a target special status plant occurrence that is currently threatened with a long-term decline. The proposed enhancement plan shall achieve an improvement in the occurrence trend to "stable" or "increasing" status, or downgrading of the overall threat rank to slight or low (from "High" to "Very High").
2. Historical Conditions. Provide a description of the pre-impact or historical conditions (before the site was degraded by weeds or grazing or ORV, etc.), and the desired conditions.
3. Site Characteristics. Describe other site characteristics relevant to the restoration or enhancement project (e.g., composition of native and pest plants, topography and drainage patterns, soil types, geomorphic and hydrologic processes important to the site or species).
4. Ecological Factors. Describe other important ecological factors of the species being protected, restored, or enhanced such as total population, reproduction, distribution, pollinators, etc.
5. Methods. Describe the restoration methods that will be used (e.g., invasive exotics control, site protection, seedling protection, propagation techniques, etc.) and the long-term maintenance required. The implementation phase of the enhancement must be completed within five years.
6. Budget. Provide a detailed budget and time line, develop clear, measurable, objective-driven annual success criteria.
7. Monitoring. Develop clear, measurable monitoring methods that can be used to evaluate the effectiveness of the restoration and the benefit to the affected species. The Plan shall include a minimum of five years of quarterly monitoring, and then annual monitoring for the remainder of the enhancement project, and until the performance standards for rescue of a threatened occurrence are met. At a minimum the progress reports shall include: quantitative measurements of the projects progress in meeting the enhancement project success criteria, detailed description of remedial actions taken or proposed, and contact information for the responsible parties.
8. Reporting Program. The Plan shall ensure accountability with a reporting program that includes progress toward goals and success criteria. Include names of responsible parties.
9. Contingency Plan. Describe the contingency plan for failure to meet annual goals.
10. 1. Long-term Protection. Include proof of long-term protection for the restoration site. For private lands this would include conservation easements or other deed restrictions; projects on public lands must be contained in a Desert Wildlife Management Area, Wildlife Habitat Management Area, or other land use protections that will protect the mitigation site and target species.

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Section E: Conformance with BLM and San Bernardino County Plant Protection Policies

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It is BLM policy to salvage yucca and cactus plants (excluding cholla species, genus *Cylindropuntia*) and transplant them to undisturbed sites within project Rights of Way. ~~Another option would be to replace them with nursery stock on- or off-site, as agreed to by the Agencies.~~ The San Bernardino County Plant Protection and Management Ordinance regulates the following where they occur on nongovernment land (San Bernardino County Code 88.01): desert native plants with stems 2 inches or greater in diameter or 6 feet or greater in height: *Psoralea* [Dalea] *spinosa* (smoke tree), *Prosopis* spp. (mesquites), all species of the family Agavaceae (century plants, nolinias, yuccas), creosote rings 10 feet or greater in diameter, all Joshua trees; and any part of any of the following species, whether living or dead: *Olneya tesota* (desert ironwood), all species of the genus *Prosopis* (mesquites), and all species of the genus *Cercidium* (palo verdes). Staff recognizes that the project site is on public land and thus not ~~strictly~~ subject to the County ordinance. ~~Moreover, staff recognizes that the reduction of the project footprint from 8,230 acres to 6,215 acres results in the avoidance of the great majority of the plant occurrences subject to the County ordinance.~~ However, staff notes that the proposed project would convert the site to exclusive private use and is, in effect, a private project. Staff recommends conformance with the spirit of the County standards, as follows:

- a. The project owner shall submit a letter report summarizing the inventory of all plants subject to BLM and County policies on the project site that would be removed or damaged by proposed project construction
- ~~b. The project owner shall prepare a Protected Plant Salvage Plan in conformance with BLM and San Bernardino County standards for review and approval by the CPM. The plan shall include detailed descriptions of proposed methods to salvage plants; transport them; store them temporarily (as needed); maintain them in temporary storage (i.e., irrigation, shade protection, etc.); proposed transplantation locations and methods for permanent relocation; proposed irrigation and maintenance methods at transplantation sites; and a monitoring plan to verify survivorship and establishment of translocated plants for a minimum of five years.~~
- ~~c. Prior to initiating any ground-disturbing activities on the project site, the project owner shall implement the Protected Plant Replacement measures as approved by the CPM, BLM's State Botanist, and the County.~~

Comment [A3]: THIS IS HUGE! They are asking we create a plan to protect the County plants. I'm trying to get a map of where all of these are so we can see what the deal is. For now – I think we have to say no.

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

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

The Project owner shall submit a monitoring report every year for the life of the project to monitor effectiveness of protection measures for all avoided special-status plants to the CPM

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and BLM State Botanist. The monitoring report shall include: dates of worker awareness training sessions and attendees, an inventory of the special-status plant occurrences and description of the habitat conditions, an indication of population and habitat quality trends, and description of the remedial action, if warranted and planned for the upcoming year.

Section A. No less than 30 days prior ~~Prior~~ to the start of ground-disturbing activities the Project owner shall submit grading plans and construction drawings depicting the location of Environmentally Sensitive Areas and the Avoidance and Minimization Measures contained in Section A of this Condition. The project owner shall coordinate with the CPM and BLM's Wildlife Biologist to revise and finalize boundaries of the ESAs.

Prior ~~No less than 30 days prior~~ to the start of ground-disturbing activities the Project owner shall submit to the CPM for review and approval, in consultation with the BLM State Botanist, the name and resume of the project's Designated Botanist. If a Designated Botanist needs to be replaced, the specified information of the proposed replacement must be submitted to BLM's Wildlife Biologist and the CPM as soon as possible prior to the termination or release of the Designated Biologist. In an emergency, the project owner shall immediately notify the BLM's Wildlife Biologist and the CPM to discuss the qualifications and approval of a short-term replacement while a permanent Designated Botanist is proposed to BLM's Wildlife Biologist and the CPM and for consideration.

Prior ~~No less than 30 days prior~~ to ground-disturbing activities the Project owner shall submit a draft White-margined Beardtongue Impact Avoidance and Minimization Plan to the CPM for review and approval, in consultation with the BLM State Botanist. Implementation of the white-margined beardtongue impact avoidance and minimization measures shall be reported in the Monthly Compliance Reports prepared by the Designated Botanist. Within 30 days after completion of Project construction, the Project owner shall provide to the CPM, for review and approval in consultation with the BLM State Botanist, a written construction termination report identifying how measures have been completed.

