



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT  
COMMISSION OF THE STATE OF CALIFORNIA  
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California Energy Commission

**DOCKETED**  
**11-AFC-02**

TN # 70199

APR. 03 2013

**APPLICATION FOR CERTIFICATION FOR THE  
HIDDEN HILLS SOLAR ELECTRIC  
GENERATING SYSTEM**

Docket No. 11-AFC-02

## **ENERGY COMMISSION STAFF CORRECTED CONDITIONS OF CERTIFICATION**

On March 25, 2013, Applicant filed "Applicant and Staff's Revised Conditions of Certification" (tn: 70065) for the following technical sections:

- Air Quality
- Biological Resources\*
- Cultural Resources
- Facility Design
- Hazardous Materials Management
- Geology / Paleontology
- Land Use\*
- Noise and Vibration\*
- Socioeconomics
- Soils and Surface Water
- Traffic and Transportation\*
- Transmissions Line Safety Nuisance
- Transmission System Engineering
- Visual Resources
- Waste Management
- Worker Safety / Fire Protection
- Water Supply

The revised conditions of certification (CoC) resulted from discussions (primarily between staff and the Applicant) held during public workshops on March 5 and March 6, 2013, and during the course of Evidentiary Hearings conducted between March 12 and March 18, 2013. While staff is in agreement with the vast majority of the revised CoC's filed by the Applicant on March 25, 2013, there are four areas of disagreement: Biological Resources, Land Use, Noise and Vibration and Traffic and Transportation (denoted above with an asterisk \*). In these four areas, staff files the following corrections to the Applicant's revised CoC's.

## **Land Use**

**Applicant** Assumes that **Land-3** is deleted.

**Staff** The requirements of **Land-3** were not covered in the agreement the applicant entered into with Inyo County. Therefore, **Land-3** should remain as written in the Final Staff Assessment, as follows:

**LAND-3** The project owner shall provide a 25-foot wide setback -- in an addition to the 24-foot right-of-way (ROW) -- along the entire project frontage on Old Spanish Trail Highway (also known as "Tecopa Road"). Landscape screening shall only be planted within the 25-foot setback, with no trees or large landscaping features placed within the 24-foot ROW.

**Verification:** At least thirty (30) days prior to construction of the HHSEGS project, the project owner shall submit a site plan to the CPM for review and approval that is to scale and shows the required setback and associated landscaping features.

## **Noise and Vibration**

**Applicant:** Proposes in **NOISE-2** to add the word "legitimate" to "project-related noise complaints" (first sentence, third line.)

**Staff:** This revised condition is acceptable to staff if the word "legitimate" is deleted. At the workshop, Staff opposed adding the word "legitimate" because as written, the condition already provides that the noise complaint must be "project related." By adding the word "legitimate," it creates an undue burden on the community to prove at the time of the complaint something more than the noise is project-related, which is not defined in the condition. Furthermore, with the change, the determination of a "legitimate" complaint is made by the project owner, who may decide a complaint is not legitimate and therefore, is not required to even document the complaint.

## **Traffic and Transportation**

**Applicant:** The Applicant is revising **TRANS-4** "Heavy Truck Routes", in consultation with Inyo County, to reflect the terms of the agreement between the

Applicant and Inyo County regarding heavy truck routes.

Staff:       **TRANS-4** should read as follows:

#### **TRANS-4 Truck Route**

The project owner shall require all construction truck traffic to use State Route 160 for all access to and from the project site. In accordance with payment procedures agreed to by Inyo County and the project owner, the project owner shall pay a per-incident penalty of ten thousand dollars (\$10,000) to Inyo County for each Class 8 truck (i.e., a vehicle with a gross weight of 33,000 pounds) or larger that uses that segment of Old Spanish Trail Highway extending from California State Highway 127 to the western boundary of the project site to transport materials or supplies to or from the project site; provided, however, that no such penalty shall be assessed during any period when alternative road access to the project site (i.e., road access other than that segment of Old Spanish Trail Highway extending from California State Highway 127 to the western boundary of the project site) is closed to such traffic or physically impassible through no fault of the project or project owner. No penalty imposed pursuant to this TRANS-4 shall exceed ten thousand dollars (\$10,000) per incident, irrespective of whether the penalized truck travels one-way or round-trip to and/or from the project site.

Throughout the construction and operation of the project, the project owner shall document, investigate, evaluate, and resolve all project truck-related complaints. The project owner or authorized agent shall:

- Provide a spotter (an individual, such as a security guard, to monitor truck traffic) or on-site video monitoring to ensure all Class 8 or larger construction truck traffic does not utilize Old Spanish Trail Highway via State Route 127;
- Use the Traffic Complaint Resolution Form (below), or a functionally equivalent procedure acceptable to the CPM, to document and respond to each traffic complaint of construction truck traffic using Old Spanish Trail Highway west of the project site;
- Attempt to contact the person(s) making the traffic complaint within 24 hours;
- Conduct an investigation to determine the transportation company in the complaint and;
- Submit a report documenting the complaint and actions taken.

The report shall include: a complaint summary, including the final resolution and, if obtainable, a signed statement by the complainant stating ~~that whether~~ the truck route problem has been resolved to the complainant's satisfaction.

- At least sixty (60) days prior to commencement of construction, submit to the CPM a copy of the procedures agreed to between Inyo County and project owner for the payment of the penalty contemplated by this TRANS-4.

**Verification:** The project owner shall include this specific route in its contracts for truck deliveries and provide the CPM with a copy of the transmittal letter to the contractors specifying the truck route.

Within five days of receiving a truck route complaint, the project owner shall file a Traffic Complaint Resolution Form, shown below, with the CPM that documents the resolution of the complaint.