The Project owner shall submit a monitoring report every year for the life of the project to monitor effectiveness of protection measures for all avoided white-margined beardtongue ESAs to the CPM and BLM State Botanist. The monitoring report shall include: dates of worker awareness training sessions and attendees, an inventory of the special-status plant occurrences and description of the habitat conditions, an indication of population and habitat quality trends, and description of the remedial action, if warranted and planned for the upcoming year. The project owner shall coordinate with the CPM and BLM's Wildlife Biologist to revise and finalize monitoring reports and all reports described in this section, and shall specifically report any difficulties in meeting the protection goals and cooperatively develop adaptive measures as needed.

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

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

Prior to construction, the project owner shall provide verification that seed of any special status plants on the project site have been collected and conveyed to a facility (as described in this measure) and that suitable long-term funding has been provided by the project owner.

Section D. On January 31st of each year following construction the project owner's Designated Botanist shall submit a report, including CNPS field survey forms, describing the results of off-site plant surveys conducted pursuant to Section D above to the BLM's authorized officer, the CPM, CDFG, and CNDDDB. Submittal of survey reports shall continue for a maximum of 10 years until the same number of occurrences in the project area excluding the occurrences in the ESAs impacted by the project for CNPS List 1 or List 2 species detected during late summer/fall season surveys that could not be avoided, are identified on these off-site lands. The project owner's Designated Botanist shall submit a completion report documenting fulfillment of the target goals and which describe the number of new, previously undiscovered occurrences identified and mapped using GIS techniques for each species. Mapping results shall include GPS coordinates of the plants found.

If compensatory mitigation is required, no less than 30 days prior to the start of ground-disturbing activities, the Project owner shall submit to the CPM Security adequate to acquire compensatory mitigation lands and/or undertake habitat enhancement or restoration activities, as described in this condition. No fewer than 90-30 days prior to acquisition of compensatory mitigation lands, the Project owner shall submit a formal acquisition proposal and draft Management Plan for the proposed lands to the CPM, with copies to CDFG, USFWS, and BLM, describing the parcels intended for purchase and shall obtain approval from the CPM prior to the acquisition. No fewer than 90-30 days prior to acquisition of compensatory mitigation lands, the Project owner shall submit to the CPM and obtain CPM approval of any agreements to delegate land acquisition to an approved third party, or to manage compensation lands; such agreement shall be executed and implemented within 18 months of the Energy Commission's certification of the Project.

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

Enhancement/restoration activities shall be initiated no later than 12 months from the start of construction. The implementation phase of the enhancement project shall be completed within five years of initiation. Until completion of the five-year implementation portion of the enhancement action, a report shall be prepared and submitted as part of the Annual

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~~Compliance Report. This report shall provide, at a minimum: a summary of activities for the preceding year and a summary of activities for the following year; quantitative measurements of the Project's progress in meeting the enhancement project success criteria; detailed description of remedial actions taken or proposed; and contact information for the responsible parties.~~

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

~~Section E. No more than 90 days following the publication of the Energy Commission Decision the project owner shall submit draft versions of the Protected Plant Salvage measures for review by the CPM. The project owner shall also provide a cost estimate for implementation of the measures which shall be subject to approval by the CPM. The final measures shall be submitted for approval by the CPM within 90 days of the publication of the Commission Decision. The final measures shall be incorporated into the BRMIMP. At this time, the project owner shall also provide security sufficient to fund the implementation of the measures.~~

~~Throughout project construction, or at any phase during the project when plants covered in Section E of this Condition are to be salvaged, the Designated Biologist or The Designated Botanist shall submit quarterly and annual compliance reports to the CPM, BLM wildlife biologist, , and CDFG describing all project activities pertinent to the Protected Plant Salvage measures. Compliance reports shall include summaries of written and photographic records of the plan inventory of plants subject to BLM and County policies on the project site implementation described above. Upon completion of all plant salvage and replacement, compliance reports shall be submitted annually for a period not less than 5 years to document irrigation, maintenance, and monitoring results, including plant survival. The Designated Biologist shall maintain written and photographic records of the tasks described above, and make these records available to the CPM, County, BLM State Botanist, and CDFG upon request. The project owner shall coordinate with the CPM and BLM's Wildlife Biologist to revise and finalize all plans and reports named in this section.~~

BIO-13 MOJAVE FRINGE-TOED LIZARD MITIGATION

The project owner shall provide compensatory land to mitigate for habitat loss and direct impacts to Mojave fringe-toed lizards based on revised estimates of suitable Mojave fringe-toed lizard habitat on-site. The project owner shall provide compensatory mitigation at a 3:1 ratio for impacts to breeding habitat (i.e., dune, sand ramp, or fine-sandy wash habitat), and at a 1:1 ratio for impacts to adjacent suitable foraging and cover habitat, such as thin aeolian sand overlying bajada surfaces, or foraging habitat surrounding the breeding habitat. CEC staff estimated breeding habitat on site as 21.4 acres, and surrounding suitable foraging and cover habitat (i.e., 45 meter buffer) as 143.3 acres. Therefore, CEC staff anticipated this condition would require the acquisition and dedication in perpetuity of at 207.5 acres of habitat. The project owner shall provide funding for the acquisition, initial habitat improvements, and long-term management of the compensation lands, as described below.

**Biological Resources Table 17
Mojave Fringe-toed Lizard Compensation Acreage Summary**

Habitat Function	Project Impact Acreage	Mitigation Ratio	Compensation Acreage
Foraging and cover	143.3 acres	1:1	143.3 acres
Breeding	21.4 acres	3:1	64.2 acres
Total	164.7 acres		207.5 acres

This compensation acreage may be included (“nested”) within the acreage acquired and managed as desert tortoise habitat compensation (Condition of Certification **BIO-17**) only if:

- Adequate acreage of qualifying desert tortoise compensation lands also meet the Selection Criteria (below) as habitat for Mojave fringe-toed lizard;
- The desert tortoise habitat compensation lands are acquired and dedicated as permanent conservation lands within 24 months of the start of project construction.

If these two criteria are not met, then the project owner shall provide the required number of acres of Mojave fringe-toed lizard habitat compensation lands, adjusted to reflect the final project footprint and additional delineation of suitable habitat, independent of any compensation land required under other conditions of certification, and shall also provide funding for the initial improvement and long-term maintenance and management of the acquired lands, and shall comply with other related requirements of this condition.

Funding of this mitigation shall be phased to ensure that appropriate compensation lands and/or funding reflect the phasing of actual project impacts and will ensure that all impacts are fully compensated prior to occurring.

COMPENSATORY MITIGATION LAND ACQUISITION

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1. **Method of Acquisition.** Compensation lands required to meet this condition shall be acquired in whole or in part either:
 - a. By the project owner for donation, as approved by the CPM, to a state or federal land management agency or non-profit land management organization,
 - b. By BLM with funds provided by the project owner,
 - c. By a third party approved by the CPM to acquire or donate the lands with funds provided by the project owner, or
 - d. By the National Fish and Wildlife Foundation (NFWF) with in lieu funds deposited into the Renewable Energy Action Team (REAT) Account.

If the project owner chooses to delegate responsibility for acquisition of all or portions of compensation lands to a third party such as a nongovernmental organization supportive of desert habitat conservation, such delegation shall be subject to approval by the CPM, in consultation with the project owner and CDFG, BLM and USFWS, prior to land acquisition, enhancement or management activities. The CPM shall provide a written response and explanation to the project owner within 30 days of receiving the proposal. Agreements to delegate land acquisition to an approved third party, or to manage compensation lands, shall be executed and implemented within 18 months of the Energy Commission's certification of the project or initiation of each phase of the project.

2. **Selection Criteria for Compensation Lands.** The compensation lands selected for acquisition to meet Energy Commission requirements shall:
 - a. Be sand dune or partially stabilized sand dune habitat with potential to contribute to Mojave fringe-toed lizard habitat connectivity and build linkages between known populations of Mojave fringe-toed lizards and preserve lands with suitable habitat;
 - b. Be biologically contiguous to lands currently occupied by Mojave fringe-toed lizard;
 - c. Be near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation;
 - d. Provide quality habitat for Mojave fringe-toed lizard, that has the capacity to regenerate naturally when disturbances are removed;
 - e. Not have a history of intensive recreational use or other disturbance that might make habitat recovery and restoration infeasible;
 - f. Not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration;
 - g. Not contain hazardous wastes;
 - h. Have water and mineral rights included as part of the acquisition, unless the CPM, in consultation with CDFG, BLM and USFWS, agrees in writing to the acceptability of land without these rights; and

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- i. Be on land for which long-term habitat management for Mojave fringe-toed lizard and other native biological resources is feasible.

These requirements may be adjusted upon mutual agreement with the resource agencies (CEC, CDFG, BLM, and USFWS) depending on the specific lands available and in consideration of larger fringe-toed lizard mitigation efforts.

3. **Review and Approval of Compensation Lands Prior to Acquisition.** If the project owner assumes responsibility for acquiring the compensation lands, the project owner shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for Mojave fringe-toed lizard in relation to the criteria listed above and must be approved by the CPM. The CPM will share the proposal with and consult with CDFG, BLM, and the USFWS before deciding whether to approve or disapprove the proposed acquisition. The CPM shall provide a written response and explanation to the project owner within 30 days of receiving the proposal.
4. **Compensation Lands Acquisition Conditions:** If the project owner assumes responsibility to acquire the compensation lands to meet Energy Commission and CESA requirements, the project owner shall comply with the following conditions relating to acquisition of the compensation lands after the CPM, in consultation with CDFG, BLM and the USFWS, has approved the proposed compensation lands:
 - a. Preliminary Report: The Project owner, or approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary documents for the proposed compensation land to the CPM. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPM, in consultation with CDFG, BLM and the USFWS. For conveyances to the State, approval may also be required from the California Department of General Services, the Fish and Game Commission and the Wildlife Conservation Board.
 - b. Title/Conveyance: The Project owner shall acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement as required by the CPM in consultation with CDFG. Any transfer of a conservation easement or fee title must be to CDFG, a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to BLM or other public agency approved by the CPM in consultation with CDFG.
 - c. Property Analysis Record. Upon identification of the compensation lands, the Project owner shall conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the CPM, in consultation with CDFG, before it can be used to establish funding levels or management activities for the compensation lands.

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5. **Compensation Lands Acquisition Costs:** If the project owner assumes responsibility to acquire all or a part of the compensation lands to meet Energy Commission and CESA requirements, the project owner shall fund the following items in addition to actual land costs:
 - a. Level 1 Environmental Site Assessment,
 - b. Appraisal,
 - c. Closing and Escrow costs,
 - d. Biological survey for determining mitigation value of the land, and
 - e. Agency costs to accept the land.

If the project owner uses BLM to acquire all or a portion of the compensation lands, the project owner shall provide the BLM with funds for items a. to e. above as well as actual land costs.

If the project owner uses in lieu funds deposited into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF) to acquire some or all of the compensation lands, the project owner shall provide funds for items a. to e. above as well as actual land costs and third party administrative costs. If the Project owner elects to use the REAT Account with NFWF, the Project owner will be responsible for providing sufficient funds to cover actual acquisition costs and fees

Estimated costs associated with acquisition of compensation lands are: (there should be an agreed upon amount between the applicant and the agencies)

ESTIMATED LAND ACQUISITION COSTS PER ACRE OR PARCEL

COST ITEM	ACQUISITION METHOD		
	PROJECT OWNER	BLM	REAT/NFWF
Land cost/acre	Covered by Owner	\$500	\$500
Level 1 Environmental Site Assessment	\$1,000	\$1,000	\$1,000
Appraisal/parcel	Covered by Owner	\$2,500	\$2,500
Closing and Escrow Costs/parcel	Covered by Owner	\$2,500	\$2,500
Biological Survey/parcel	\$1,000	\$1,000	\$1,000
3 rd Party Admin. Costs/parcel	\$0	\$0	5% of land cost
Agency Cost to Accept	\$?	\$0	17.6% of land cost

TOTAL LAND ACQUISITION COSTS

(This is for discussion only, it should not be included in the final condition, only the final amount)

COST ITEM	ACQUISITION METHOD		
	PROJECT OWNER	BLM	REAT/NFWF
Acres Purchased	207.5	207.5	207.5

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Parcels Purchased	5.2	5.2	5.2
Land cost	\$103,750	\$103,750	\$103,750
Level 1 Environmental Site Assessment	\$5,188	\$5,188	\$5,188
Appraisal	\$12,969	\$12,969	\$12,969
Closing and Escrow Costs	\$12,969	\$12,969	\$12,969
Biological Survey	\$5,188	\$5,188	\$5,188
3 rd Party Admin. Costs	\$0	\$0	\$5,188
Agency Cost to Accept	\$18,208	\$0	\$18,208
TOTAL	\$158,271	\$140,063	\$163,458

COMPENSATORY MITIGATION LAND IMPROVEMENT

- Land Improvement Requirements:** The Project owner shall fund activities that the CPM, in consultation with the CDFG, USFWS and BLM, requires for the initial protection and habitat improvement of the compensation lands. These activities will be implemented by the state or federal land management agency or non-profit organization holding the land or their representative. The specific activities will vary depending on the condition and location of the land acquired but may include:
 - Installation of signs,
 - Removal of trash,
 - Construction and repair of fences,
 - Surveys of boundaries and property lines,
 - Removal of invasive plants,
 - Removal of roads,
 - And similar measures to protect habitat and improve habitat quality.