## **Biological Resources**

**Applicant:** Please refer to the following pages of Applicant's March 25, 2013 posting, "Conditions as Revised by Applicant and Staff" found here:  
[http://www.energy.ca.gov/sitingcases/hiddenhills/documents/applicant/2013-03-25\\_Applicant\\_and\\_Staff\\_Revised\\_Conditions\\_TN-70065.pdf](http://www.energy.ca.gov/sitingcases/hiddenhills/documents/applicant/2013-03-25_Applicant_and_Staff_Revised_Conditions_TN-70065.pdf)

**BIO-8:** page 29

**BIO-14:** page 41

**BIO-18:** page 44

**BIO-20:** page 50

**BIO-22:** page 61

**Staff:** **BIO-8, BIO-14, BIO-18, BIO-20, and BIO-22** should read as follows:

## **GENERAL IMPACT AVOIDANCE AND MINIMIZATION MEASURES**

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

1. Limit Disturbance Area. The boundaries of all areas to be disturbed (including staging areas, access roads, and sites for temporary placement of spoils) shall be delineated with stakes and flagging prior to construction activities in coordination consultation with the Designated Biologist. All disturbances, vehicles, and equipment shall be confined to the flagged areas.
2. Minimize Road Impacts. New and existing roads that are planned for construction, widening, or other improvements shall not extend beyond the

flagged impact area as described above. All vehicles passing or turning around will do so within the planned impact area or in previously disturbed areas. Where new access is required outside of existing roads (e.g. new spur roads) or the construction zone, the route will be clearly marked (i.e., flagged and/or staked) prior to the onset of construction.

3. Minimize Traffic Impacts. Vehicular traffic during project construction and operation shall be confined to existing routes of travel to and from the project site, and cross country vehicle and equipment use outside designated work areas shall be conducted in coordination with the Designated Biologist. With the exception of the dirt roads that run between Tecopa Road and the project site, overland vehicle traffic shall be prohibited without coordination with the Designated Biologist. The speed limit shall not exceed the miles per hour limit as described in the Biological Opinion and as specified in Condition AQ-SC-3. 25 miles per hour within the project area, on maintenance roads for linear facilities, or on dirt access roads to the HHSEGS site. Vehicles shall abide by posted speed limits on paved roads.
4. Monitor During Construction. The Designated Biologist or Biological Monitor shall be present at the construction site during all project activities that have potential to disturb soil, vegetation, and wildlife. In areas that could support desert tortoise or any other sensitive wildlife species, the USFWS-approved Designated Biologist or Biological Monitor shall walk immediately ahead of equipment during brushing and grading activities.
5. Salvage Wildlife during Clearing and Grubbing. The Designated Biologist or Biological Monitor shall salvage and relocate special status sensitive wildlife during clearing and grading operations. The species shall be salvaged when conditions will not jeopardize the health and safety of the monitor and relocated off-site habitat.
6. Avoid Roosting Bats. The project owner shall minimize disturbance to roosting bats. If night or day roosting bats are identified in project structures they shall not be disturbed and a 100 foot non disturbance buffer shall be placed around the bats. If the Designated Biologist, in consultation with a qualified bat biologist, determines roosting bats consist of a non-breeding roost the individuals shall be safely evicted, under the direction of a qualified bat biologist. The CPM and CDFG shall be notified of any bat evictions within 48 hours. Maternity colonies shall not be disturbed. The CPM shall be notified within 48 hours of any active nurseries that are identified within the construction area.
7. Minimize Impacts of Transmission/Pipeline Alignments, Roads, and Staging Areas. For construction activities ~~outside of the plant site~~ within California (transmission line, pipeline alignments) access roads, pulling sites, and storage and parking areas shall be designed, installed, and maintained with the goal of minimizing impacts to native plant communities and sensitive biological resources. Transmission lines and all

electrical components shall be designed, installed, and maintained in accordance with the Avian Power Line Interaction Committee's (APLIC's) *Suggested Practices for Avian Protection on Power Lines* (APLIC 2006) and *Mitigating Bird Collisions with Power Lines* (APLIC 2004) to reduce the likelihood of bird electrocutions and collisions.

8. Avoid Use of Toxic Substances. Road surfacing and sealants as well as soil bonding and weighting agents used on unpaved surfaces shall be non-toxic to wildlife and plants. Anticoagulants shall not be used for rodent control. Only herbicides approved by the California Department of Pesticide Regulation (under the California Department of Environmental Protection) Pre-emergents and other herbicides with documented residual toxicity shall not be used. Herbicides shall be applied in conformance with federal, state, and local laws and according to the guidelines for wildlife-safe use of herbicides in **BIO-18** (Weed Management Plan).
9. Minimize Lighting Impacts. Facility lighting shall be designed, installed, and maintained to prevent side casting of light ~~towards wildlife habitat.~~
10. Cap Vertical Pipes. All vertical pipes greater than 4-inches in diameter shall be capped to prevent the entrapment of birds or bats.
11. Avoid Vehicle Impacts to Desert Tortoise. Parking and storage shall occur within the area enclosed by desert tortoise exclusion fencing to the extent feasible. No vehicles or construction equipment parked outside the fenced area shall be moved prior to an inspection of the ground beneath the vehicle for the presence of desert tortoise. If a desert tortoise is observed, it shall be left to move on its own. If it does not move within 15 minutes, a Designated Biologist or Biological Monitor under the Designated Biologist's direct supervision may remove and relocate the animal to a safe location if temperatures are within the range described in the USFWS' 2009 Desert Tortoise Field Manual ([http://www.fws.gov/ventura/speciesinfo/protocols\\_guidelines](http://www.fws.gov/ventura/speciesinfo/protocols_guidelines)). All access roads outside of the fenced project footprint shall be delineated with temporary desert tortoise exclusion fencing on either side of the access road, unless otherwise authorized by the CPM.
12. Avoid Wildlife Pitfalls.
  - a. Backfill Trenches. At the end of each work day, the Designated Biologist shall ensure that all potential wildlife pitfalls (trenches, bores, and other excavations) have been backfilled. If backfilling is not feasible, all trenches, bores, and other excavations shall be sloped at a 3:1 ratio at the ends to provide wildlife escape ramps, or covered completely to prevent wildlife access, or fully enclosed with desert tortoise-exclusion fencing. All trenches, bores, and other excavations outside the areas permanently fenced with desert tortoise exclusion fencing shall be inspected periodically, but no less than three times, throughout the day and at the end of each workday by the Designated

Biologist or a Biological Monitor. Should a tortoise or other wildlife become trapped, the Designated Biologist or Biological Monitor shall remove and relocate the individual as described in the Desert Tortoise Relocation/Translocation Plan. Any wildlife encountered during the course of construction shall be allowed to leave the construction area unharmed.