The costs of these activities are estimated at \$250 an acre, but will vary depending on the measures that are required for the compensation lands. A non-profit organization, CDFG or another public agency may hold and expend the habitat improvement funds if it is qualified to manage the compensation lands (pursuant to California Government Code section 65965), if it meets the approval of the CPM in consultation with CDFG, and if it is authorized to participate in implementing the required activities on the compensation lands. If CDFG takes fee title to the compensation lands, the habitat improvement fund must be paid to CDFG or its designee.

- Compensation Lands Improvement Costs:** Land improvement costs will vary depending on the activities undertaken. The cost of those actions may range between \$25 per acre to \$250 per acre. (There should be an agreed on amount in the final condition.)

Assuming all of the compensation is met with land acquisition, the total land improvement costs may range between \$5,188 and \$51,875.

COMPENSATORY MITIGATION LAND LONG-TERM MANAGEMENT

1. **Long-term Management Requirements:** Long-term management is required to ensure that the compensation lands are managed and maintained to protect desert tortoise. This may include maintenance of signs, fences, removal of invasive weeds, and elimination of unauthorized use.
2. **Long-term Management Plan:** The owner of or the entity responsible for management of the compensation lands shall prepare a Management Plan for the compensation lands. The Management Plan shall reflect site-specific enhancement measures on the acquired compensation lands. The plan shall be submitted for approval of the CPM, in consultation with CDFG, BLM and USFWS.
3. **Long-term Management Costs:** For those compensation lands that are donated to or owned by the BLM, the long-term management costs will be determined by BLM in consultation with the CDFG, CEC, and USFWS.

For those compensation lands that are donated to or owned by a state land management agency or a non-profit organization, the Project owner shall provide money to establish an account with a non-wasting capital that will be used to fund the long-term maintenance and management of the compensation lands. The amount of money to be paid will be determined through an approved PAR or PAR-like analysis conducted for the compensation lands.

The CPM will consult with the project owner and CDFG before deciding whether to approve an entity to hold the project's long-term maintenance and management funds on any lands. For any compensation lands that are not managed by a federal land management agency, the CPM, in consultation with the project owner and CDFG, will designate another state agency or non-profit organization to hold the long-term maintenance and management fee if the organization is qualified to manage the compensation lands in perpetuity.

If CDFG takes fee title to the compensation lands, CDFG shall determine whether it will hold the long-term management fee in the special deposit fund, leave the money in the REAT Account, or designate another entity to manage the long-term maintenance and management fee for CDFG and with CDFG supervision.

The long-term maintenance and management fee holder/manager shall be subject to the following conditions:

- I. **Interest.** Interest generated from the initial capital shall be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring, improvements to carrying capacity, law enforcement measures, and any other action approved by CDFG designed to protect or improve the habitat values of the compensation lands.
- II. **Withdrawal of Principal.** The long-term maintenance and management fee principal shall not be drawn upon unless such withdrawal is deemed necessary by the CPM, in consultation with CDFG, or the approved third-

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

- III. Pooling Funds. A CPM- approved non-profit organization qualified to hold long-term maintenance and management fees solely for the purpose to manage lands in perpetuity, may pool the fund with other funds for the operation, management, and protection of the compensation lands for local populations of desert tortoise. However, for reporting purposes, the long-term maintenance and management fee fund must be tracked and reported individually to the CDFG and CPM.
- IV. Reimbursement Fund. The project owner shall provide reimbursement to CDFG or an approved third party for reasonable expenses incurred during title, easement, and documentation review

Long-term management on lands required for the Energy Commission and CESA are estimated to cost \$1,450 per acre. If 207.5 acres are acquired and donated to a state land management agency or non-profit organization for long-term management, the total cost of this activity is capped at \$300,875.

If the compensation lands required for the Energy Commission and CESA are administered with in lieu funds deposited into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF), the project owner shall pay the following additional fees:

- 1. Project Specific Account Establishment - \$12,000
- 2. Pre-proposal RFP or RFP procession - \$30,000
- 3. Management fee for acquisition and enhancement – 3% of all acquisition and enhancement costs
- 4. Management fee for long-term management account – 1% of long-term management costs

COMPENSATORY MITIGATION LAND FUNDS

- 1. **Compensation Mitigation Fund:** The project owner shall provide funding for acquisition, improvement, and long-term management of desert tortoise compensation land. This amount of funding shall be \$XXXXX based on the costs itemized below:

EXAMPLE of TOTAL COMPENSATION LAND COSTS

COST ITEM	ACQUISITION METHOD		
	PROJECT OWNER	BLM	REAT/NFWF
Acres Purchased	207.5	207.5	207.5
Parcels Purchased	5.2	5.2	5.2
Land Acquisition Cost	\$158,271	\$140,063	\$163,458
Land Improvement	\$51,875	\$51,875	\$51,875

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Cost			
Long-term Management Cost	\$300,875	\$?	\$300,875
NFWF Fees	\$49,757	\$0	\$49,912
TOTAL	\$560,777	\$191,938	\$566,121

2. **Fund Payment:** In light of the timing and requirements of the federal loan guarantees and project financing as well as the phasing of project construction activities, the project owner shall be allowed to phase payment of mitigation funds in a manner that is consistent with project development and federal assistance timelines and ensures that compensatory mitigation is fully funded before specific site disturbance activities and other on-site impacts to desert tortoise occur. Specific payments shall reflect the approach chosen by the project owner for land acquisition and shall include funds for land enhancement and long-term management consistent with the amount of land to be disturbed during each phase. The project owner shall make the following compensatory mitigation payments based on the following project phasing

3.

TIME	PROJECT ACTIVITY	MITIGATION PAYMENT
Phase 1a – October 2010	Start of construction, no more than 500 acres of site disturbance activities.	\$0
Phase 1b – Close of Financing (estimated 1 st quarter 2011)	Completion on Phase 1 construction (275 MW on 1,827 additional acres)	\$0
Phase 2	Initiation and completion of Phase 2 (575 MW on 3,888 acres)	\$560,777 less adjustments for land acquisition method, and land improvement costs

4. **REAT/NFWF Payment:** If the project owner elects to comply with the requirements in this condition for acquisition, initial improvement, long-term maintenance and management, or any combination of these three requirements by providing funds to implement those measures into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF), the Project owner shall make an initial deposit to the REAT Account in an amount equal to the estimated costs of administering these requirements.

If the actual cost of the acquisition, initial protection and habitat improvements, or long-term funding is more than the estimated amount initially paid by the project owner, the project owner shall make an additional deposit into the REAT Account sufficient to cover the actual acquisition costs, the actual costs of initial protection and habitat improvement on the compensation lands, or the long-term funding requirements as established in an approved PAR or PAR-like analysis. If those

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actual costs or PAR projections are less than the amount initially transferred by the applicant, the remaining balance shall be returned to the project owner.

5. **Security:** The Project owner shall provide financial assurances to the CPM with copies of the document(s) to BLM, CDFG and the USFWS, to guarantee that an adequate level of funding is available to implement the mitigation required by this condition is available prior to the start of ground-disturbing activities for each phase of the project discussed in the described in section 2 immediately above.

The CPM may use money from the Security solely for implementation of the requirements of this condition. The CPM's use of the security to implement measures in this condition may not fully satisfy the Project owner's obligations under this condition. Any amount of the Security that is not used to carry out mitigation shall be returned to the Project owner upon successful completion of the associated requirements in this condition. 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 submitting the Security to the CPM, the Project owner shall obtain the CPM's approval, in consultation with CDFG, BLM and the USFWS, of the form of the Security.

The amount of the Security shall correspond to the mitigation fund payments described in "fund payment" above.

6. **Audit:** The project owner may request the CPM to for an independent audit of the compensatory mitigation funds.

Verification: The project owner shall provide the CPM with written notice of intent to start ground disturbance at least 30 days prior to the start of ground-disturbing activities on the project site.

If the mitigation actions required under this condition are not completed prior to the start of ground-disturbing activities, the Project owner shall provide the CPM and CDFG with an approved Security in accordance with this condition of certification 30 days prior to beginning Project ground-disturbing activities. 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 submitting the Security to the CPM, the project owner shall obtain the CPM's approval, in consultation with CDFG, BLM and the USFWS, of the form of the Security. The project owner, or an approved third party, shall complete and provide written verification to the CPM, CDFG, BLM and USFWS of the compensation lands acquisition and transfer within 18 months of the start of Project ground-disturbing activities.

No later than 12 months after the start of any phase of ground-disturbing project activities, the project owner shall submit a formal acquisition proposal to the CPM describing the parcels intended for purchase, and shall obtain approval from the CPM, in consultation with CDFG, BLM and USFWS, prior to the acquisition. If NFWF or another approved third party is handling the acquisition, the project owner shall fully cooperate with the third party to ensure the proposal is submitted within this time period. The project owner or an approved third party shall complete the acquisition and all required transfers of the compensation lands, and provide written

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verification to the CPM, CDFG, BLM and USFWS of such completion, no later than 18 months after the issuance of the Energy Commission Decision. If NFWF or another approved third party is being used for the acquisition, the project owner shall ensure that funds needed to accomplish the acquisition are transferred in timely manner to facilitate the planned acquisition and to ensure the land can be acquired and transferred prior to the 18-month deadline.

The project owner shall complete and submit to the CPM a PAR or PAR-like analysis no later than 60 days after the CPM approves compensation lands for acquisition associated with any phase of construction. The project owner shall fully fund the required amount for long-term maintenance and management of the compensation lands for that phase of construction no later than 30 days after the CPM approves a PAR or PAR-like analysis of the anticipated long-term maintenance and management costs of the compensation lands. Written verification shall be provided to the CPM and CDFG to confirm payment of the long-term maintenance and management funds.

No later than 60 days after the CPM determines what activities are required to provide for initial protection and habitat improvement on the compensation lands for any phase of construction, the project owner shall make funding available for those activities and provide written verification to the CPM of what funds are available and how costs will be paid. Initial protection and habitat improvement activities on the compensation lands for that phase of construction shall be completed, and written verification provided to the CPM, no later than six months after the CPM's determination of what activities are required on the compensation lands.

If a third party is responsible for management of the compensation lands shall provide the CPM, they shall provide the CDFG, BLM and USFWS with a management plan for the compensation lands associated with any phase of construction within 180 days of the land or easement purchase, as determined by the date on the title. The CPM, in consultation with CDFG, BLM and the USFWS, shall approve the management plan after its content is acceptable to the CPM.

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

BIO-17 DESERT TORTOISE COMPENSATORY MITIGATION

To fully mitigate for habitat loss and potential take of desert tortoise, the project owner shall acquire, protect, and transfer no fewer than 14,365 acres of desert tortoise habitat lands, shall provide funding for the initial improvement and long-term maintenance and management of the acquired lands for protection of the desert tortoise, and comply with other related requirements of this condition. This acreage was calculated as follows: a ratio of 1:1 for the entire project area (6,215 acres) and an additional 2:1 ratio for 4,075 acres of the project area north of the BNSF railroad tracks (i.e., a total ratio of 1:1 on 2,140 acres and a total ratio of 3:1 on 4,075 acres).

Desert Tortoise Compensation Acreage Summary

Location	Project Impact Acreage	Mitigation Ratio	Compensation Acreage
South of BNSF RR	2,140 acres	1:1	2,140 acres
North of BNSF RR	4,075 acres	3:1	12,225 acres
Total	6,215 acres		14,365 acres

Of this compensatory mitigation, 6,215 acres meet requirements of BLM and 8,150 acres represent additional requirements of the State of California.

These impact acreages shall be adjusted to reflect the final project footprint. For purposes of this condition, the Project footprint means all lands disturbed in the construction and operation of the Calico Solar Project, including all linear project components, as well as undeveloped areas inside the Project’s boundaries that will no longer provide viable long-term habitat for the desert tortoise.

These impact acreages may also be adjusted to reflect approval by BLM to meet their portion of the compensatory mitigation requirements, in whole or in part, through “habitat enhancement actions” rather than the purchase and donation of compensation lands.

Funding of this mitigation shall be phased to ensure that appropriate compensation lands and/or funding reflect the phasing of actual project impacts and will ensure that all impacts are fully compensated prior to occurring.

COMPENSATORY MITIGATION LAND ACQUISITION

1. **Method of Acquisition.** To the extent that BLM mitigation requirements are met through the purchase of compensation lands, these lands shall be acquired in whole or in part either:
 - a. By the project owner for donation, as approved by the BLM, to a state or federal land management agency or non-profit land management organization,
 - b. By the BLM with funds provided by the project owner,
 - c. By a third party approved by the BLM to acquire or donate the lands with funds provided by the project owner, or

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- d. By the National Fish and Wildlife Foundation (NFWF) with in lieu funds deposited into the Renewable Energy Action Team (REAT) Account.