- b. Avoid Entrapment of Desert Tortoise. Any construction pipe, culvert, or similar structure with a diameter greater than 3 inches, stored less than 8 inches aboveground, and within desert tortoise habitat (i.e., outside the permanently fenced area) for one or more nights, shall be inspected for tortoises before the material is moved, buried, or capped. As an alternative, all such structures may be capped before being stored outside the fenced area, or placed on pipe racks. These materials would not need to be inspected or capped if they are stored within the permanently fenced area after the clearance surveys have been completed.
13. Minimize Standing Water. Water applied to dirt roads and construction areas (trenches or spoil piles) for dust abatement shall use the minimal amount needed to meet safety and air quality standards in an effort to prevent the formation of puddles, which could attract desert tortoises and common ravens to construction sites. A Biological Monitor shall patrol these areas to ensure water does not puddle and attract desert tortoise, common ravens, and other wildlife, to the site and shall take appropriate action to reduce water application where necessary.
14. Minimize Standing Water in the Retention Basin. Water shall be prohibited from collecting or pooling for more than 24 hours after a storm event within the project retention basin. Standing water within the retention basin shall be removed, pumped, raked, or covered. Alternative methods or the time water is allowed to pool may be ~~approved~~ utilized with the approval of the CPM.
15. Minimize Spills of Hazardous Materials. All vehicles and equipment shall be maintained in proper working condition to minimize the potential for fugitive emissions of motor oil, antifreeze, hydraulic fluid, grease, or other hazardous materials. The Designated Biologist shall be informed of any hazardous spills immediately as directed in the project Hazardous Materials Plan. Hazardous spills shall be immediately cleaned up and the contaminated soil properly disposed of at a licensed facility. Servicing of construction equipment shall take place only at a designated area. Service/maintenance vehicles shall carry a bucket and pads to absorb leaks or spills.
16. Dispose of Road-killed Animals. ~~Road-killed animals or other carcasses detected on Tecopa Road and other project roads in the vicinity within one mile of the project site shall be reported picked up immediately and delivered to the Biological Monitor for pick-up.~~ Road-killed animals or other

carcasses detected on Tecopa road and other project roads within one mile of the project site shall be reported to the Biological Monitor for pick up. For special-status species road kill, the Biological Monitor shall contact USFWS and CDFG within 1 working day of receipt of the carcass for guidance on disposal or storage of the carcass. The Biological Monitor shall report the special-status species record as described in Condition of Certification **BIO-2**.

17. Worker Guidelines. During construction all trash and food-related waste shall be placed in self-closing containers and removed ~~daily~~ from the site. Workers shall not feed wildlife or bring pets to the project site. Except for law enforcement or security personnel, no workers or visitors to the site shall bring firearms or weapons.

18. Avoid Spread of Noxious Weeds. The project owner shall implement ~~the following~~ best management practices (BMPs) during construction and operation, and all other measures as required in the final approved Weed Management Plan (**BIO-18**) to prevent the spread and propagation of noxious weeds and other invasive plants.:

~~a. Limit the size of any vegetation and/or ground disturbance to the absolute minimum and limit ingress and egress to defined routes;~~

~~b. Prevent spread of non-native plants via vehicular sources by implementing Trackclean™ or other methods of vehicle cleaning for vehicles coming and going from construction sites. Earth-moving equipment shall be cleaned prior to transport to the construction site; and~~

~~c. Use only weed-free straw, hay bales, and seed for erosion control and sediment barrier installations.~~

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

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

21. Control and Regulate Fugitive Dust. To reduce the potential for the transmission of fugitive dust the owner shall implement dust control measures as set forth in Condition AQ-SC3. ~~These shall include:~~



- ~~a. The owner shall apply non-toxic soil binders, equivalent or better in efficiencies than the CARB-approved soil binders, to active unpaved roadways, unpaved staging areas, and unpaved parking area(s) throughout construction to reduce fugitive dust emissions.~~
- ~~b. Water the disturbed areas of the active construction sites as necessary to control dust at least three times per day and more often if uncontrolled fugitive dust is noted.~~
- ~~c. Enclose, cover, water twice daily, and/or apply non-toxic soil binders according to manufacturer's specifications to exposed piles that may create fugitive dust with a 5% or greater silt content. Agents with known toxicity to wildlife shall not be used unless approved by the CPM.~~
- ~~d. Establish a vegetative ground cover (in compliance with biological resources impact mitigation measures above) or otherwise create stabilized surfaces on all unpaved areas at each of the construction sites within 21 days after active construction operations have ceased.~~
- ~~e. Increase the frequency of watering, if water is used as a soil binder for disturbed surfaces, or implement other additional fugitive dust mitigation measures, to all active disturbed fugitive dust emission sources when wind speeds (as instantaneous wind gusts) exceed 25 mph.~~

All mitigation measures and their implementation methods shall be included in the BRMIMP and implemented. Implementation of the measures shall be reported in the Monthly Compliance Reports by the Designated Biologist. Within 30 days after completion of project construction, the project owner shall provide to the CPM, for review and approval, a written construction termination report identifying how measures have been completed.

## **AMERICAN BADGER AND DESERT KIT FOX MANAGEMENT PLAN**

**BIO-14** The owner shall prepare and implement an American Badger and Desert Kit Fox Management Plan. ~~The plan shall be prepared in accordance with the most current CDFG guidelines for these species.~~ The Management Plan must be approved by the CPM prior to implementation, and shall contain the following provisions:

Preconstruction surveys and mapping efforts: biological monitors shall perform pre-construction surveys for badger and kit fox dens in the project area, including areas within 250 feet of all project facilities, utility corridors, and access roads. Preconstruction surveys may be completed concurrent with the preconstruction nesting bird surveys, burrowing owl surveys, or desert tortoise clearance surveys. If dens are detected, each den shall be classified as inactive, potentially active, or known active, including characterization of den type for kit fox (natal, pupping, likely satellite, atypical)

per CDFG and/or CPM guidance, and mapped along with major project design elements.

Directions for collapse of inactive dens. Inactive dens that would be directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by badgers or kit fox. Potentially and known active dens shall not be disturbed during the whelping/pupping season (approximately February 1 – September 30). A den may only be declared “inactive” after three days of monitoring via camera(s) or ~~and~~ tracking medium that have shown no kit fox or American badger activity.

Monitoring requirements: potentially and definitely active dens that would be directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights (during weather conditions favorable for detection) using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand. Backfilling dens ensures no badgers or kit fox are trapped in the den.

Passive relocation strategies: the management plan shall contain, ~~at a minimum, several~~ strategies to passively relocate animals from the site. These methods may entail strategic mowing, fencing, or other feasible ~~construction~~ methods to assist in moving animals offsite toward desirable land. The plan shall also ~~detail methods used to discourage occupation of dens within the project site, such as use of noisemakers, citronella-based chemical deterrents, strobe lighting, ect., and~~ shall incorporate temperature constraints if requested by the CPM or CDFG. The plan shall address location of preferred offsite movement of animals, based on CDFG data and land ownership. Private land is to be avoided to the maximum extent practicable. The plan shall also indicate that passive hazing is not to be used at natal dens, and shall include guidelines specific to determining when kit fox pups are functioning independently, and when passive relocation strategies may be safely implemented. The plan shall also prescribe use of buffer zones around dens to protect against accidental collapse or crushing by people or equipment.

Kit fox disease prevention measures. The Designated Biologist shall notify the CDFG and CPM within 24 hours if a dead kit fox is found or appears sick. The plan must also detail a response to a kit fox injury, including a necropsy plan, reporting methods, and scope of adaptive methods in the event of a known or suspected outbreak. ~~The project owner will pay for any necropsy work for dead kit fox found on the project site.~~ The project owner will pay for any necropsy work for dead kit fox found on the project site, or access roads, or within 1 mile of the project site.

**Verification:** At least ~~45~~ 60 days prior to any project-related ground disturbing activity, the project owner shall submit an American badger and desert kit fox management plan to the CPM for review and approval and to CDFG for review and

comment. No less than 310 days prior to any ground disturbing activity, the project owner shall provide one copy of the final approved plan to the CPM and implement the plan.

The project owner shall submit a report to the CPM and CDFG within 30 days of completion of badger and kit fox surveys. The report shall describe survey methods, findings, provide preliminary classification of dens and rationale, and map dens along with project features. Results of ongoing monitoring and relocation efforts shall be reported in the Monthly Compliance Reports. The project owner shall provide the CPM 24 hour notice before excavating a den classified as natal.

**BIO-18:** To minimize the potential indirect effects of weeds on biological resources adjacent to the project, the project owner shall submit a draft Weed Management Plan subject to review and approval by the compliance project manager (CPM). The general objective of the Weed Management Plan shall be to: 1) manage or contain weed species of greatest environmental concern for the life of the project to prevent their spread into adjacent offsite habitat, and 2) prevent the accidental introduction of new weed species from contaminated vehicles and equipment during construction or soil disturbing activities.

“Target” weed species or weed populations for long-term management, and those considered infeasible to control or a low priority shall be determined through an ecological risk assessment such as *Criteria for Categorizing Invasive Non-Native Plants that Threaten Wildlands* (2003)<sup>1</sup>, California Exotic Pest Plant Council *An Invasive Species Assessment Protocol: Evaluating Non-Native Plants for Their Impact on Biodiversity* (The Nature Conservancy 2004)<sup>2</sup>, or weed risk assessment criteria developed by the Bureau of Land Management (BLM) or U.S. Forest Service. The term “weeds” as used in this condition includes weed species identified by: California Invasive Plant Council (Cal-IPC); California Department of Food and Agriculture; and BLM California. Only the species of greatest environmental concern and/or limited distribution onsite shall be mandated for control and/or eradication. Weed management is not required for common and widespread weed species.

The draft weed management plan shall include the following:

1. Weed Plan Requirements. The draft plan shall include the following information: a) specific weed management objectives and measures for each target non-native weed species; b) description of the baseline conditions; c) maps showing locations of existing populations of target weeds or weed populations; d) weed risk assessment based on Cal-

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<sup>1</sup> Warner, Peter J., Carla C. Bossard, Matthew L. Brooks, Joseph M. DiTomaso, John A. Hall, Ann M. Howald, Douglas W. Johnson, John M. Randall, Cynthia L. Roye, Maria M. Ryan, and Alison E. Stanton. 2003. *Criteria for Categorizing Invasive Non-Native Plants that Threaten Wildlands*. California Exotic Pest Plant Council and Southwest Vegetation Management Association. 24 pp. Online: <http://www.cal-ipc.org/ip/inventory/pdf/Criteria.pdf>

<sup>2</sup> Morse, L.E., J.M. Randall, N. Benton, R. Hiebert, and S. Lu. 2004. *An Invasive Species Assessment Protocol: Evaluating Non-Native Plants for Their Impact on Biodiversity*. [v1]. The Nature Conservancy. Arlington, Va. Online: <http://www.natureserve.org/library/invasiveSpeciesAssessmentProtocol.pdf>

IPC<sup>3</sup>, Nature Conservancy<sup>4</sup>; BLM, or USFS criteria, e) measures that would be used to contain, manage, or monitor identified priority weed species; f) measures that would be used to prevent the introduction and spread of weeds on vehicles, equipment, and materials (e.g., infested seed, straw, gravel, etc.); g) measures to minimize the risk of unintended harm to wildlife and other plants from weed control activities; h) monitoring and surveying methods; and i) reporting requirements. Maps of all weeds found onsite contained in the botanical surveys<sup>5</sup> shall be attached as an appendix to the Weed Plan.