Compensation lands required to meet Energy Commission and CESA requirements associated with this condition shall be acquired in whole or in part either:

- a. By the project owner for donation, as approved by the CPM, to a state or federal land management agency or non-profit land management organization,
- b. By BLM with funds provided by the project owner,
- c. By a third party approved by the CPM to acquire or donate the lands with funds provided by the project owner, or
- d. By the National Fish and Wildlife Foundation (NFWF) with in lieu funds deposited into the Renewable Energy Action Team (REAT) Account.

If the project owner chooses to delegate responsibility for acquisition of all or portions of compensation lands to a third party such as a nongovernmental organization supportive of desert habitat conservation, such delegation shall be subject to approval by the CPM, in consultation with the project owner and CDFG, BLM and USFWS, prior to land acquisition, enhancement or management activities. The CPM shall indicate their approval or disapproval within 30 days of receipt of the project owner's delegation proposal. Agreements to delegate land acquisition to an approved third party, or to manage compensation lands, shall be executed and implemented within 18 months of the Energy Commission's certification of the project or initiation of each phase of the project.

2. **Selection Criteria for Compensation Lands.** The compensation lands selected for acquisition to meet BLM requirements and to meet Energy Commission and CESA requirements shall be equal to or better than the quality and function of the habitat impacted and:
 - a. Be within the Western Mojave Recovery Unit, with potential to contribute to desert tortoise habitat connectivity and build linkages between desert tortoise designated critical habitat, known populations of desert tortoise, and/or other preserve lands;
 - b. Provide habitat for desert tortoise with capacity to regenerate naturally when disturbances are removed;
 - c. Be near larger blocks of lands that are either already protected or planned for protection, or which could feasibly be protected long-term by a public resource agency or a non-governmental organization dedicated to habitat preservation;
 - d. Be contiguous and biologically connected to lands currently occupied by desert tortoise, ideally with populations that are stable, recovering, or likely to recover;
 - e. Not have a history of intensive recreational use or other disturbance that might cause future erosion damage or other habitat damage, and make habitat recovery and restoration infeasible;

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- f. Not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration; and
- g. Not contain hazardous wastes that cannot be removed to the extent that the site could not provide suitable habitat; and
- h. Have water and mineral rights included as part of the acquisition, unless the CPM, in consultation with CDFG, BLM and USFWS, agrees in writing to the acceptability of land without these rights.

These requirements may be adjusted upon mutual agreement with the resource agencies (CEC, CDFG, BLM, and USFWS) depending on the specific lands available and in consideration of larger desert tortoise mitigation efforts.

- 3. **Review and Approval of Compensation Lands Prior to Acquisition.** If the project owner assumes responsibility for acquiring the compensation lands to meet Energy Commission and CESA requirements, the project owner shall submit a formal acquisition proposal to the CPM describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands for desert tortoise in relation to the criteria listed above and must be approved by the CPM. The CPM will share the proposal with and consult with CDFG, BLM and the USFWS before deciding whether to approve or disapprove the proposed acquisition. The CPM shall provide a written response and explanation to the project owner within 30 days of receiving the proposal.
- 4. **Compensation Lands Acquisition Conditions:** If the project owner assumes responsibility to acquire the compensation lands to meet Energy Commission and CESA requirements, the project owner shall comply with the following conditions relating to acquisition of the compensation lands after the CPM, in consultation with CDFG, BLM and the USFWS, has approved the proposed compensation lands:
 - a. Preliminary Report: The Project owner, or approved third party, shall provide a recent preliminary title report, initial hazardous materials survey report, biological analysis, and other necessary documents for the proposed compensation land to the CPM. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the CPM, in consultation with CDFG, BLM and the USFWS. For conveyances to the State, approval may also be required from the California Department of General Services, the Fish and Game Commission and the Wildlife Conservation Board.
 - b. Title/Conveyance: The Project owner shall acquire and transfer fee title to the compensation lands, a conservation easement over the lands, or both fee title and conservation easement as required by the CPM in consultation with CDFG. Any transfer of a conservation easement or fee title must be to CDFG, a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), to the BLM, or other public agency approved by the CPM in consultation with CDFG. If an approved nonprofit organization holds fee title to the compensation lands, a

conservation easement shall be recorded in favor of CDFG or another entity approved by the CPM.

- c. Property Analysis Record. Upon identification of the compensation lands, the Project owner shall conduct a Property Analysis Record (PAR) or PAR-like analysis to establish the appropriate amount of the long-term maintenance and management fund to pay the in-perpetuity management of the compensation lands. The PAR or PAR-like analysis must be approved by the CPM, in consultation with CDFG, before it can be used to establish funding levels or management activities for the compensation lands.
5. **Compensation Lands Acquisition Costs:** If the project owner assumes responsibility to acquire all or a part of the compensation lands to meet Energy Commission and CESA requirements, the project owner shall fund the following items in addition to actual land costs:
- a. Level 1 Environmental Site Assessment,
 - b. Appraisal,
 - c. Closing and Escrow costs,
 - d. Biological survey for determining mitigation value of the land, and
 - e. Agency costs to accept the land.

If the project owner uses BLM to acquire all or a portion of the compensation lands, the project owner shall provide the BLM with funds for items a. to e. above as well as actual land costs.

If the project owner uses in lieu funds deposited into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF) to acquire some or all of the compensation lands, the project owner shall provide funds for items a. to e. above as well as actual land costs and third party administrative costs. The project owner shall provide reimbursement to CDFG or an approved third party for reasonable expenses incurred during title, easement, and documentation review; expenses incurred by other State or State-approved outside consultants.