2. Avoidance and Treatment of Dense Weed Populations. The draft plan shall include guidelines for avoiding or treating dense populations of the weed species identified as priorities for containment. If grading and construction cannot avoid the highest priority target weed species, they shall be contained by one of the following methods: a) requiring tires of vehicles and equipment operating in infested areas to be cleaned before leaving the infested area; or b) treating the infested areas in the season prior to construction and spraying the new crop of plants that emerge in early spring.
3. Cleaning Vehicles and Equipment. The draft plan shall include specifications and requirements for establishing a cleaning station for removal of weed seed and weed plant parts from vehicles and equipment entering and leaving the site during construction. Vehicles and equipment working in weed-infested areas (including previous job sites) shall be required to clean the equipment tires, tracks, and undercarriage before entering the project area. The washing station shall be sized to accommodate large vehicles and construction equipment. Security or cleaning station staff will actively monitor vehicles and provide records in the monthly logs. Cleaning shall adequately remove all visible dirt and plant debris. If water must be used to clean vehicles, the water/slurry shall be contained to prevent seeds and plant parts from washing offsite.
4. Treatment of Weed Populations near Special-status Plants. The draft plan shall include a requirement to prioritize the containment of target non-native weeds ~~onsite~~ that occur onsite and within 100 feet of any of the nine offsite special-status plant occurrences immediately adjacent to the project boundary. Weeds that are located offsite will not be controlled. The

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<sup>3</sup> Warner, Peter J., Carla C. Bossard, Matthew L. Brooks, Joseph M. DiTomaso, John A. Hall, Ann M. Howald, Douglas W. Johnson, John M. Randall, Cynthia L. Roye, Maria M. Ryan, and Alison E. Stanton. 2003. *Criteria for Categorizing Invasive Non-Native Plants that Threaten Wildlands*. California Exotic Pest Plant Council and Southwest Vegetation Management Association. 24 pp. Online: <http://www.cal-ipc.org/ip/inventory/pdf/Criteria.pdf>

<sup>4</sup> Morse, L.E., J.M. Randall, N. Benton, R. Hiebert, and S. Lu. 2004. *An Invasive Species Assessment Protocol: Evaluating Non-Native Plants for Their Impact on Biodiversity*. [v1]. The Nature Conservancy. Arlington, Va. Online: <http://www.natureserve.org/library/invasiveSpeciesAssessmentProtocol.pdf>

<sup>5</sup> CH2M Hill 2011. *Spring 2011 Botanical Resource Survey of the Hidden Hills Solar Electric Generating System Site*, Appendix A. Applicants Data Response Set 1B-2 (tn: 63262).

draft plan shall also include measures for preventing accidental harm to the adjacent offsite occurrences during spraying or other weed management activities, ~~according to the guidelines in #6, below.~~ The plan shall not include spraying or mechanical treatments of common and widespread weeds around the perimeter to avoid harming wildlife; the focus shall instead be on spot treatment of new outbreaks and small populations of the most invasive species, and according to the guidelines for wildlife-safe herbicide use described under #7 and #8, below.

5. Employee Weed Awareness Training. A program shall be developed and incorporated into the WEAP and BRMIMP to train construction and operation employees to recognize the most common and most invasive species in the area, how to avoid contaminating vehicles and equipment, how to avoid spreading weeds offsite or introducing new weed species onsite, and how to protect wildlife and adjacent offsite special-status plant occurrences from accidental harm during weed management activities. Employees shall be trained to understand the common vectors and conduits for spread, the economic and ecological impacts of weeds, and trained on procedures for reporting infestations.
- ~~6. Compensate Local Agencies for Increased Weed Monitoring and Abatement. The project owner and the Inyo/Mono Agricultural Commissioner shall establish an amount for a fee to be paid annually by the project owner to the local agency for increased offsite monitoring and abatement costs resulting from the construction and operation of the project.<sup>6</sup>~~
7. Safe Use of Herbicides. The draft plan shall include a list of herbicides and soil stabilizers that will be used on the project with manufacturer's guidance on appropriate use. The draft plan shall indicate under what circumstances herbicides will be used, and what techniques will be used to avoid chemical drift. Guidance for safe herbicide use is available in *Safe Herbicide Handling in Natural Areas* (Hillmer et al. 2003). Only weed control measures for target weeds with a demonstrated record of success shall be used, based on the best available information from sources such as The Global Invasive Species Team "Invasipedia"<sup>7</sup>, Cal-IPC Invasive Plant Profiles<sup>8</sup>, and the California Department of Food & Agriculture Encycloweediea<sup>9</sup>.
8. Weed Control Methods. The methods for weed control described in the draft plan shall meet the following criteria:

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<sup>6</sup> ~~It is applicant's belief that the language regarding payment to the Agricultural Commission in Condition BIO-18 is not required due to the agreement between the applicant and Inyo County.~~

<sup>7</sup> <http://wiki.bugwood.org/Invasipedia>

<sup>8</sup> [http://www.cal-ipc.org/ip/management/plant\\_profiles/index.php](http://www.cal-ipc.org/ip/management/plant_profiles/index.php)

<sup>9</sup> [http://www.cdff.ca.gov/plant/ipc/encycloweediea/encycloweediea\\_hp.htm](http://www.cdff.ca.gov/plant/ipc/encycloweediea/encycloweediea_hp.htm)

- a. Manual: Seed heads and plants removed manually must be disposed of in accordance with guidelines from the Inyo County Agricultural Commissioner (or Clark or Nye County commissioners if disposed in Nevada).
- b. Chemical: Herbicides known to have residual toxicity, such as soil fumigants and certain pre-emergent herbicides and pellets shall not be used. Only post- and pre-emergent herbicides known to have minimal toxicity to birds and other wildlife shall be used in weed control. This includes selective or non-selective types depending on target weed species. In sensitive areas immediately adjacent to offsite special-status plant occurrences, sprayers shall be operated at low pressure or with a shield attachment to control drift, and spraying conducted on windless days;
- c. Biological: Biological methods, if used, shall be subject to agency review to avoid inadvertent naturalizing, hybridizing with native species;
- d. Mechanical: Mechanical trimmers shall not be used during periods of high fire risk or shall only be implemented during early morning hours when the fire risk is lowest. Contact information for the local fire department and Cal-Fire shall be clearly posted at all times. A live water supply, shovels, and fire extinguishers shall be available at all times during mowing and other mechanical weed controls.

**Verification:** At least 90 days prior to the start of any project-ground disturbing activity, the project owner shall submit the draft Weed Management Plan to the CPM for review and approval. No less than 30 days prior to the start of any project-ground disturbing activity, the project owner shall provide the CPM with the final version of the Weed Management Plan. Any modifications to the approved plan shall be made only after approval by the CPM.

~~No less than 60 days prior to start of any project-related ground disturbance activities, the project owner shall provide the CPM with a copy of an agreement between the project owner and local agricultural commissioner(s) regarding compensation for increased weed monitoring and abatement costs, and provide written evidence that the first annual fee has been paid.~~<sup>10</sup>

Within 60 days after completion of project construction, the project owner shall provide to the CPM for review and approval a written report identifying which items of the Weed Management Plan have been completed, a summary of all modifications to mitigation measures made during the project's construction phase, and which items are still outstanding.

As part of the Annual Compliance Report, each year following construction the Designated Biologist shall provide a report to the CPM that includes: a) a summary of the results of noxious weed surveys and management activities for the year; b) discussion and documentation of progress in meeting management goals for target weed species; c) documentation that methods were employed to prevent accidental harm to adjacent sensitive resources, and d) recommendations for weed management activities for the upcoming year.

<sup>10</sup> ~~It is applicant's belief that the language regarding payment to the Agricultural Commission in Condition BIO-18 is not required due to the agreement between the applicant and Inyo County.~~

## **SPECIAL-STATUS PLANT COMPENSATORY MITIGATION PLAN**

**BIO-20** To mitigate for significant impacts to special-status plants that occur on the project site, the project owner shall implement mitigation to offset the impact as described below. Because the condition allows for future offsite surveys to identify new occurrences, and the adjustment of mitigation ratios if new offsite occurrences are found, a range of options is provided with detailed performance standards for each option. Due to the resulting length of the condition, it has been subdivided into the following subsections:

### **A. Mitigation through Acquisition and Preservation**

### **B. Mitigation through Restoration and Enhancement**

### **C. Mitigation through Avoidance**

### **D. Other Provisions**

“Other Provisions” includes performance standards for future surveys, and adjusting mitigation ratios, and seed collection. An in-lieu option for fulfilling mitigation through payments to an approved third-party land trust or public agency is also included.

### **Subsection A: Mitigation through Acquisition and Preservation**

1. Selection Criteria and Mitigation Ratio for Compensation Lands. If the project owner elects to mitigate for significant impacts to Wheeler’s skeletonweed, Torrey’s joint-fir, and Preuss’ milk-vetch by acquiring and preserving offsite occurrences under a permanent conservation easement, three offsite occurrences shall be protected for every S1 (“critically imperiled”) species affected and two offsite-occurrences protected for every S2 (“imperiled”) species affected. Range ranks (e.g., an S1S2 rank) shall defer to the more imperiled rank. For gravel milk-vetch a total of four offsite occurrences shall be protected through acquisition and preservation (~~see explanation in the Staff Rebuttal, page 14-15, tn 69495~~). The restoration option (subsection B) and the option for avoidance of perimeter occurrences (subsection C) may be used to fulfill this obligation if there are insufficient opportunities for acquisition. Acquisition lands containing more than one of the affected species shall be credited for both species. Integration of special-status plant mitigation land with other mitigation lands is described below.

The compensation lands selected for acquisition must meet the following selection criteria: a) the compensation lands selected for acquisition shall be occupied by the target plant species and shall be characterized by site integrity and habitat quality adequate to sustain the population, and b) shall be of equal or better habitat quality than that of the affected occurrence unless restoration/enhancement actions are proposed to the acquisition property. The occurrence of the target special-status plant on the proposed acquisition lands should be viable, stable or increasing, or be made so, with implementation of restoration/enhancement actions.

- 2) Review and Approval of Compensation Lands Prior to Acquisition. A Draft Special-status Plant Mitigation Plan (Plan) shall be prepared subject to review and approval of the CPM prior to acquisition. The Draft Plan shall discuss the suitability of the proposed parcel(s) as compensation lands for special-status plants in relation to the criteria listed above. The project owner shall submit the final plan and formal acquisition proposal to the CPM describing the parcel(s) intended for purchase, and must be approved by the CPM.
- 3) Management Plan. The project owner, or approved third party as described below under "Title and Conveyance", 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 maintain the long-term viability of the target special-status plant occurrences to be viable, stable, or increasing. The management plan shall also include long-term monitoring and reporting on the implementation, effectiveness and compliance with the conservation goals and objectives of the mitigation. The Management Plan shall be submitted for review and approval to the CPM.
- 4) Integrating Special-Status Plant Mitigation with Other Mitigation Lands. If all or any portion of the acquired Desert Tortoise, Waters of the State, or other required compensation lands meets the criteria above for special-status plant compensation lands, the portion of the other species' or habitat compensation lands that meets any of the criteria above may be used to fulfill that portion of the obligation for special-status plant mitigation. Mitigation obligations for special-status plants shall not be fulfilled by nesting with other mitigation lands if the lands do not meet all the criteria and performance standards described in this condition. Potential mitigation lands containing more than one of the significantly affected species would be credited for both species, i.e., one parcel could be used to fulfill the mitigation obligations for more than one special-status plant species providing the parcel met all the selection criteria. If mitigation lands contain more than one special-status plant occurrence or multiple special-status plant species then credit will be given for multiple occurrences.
- 5) 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, 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.



- 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 a non-profit organization qualified to hold title to and manage compensation lands (pursuant to California Government Code section 65965), or to CDFG 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 the deed holder approved by the CPM. The CPM may require that another entity approved by the CPM 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, if habitat improvement is necessary. These activities will vary depending on the condition and location of the land acquired, but may include: initial enhancement (e.g., signs, fencing, protection from off-road vehicles); restoration actions needed to maintain the viability of the occurrences (e.g., removal of invasive species, barricading and decommissioning off-road vehicle trails, protection from herbivores, managing public access, enforcement); and monitoring and reporting on implementation, effectiveness and compliance with the conservation goals and objectives of the mitigation. For determining the amount of security, the cost of these activities may use the estimated cost per acre for Desert Tortoise mitigation as a proxy or other estimates proposed by the project owner and approved by the CPM. The actual costs will vary depending on the measures that are required for the compensation lands and shall be determined by a Property Analysis Record (PAR) or similar analysis. A non-profit organization 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), and if it meets the approval of the CPM.
- d. Property Analysis Record. Upon identification of the compensation lands, the project owner shall conduct a 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 deposit into an account managed by a land trust or other non-profit organization to fund a capital long-term maintenance and

management fee (endowment) in the amount determined through the Property Analysis Record (PAR) or PAR-like analysis conducted for the compensation lands. The CPM may designate another non-profit organization to hold the long-term maintenance and management fee if the organization is qualified to manage the compensation lands in perpetuity.