Estimates for costs associated with acquisition of compensation lands are: (there should be an agreed upon amount between the applicant and the agencies)

ESTIMATED LAND ACQUISITION COSTS PER ACRE OR PARCEL

COST ITEM	ACQUISITION METHOD		
	PROJECT OWNER	BLM	REAT/NFWF
Land cost/acre	Covered by Owner	\$500	\$500
Level 1 Environmental Site Assessment	\$1,000	\$1,000	\$1,000
Appraisal/parcel	Covered by Owner	\$2,500	\$2,500
Closing and Escrow Costs/parcel	Covered by Owner	\$2,500	\$2,500
Biological Survey/parcel	\$1,000	\$1,000	\$1,000

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3 rd Party Admin. Costs/parcel	\$0	\$0	5% of land cost
Agency Cost to Accept	\$? ¹	\$0	17.6% of land cost

TOTAL LAND ACQUISITION COSTS

(This is for discussion only, it should not be included in the final condition, only the final amount)

COST ITEM	ACQUISITION METHOD		
	PROJECT OWNER	BLM	REAT/NFWF
Acres Purchased	14,365	6215	8150
Parcels Purchased	360	156	204
Land cost	\$7,182,500	\$3,107,500	\$4,075,000
Level 1 Environmental Site Assessment	\$360,000	\$156,000	\$204,000
Appraisal	\$900,000	\$390,000	\$510,000
Closing and Escrow Costs	\$900,000	\$390,000	\$510,000
Biological Survey	\$360,000	\$156,000	\$204,000
3 rd Party Admin. Costs	\$0	\$0	\$203,750
Agency Cost to Accept	\$1,260,529	\$0	\$715,163
TOTAL	\$10,963,029	\$4,199,500	\$6,421,913

COMPENSATORY MITIGATION LAND IMPROVEMENT

- Land Improvement Requirements:** The Project owner shall fund activities that the CPM, in consultation with the CDFG, USFWS and BLM, requires for the initial protection and habitat improvement of the compensation lands. These activities will be implemented by the state or federal land management agency or non-profit organization holding the land or their representative. The specific activities will vary depending on the condition and location of the land acquired but may include:

 - Installation of signs,
 - Removal of trash,
 - Construction and repair of fences,
 - Surveys of boundaries and property lines,
 - Removal of invasive plants,
 - Removal of roads,
 - And similar measures to protect habitat and improve habitat quality.
- Compensation Lands Improvement Costs:** Land improvement costs will vary depending on the activities undertaken. The cost of those actions may range between \$25 per acre to \$250 per acre. **(There should be an agreed on amount in the final condition.)**

¹ This cost appears very high but the applicant does not have any numbers to dispute it with.

Assuming all of the compensation is met with land acquisition, the total land improvement costs may range between \$359,125 and \$3,591,250. This amount will be reduced to the extent that direct habitat enhancements are used to satisfy some or all of the BLM's compensatory mitigation requirements.

COMPENSATORY MITIGATION LAND LONG-TERM MANAGEMENT

1. **Long-term Management Requirements:** Long-term management is required to ensure that the compensation lands are managed and maintained to protect desert tortoise. This may include maintenance of signs, fences, removal of invasive weeds, and elimination of unauthorized use.
2. **Long-term Management Plan:** The owner of or the entity responsible for the management of the compensation lands shall prepare a Management Plan for the compensation lands. The Management Plan shall reflect site-specific enhancement measures on the acquired compensation lands. The plan shall be submitted for approval of the CPM, in consultation with CDFG, BLM and USFWS.
3. **Long-term Management Costs:** For those compensation lands that are donated to or owned by the BLM, the long-term management costs will be determined by BLM in consultation with the CDFG, CEC, and USFWS.

For those compensation lands that are donated to or owned by a state land management agency or a non-profit organization, the Project owner shall provide money to establish an account with a non-wasting capital that will be used to fund the long-term maintenance and management of the compensation lands. The amount of money to be paid will be determined through an approved PAR or PAR-like analysis conducted for the compensation lands.

The CPM will consult with the project owner and CDFG before deciding whether to approve an entity to hold the project's long-term maintenance and management funds on any lands. For any compensation lands that are not managed by a federal land management agency, the CPM, in consultation with the project owner and CDFG, will designate another state agency or non-profit organization to hold the long-term maintenance and management fee if the organization is qualified to manage the compensation lands in perpetuity.

If CDFG takes fee title to the compensation lands, CDFG shall determine whether it will hold the long-term management fee in the special deposit fund, leave the money in the REAT Account, or designate another entity to manage the long-term maintenance and management fee for CDFG and with CDFG supervision.

The following conditions shall apply to the long-term maintenance and management funds:

- I. **Interest.** Interest generated from the initial capital shall be available for reinvestment into the principal and for the long-term operation, management, and protection of the approved compensation lands, including reasonable administrative overhead, biological monitoring,

improvements to carrying capacity, law enforcement measures, and any other action approved by CDFG designed to protect or improve the habitat values of the compensation lands.

- II. **Withdrawal of Principal.** The long-term maintenance and management fee principal shall not be drawn upon unless such withdrawal is deemed necessary by the CPM, in consultation with CDFG, or the approved third-party long-term maintenance and management fee manager to ensure the continued viability of the species on the compensation lands. If CDFG takes fee title to the compensation lands, monies received by CDFG pursuant to this provision shall be deposited in a special deposit fund established solely for the purpose to manage lands in perpetuity unless CDFG designates NFWF or another entity to manage the long-term maintenance and management fee for CDFG.
- III. **Pooling Funds.** A CPM- approved non-profit organization qualified to hold long-term maintenance and management fees solely for the purpose to manage lands in perpetuity, may pool the fund with other funds for the operation, management, and protection of the compensation lands for local populations of desert tortoise. However, for reporting purposes, the long-term maintenance and management fee fund must be tracked and reported individually to the CDFG and CPM.

Long-term management on lands required for the Energy Commission and CESA are estimated to cost \$1,450 per acre. If 8,150 acres are acquired and donated to a state land management agency or non-profit organization for long-term management, the total cost of this activity is capped at \$11,817,500.

If the compensation lands required for the Energy Commission and CESA are administered with in lieu funds deposited into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF), the project owner shall pay the following additional fees:

- 1. Project Specific Account Establishment - \$12,000
- 2. Pre-proposal RFP or RFP procession - \$30,000
- 3. Management fee for acquisition and enhancement – 3% of all acquisition and enhancement costs
- 4. Management fee for long-term management account – 1% of long-term management costs

COMPENSATORY MITIGATION LAND FUNDS

- 1. **Compensation Mitigation Fund:** The project owner shall provide funding for acquisition, improvement, and long-term management of desert tortoise compensation land. This amount of funding shall be \$XXXXX based on the costs itemized below:

EXAMPLE of TOTAL COMPENSATION LAND COSTS

COST ITEM	ACQUISITION METHOD		
	PROJECT OWNER	BLM	REAT/NFWF

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Acres Purchased	14,365	6215	8150
Parcels Purchased	360	156	204
Land Acquisition Cost	\$10,963,029	\$4,199,500	\$6,421,913
Land Improvement Cost	\$3,591,250	\$1,553,750	\$2,037,500
Long-term Management Cost	\$20,829,250	\$?	\$11,817,500
NFWF Fees	\$579,183	\$0	\$352,832
TOTAL	\$35,962,712	\$5,753,250	\$20,629,745