- f. Interest, Principal, and Pooling of Funds. The project owner shall ensure that an agreement is in place with the long-term maintenance and management fund (endowment) holder/manager to ensure the following requirements are met:
  - 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 and any other action that is approved by the CPM and is designed to protect or improve the habitat values of the compensation lands related to the special-status plants.
  - 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 target 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 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.
- g. Other Expenses. In addition to the costs listed above, the project owner shall be responsible for all other costs related to acquisition of compensation lands and conservation easements, including but not limited to the title and document review costs incurred from other state agency reviews, overhead related to providing compensation lands to an approved third party, escrow fees or costs, and environmental contaminants clearance.
- h. 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. 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 financial security ("Security") approved by the CPM. The estimated acquisition costs and amount of the security may be calculated based on the estimated cost per acre for Desert Tortoise mitigation or other estimate as approved by the CPM as a best available proxy. 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.

- i. Conservation Easements and Other Deed Restrictions. If acquisition and preservation is accomplished through conservation easements, or other deed restrictions that go with the land, as an alternative to fee title, the easement shall meet the following performance standards: 1) the easement shall be large enough to maintain the viability of the occurrence and protect it from edge effects; 2) stewardship fees shall be adequate to manage and defend the easement; and 3) ongoing oversight and accountability shall be ensured through monitoring and reporting requirements of the easement holder. Conservation easements held by a third party land trust or public agency, and other deed restrictions shall be obligated to fulfill all performance standards described above. The approved third party shall submit an annual report to the CPM on the health and status of the protected occurrence as described below.

Other deed restrictions, such as restrictive covenants, are acceptable only if the project owner demonstrates that no third party land trust or public agency was available to accept the easement. Under these circumstances, the project owner shall be responsible for managing the occurrence under deed restrictions according to the performance standards described above for initial protection and enhancement and long-term management until transferred to an approved third party under a conservation easement. The project owner shall monitor the occurrence(s) and submit an annual report to the CPM that includes a

qualitative and quantitative report on the occurrence health and status, actions taken to enhance and protect the occurrence, a description of remedial actions taken or proposed, and contact information for the responsible parties.

### **Subsection B: Mitigation through Restoration and Enhancement**

1. Criteria for Mitigation through Enhancement/Restoration of At-Risk Occurrences. As an alternative or adjunct to acquisition of compensation lands, the project owner may undertake or fund habitat enhancement or restoration for at-risk occurrences of the target special-status plant species. Examples of suitable restoration projects include but are not limited to the following: a) control of unauthorized vehicle use into an occurrence; b) control of invasive non-native plants that pose an immediate threat to an occurrence; c) fencing to exclude grazing by wild burros or livestock from an occurrence; d) protection from other herbivores (e.g. lagomorphs) if damaging to the occurrence, or e) restore lost or degraded hydrologic or geomorphic functions critical to the species (e.g., restoring previously diverted stream flows, removing obstructions to the wind sand transport corridor above an occurrence, or increasing groundwater availability for dependent species). Ex-situ mitigation through transplanting or replacement planting is not an acceptable mitigation option due to the high rate of failure.
2. Performance Standards. 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 enhancement/restoration of an off-site occurrence that is currently in decline to a stable or increasing status. The NatureServe threat ranking system, or another equivalent system approved by the CPM, may be used to evaluate threats to the occurrence. Restoration would be considered successful if it achieves an improvement in the occurrence trend as measured using the NatureServe ranking system, or other approved threat-ranking system to a stable or increasing status, as defined by the approved threat-ranking system.
3. Mitigation Security. The project owner shall provide financial assurances to the CPM to guarantee that an adequate level of funding is available to implement the restoration/enhancement project. 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 financial security ("Security") approved by the CPM. The amount of the security shall be based on the estimated total cost for the restoration project, including implementation, monitoring, and contingency measures. The implementation and monitoring of the restoration may be undertaken by an appropriate third party, or the project owner may fund an agency to implement the restoration,

subject to approval by the CPM. Any restoration undertaken on private lands must be protected in perpetuity under a conservation easement.

4. Prepare Enhancement/Restoration Plan. If the project owner elects to undertake an enhancement/restoration project for mitigation, they shall submit an Enhancement/Restoration Plan to the CPM for review and approval. The Enhancement/Restoration Plan shall include each of the following components:
  - a. Goals, Objectives, and Performance Standards. 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 enhancement/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 threat trend-compared to pre-enhancement/restoration conditions using NatureServe or other threat-ranking system.
  - b. Baseline, Historical, and Desired Conditions. Provide a description of the pre-project baseline conditions (prior to the start of restoration), an estimate of the pre-impact historical conditions (before the site was degraded by weeds or grazing or ORV, etc.), and the desired conditions.
  - c. 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).
  - d. Ecological Factors. Describe other important ecological factors of the species being protected, restored, or enhanced such as total population, reproduction, distribution, pollinators, etc.
  - e. 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/restoration project must be completed within five years of the start of construction.
  - f. Budget. Provide a detailed budget and time-line, and develop clear, measurable, objective-driven annual success criteria.
  - g. Monitoring. Develop clear, measurable monitoring methods that can be used to evaluate the effectiveness of the enhancement/restoration and the benefit to the affected species. The plan shall include a minimum of five years of monitoring until the performance standards for restoration of the threatened occurrence are met.

- h. Reporting Program. The project owner shall submit annual progress reports that include: quantitative measurements of the projects' progress in meeting the enhancement/restoration project success criteria, detailed description of remedial actions taken or proposed and contact information for the responsible parties.
- i. Contingency Plan. Describe the contingency plan for failure to meet annual success criteria.
- j. Long-term Protection. Include proof of long-term protection for the restoration site. For private lands this could include conservations easements or other deed restrictions. Projects on public lands must be protected under a Wilderness designation, Bureau of Land Management (BLM), BLM Area of Critical Environmental Concern (ACEC), BLM Desert Wildlife Management Area (DWMA), BLM or other agency Research Natural Area, National Park lands, or State Park lands, or under a conservation easement or equivalent protection on Department of Defense lands.