2. **Fund Payment:** In light of the timing and requirements of the federal loan guarantees and project financing as well as the phasing of project construction activities, the project owner shall be allowed to phase payment of mitigation funds in a manner that is consistent with project development and federal assistance timelines and ensures that compensatory mitigation is fully funded before specific site disturbance activities and other on-site impacts to desert tortoise occur. Specific payments shall reflect the approach chosen by the project owner for land acquisition and shall include funds for land enhancement and long-term management consistent with the amount of land to be disturbed during each phase. The project owner shall make the following compensatory mitigation payments based on the following project phasing:

TIME	PROJECT ACTIVITY	MITIGATION PAYMENT
Phase 1a – October 2010	Start of desert tortoise translocation followed by no more than 250 acres of site disturbance activities.	\$1,917,099
Phase 1b – Close of Financing (estimated 1 st quarter 2011)	Completion on Phase 1 construction (275 MW on 1,827 additional acres)	\$15,620,326
Phase 2	Initiation and completion of Phase 2 (575 MW on 3,888 acres)	\$18,502,978 less adjustments for habitat enhancement actions, land acquisition method, and land improvement costs

3. **REAT/NFWF Payment:** If the project owner elects to comply with the requirements in this condition for acquisition, initial improvement, long-term maintenance and management, or any combination of these three requirements by providing funds to implement those measures into the Renewable Energy Action Team (REAT) Account established with the National Fish and Wildlife Foundation (NFWF), the Project owner shall make an initial deposit to the REAT Account in an amount equal to the estimated costs of administering these requirements.

If the actual cost of the acquisition, initial protection and habitat improvements, or long-term funding is more than the estimated amount initially paid by the project owner, the project owner shall make an additional deposit into the REAT Account sufficient to cover the actual acquisition costs, the actual costs of initial protection and habitat improvement on the compensation lands, or the long-term funding requirements as established in an approved PAR or PAR-like analysis. If those actual costs or PAR projections are less than the amount initially transferred by the applicant, the remaining balance shall be returned to the project owner.

4. **Security:** The Project owner shall provide financial assurances to the CPM with copies of the document(s) to BLM, CDFG and the USFWS, to guarantee that an adequate level of funding is available to implement the mitigation required by this condition is available prior to the start of ground-disturbing activities for each phase of the project discussed in the described in section 2 immediately above.

The CPM may use money from the Security solely for implementation of the requirements of this condition. The CPM's use of the security to implement measures in this condition may not fully satisfy the Project owner's obligations under this condition. Any amount of the Security that is not used to carry out mitigation shall be returned to the Project owner upon successful completion of the associated requirements in this condition. 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 submitting the Security to the CPM, the Project owner shall obtain the CPM's approval, in consultation with CDFG, BLM and the USFWS, of the form of the Security.

The amount of the Security shall correspond to the mitigation fund payments described in "fund payment" above.

5. **Audit:** The project owner may request the CPM to for an independent audit of the compensatory mitigation funds.

Verification: The project owner shall provide the CPM with a description of the phasing of the project's construction and ground disturbing activities at least 30 days prior to ground disturbing activities.

The project owner shall provide written notice of intent to start ground disturbance for any phase of project construction at least 30 days prior to the start of those activities on the project site.

If the mitigation actions required under this condition are not completed prior to the start of ground-disturbing activities, the Project owner shall provide the CPM and CDFG with an approved Security in accordance with this condition of certification prior to beginning Project ground-disturbing activities. 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 submitting the Security to the CPM, the project owner shall obtain the CPM's approval, in consultation with CDFG, BLM and the USFWS, of the form of the Security. The project owner, or an

Applicant Draft for Discussion

approved third party, shall complete and provide written verification to the CPM, CDFG, BLM and USFWS of the compensation lands acquisition and transfer within 18 months of the start of Project ground-disturbing activities.

No later than 12 months after the start of any phase of ground-disturbing project activities, the project owner shall submit a formal acquisition proposal to the CPM describing the parcels intended for purchase, and shall obtain approval from the CPM, in consultation with CDFG, BLM and USFWS, prior to the acquisition. If NFWF or another approved third party is handling the acquisition, the project owner shall fully cooperate with the third party to ensure the proposal is submitted within this time period. The project owner or an approved third party shall complete the acquisition and all required transfers of the compensation lands, and provide written verification to the CPM, CDFG, BLM and USFWS of such completion, no later than 18 months after the issuance of the Energy Commission Decision. If NFWF or another approved third party is being used for the acquisition, the project owner shall ensure that funds needed to accomplish the acquisition are transferred in timely manner to facilitate the planned acquisition and to ensure the land can be acquired and transferred prior to the 18-month deadline.

The project owner shall complete and submit to the CPM a PAR or PAR-like analysis no later than 60 days after the CPM approves compensation lands for acquisition associated with any phase of construction. The project owner shall fully fund the required amount for long-term maintenance and management of the compensation lands for that phase of construction no later than 30 days after the CPM approves a PAR or PAR-like analysis of the anticipated long-term maintenance and management costs of the compensation lands. Written verification shall be provided to the CPM and CDFG to confirm payment of the long-term maintenance and management funds.

No later than 60 days after the CPM determines what activities are required to provide for initial protection and habitat improvement on the compensation lands for any phase of construction, the project owner shall make funding available for those activities and provide written verification to the CPM of what funds are available and how costs will be paid. Initial protection and habitat improvement activities on the compensation lands for that phase of construction shall be completed, and written verification provided to the CPM, no later than six months after the CPM's determination of what activities are required on the compensation lands.

The land management entity, shall provide the CPM, CDFG, BLM and USFWS with a management plan for the compensation lands associated with any phase of construction within 180 days of the land or easement purchase, as determined by the date on the title. The CPM, in consultation with CDFG, BLM and the USFWS, shall approve the management plan after its content is acceptable to the CPM.

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



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

**APPLICATION FOR CERTIFICATION
For the CALICO SOLAR (Formerly SES Solar One)**

Docket No. 08-AFC-13

PROOF OF SERVICE

(Revised 6/14/10)

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DECLARATION OF SERVICE

I, Darin Neufeld, declare that on August 4, 2010, I served and filed copies of the attached Applicant's Submittal of Requested Changes to Specific Biological Resources Conditions. 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: [\[www.energy.ca.gov/sitingcases/solarone\]](http://www.energy.ca.gov/sitingcases/solarone).

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

(Check all that Apply)

FOR SERVICE TO ALL OTHER PARTIES:

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

AND

FOR FILING WITH THE ENERGY COMMISSION:

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

OR

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

CALIFORNIA ENERGY COMMISSION

Attn: Docket No. 08-AFC-13
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, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.

Original Signed By
Darin Neufeld