#### **Subsection C: Mitigation through Avoidance**

1. Mitigation through Avoidance of Perimeter Occurrences. The project may elect to mitigate impacts to gravel milk-vetch in part through avoidance of occurrences located along the project boundary under the following conditions: a) the avoidance includes a buffer surrounding the occurrence that is adequate, subject to approval by the CPM, for maintaining the long-term viability of the occurrence, and b) the avoided occurrence and its buffer are placed under a permanent conservation easement and protected and managed as described for mitigation through acquisition in subsection A, above. An "adequate buffer" shall ensure protection from the edge effects of the project (no less than a 100-foot setback from the project development) and can protect the ecosystem processes necessary for maintaining the habitat.

#### **Subsection D: Other Provisions**

1. Preservation of the Germplasm of Affected Special-Status Plants. This is not an alternative to mitigation by acquisition or restoration, but is a required contingency measure for all significantly affected special-status plants ~~as a contingency~~ in the event of mitigation failure. Seeds shall be collected from the affected special-status plants occurrences onsite prior to construction to conserve the germplasm. 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.
2. Criteria for Adjusting Mitigation Ratio for New Special-status Plant Occurrences. Due to the potential for finding additional offsite occurrences

of Torrey's joint-fir, gravel milk-vetch, Wheeler's skeletonweed, and Preuss' milk-vetch, ~~(see explanation in Staff Rebuttal, page 17, tn-69495)~~ the project owner may conduct pre-construction surveys in 2013. If the discovery of new occurrences results in a downgrading by the California Natural Diversity Database (CNDDB) of the CNDDB Element Rank by from an S1 to S2, the species will be mitigated as an S2 species. If the new occurrences result in a downgrading from S1 to S3 ("vulnerable but not under immediate threat of extinction") or the proportion of the statewide distribution affected by the project is less than 10 percent, then mitigation for that species shall no longer be required.

3. In-Lieu Mitigation. Compensatory special-status plant mitigation requirements may be fulfilled at the election of the project owner by using an in-lieu funding option for acquisition or enhancement/restoration of special-status plant occurrences. The in-lieu mitigation approach would be consistent with the provisions included in BIO-25 (In-Lieu Fee and Advanced Mitigation Option) with the exception that the in-lieu option may also be exercised for approved special-status plant restoration/enhancement projects. In-lieu payments for special-status plant mitigation shall only be approved for land trusts in existence for a minimum of three years. Stewardship fees shall be adequate for the long-term management and legal defense of the acquired lands or easement. Any proposals to exercise the in-lieu option would be subject to review and approval by the CPM.

**Verification:** No fewer than 90 days prior to the start of project ground-disturbing activities, the project owner shall submit to the CPM for review and approval a conceptual proposal for mitigation that meets the criteria and performance standards described above.

The project owner shall provide the CPM, no less than 30 days prior to the start of any project related ground-disturbing activities, written verification that an approved financial security in accordance with this condition of certification has been established.

No later than June 15 of the first summer following the Final Decision, the project owner shall provide the CPM documentation that seed has been collected for all the affected species and submitted to either Rancho Santa Ana Botanical Garden Seed Conservation Program, San Diego Natural History Museum, or the Missouri Botanical Garden.

No later than 30 days following the discovery of any new occurrences of Torrey's joint-fir, Wheeler's skeletonweed, gravel milkvetch, or Preuss' milkvetch, the project owner shall submit raw GPS data, metadata, and CNDDB field forms to the CPM. The project owner shall immediately provide written notification to the CPM if a state- or federal-listed plant species is detected.

No later than 18 months following project approval, the project owner shall submit a draft acquisition proposal to the CPM describing the parcels intended for purchase, and a conceptual management and enhancement plan for the acquired lands according to

the minimum requirements described under subsection A (Mitigation through Acquisition and Preservation) of this condition.

If the project elects to fulfill mitigation obligations through enhancement/restoration, the project owner shall submit a draft enhancement/restoration plan, according to the minimum requirements described under subsection B (Mitigation through Restoration/Enhancement) described above, no later than 18 months following project approval.

The project owner, or an approved third party, shall complete and provide written verification of the completion of the approved acquisition, and/or the start of an approved enhancement/restoration project, no later than 36 months following project approval.

If National Fish and Wildlife Foundation (NFWF) or another approved third party is being used for the acquisition or enhancement/restoration through the in-lieu mitigation option, the project owner shall ensure that funds needed to accomplish the mitigation are transferred in timely manner to ensure completion of acquisition or the start of enhancement/restoration project prior to the 36-month deadline.

No fewer than 30 days after acquisition of the property the project owner shall deposit the funds required for long term management, as described above, and provide proof of the deposit to the CPM.

The implementation phase of an approved enhancement/restoration project shall be completed within five years of initiation. The annual report describing the progress of the enhancement/restoration shall be prepared according to requirements under subsection B ("Monitoring" and "Reporting Requirements") and submitted as part of the Annual Compliance Report.

## **STATE WATERS COMPENSATORY MITIGATION AND IMPACT AVOIDANCE & MINIMIZATION MEASURES**

**BIO-22** To satisfy requirements of California Fish and Game Code sections 1600 and 1607, the project owner shall implement measures contained herein for: 1) compensating unavoidable impacts to all waters of the state located within the project footprint, and 2) for avoiding and minimizing accidental, incidental and indirect impacts to state waters located outside the project footprint. For purposes of this condition, "project footprint" means all lands contained within the boundaries of the project components, including access roads, utility and transmission alignments, staging areas, and temporary construction areas. Avoidance and minimization measures for work within or adjacent to waters shall be implemented during construction, operation, and decommissioning, including site mobilization.

1. Compensatory Mitigation. The project owner shall acquire and preserve under a permanent conservation easement a parcel or parcels of land that contain jurisdictional state waters in an amount equal to the area of state waters delineated within the project footprint and mitigated at a ratio of 2:1 (two acres for every acre of state waters onsite) for permanent impacts to



habitat functions and values. This ratio assumes that impacts to the hydrologic and geomorphic functions will be minimized by not diverting streams around the site in artificial channels. If the channels are diverted around the site, the mitigation ratio shall increase to a ratio of 3:1. The project owner shall provide associated funding for the long-term stewardship of the acquired lands, as specified below.

- a. Selection Criteria. Compensation lands for impacts to state waters shall meet the following criteria:
  - i. Located in California and within the Pahrump Valley Hydrologic Unit. If the project owner demonstrates that suitable compensation lands are not available within Pahrump Valley, lands may be acquired in California Valley, or the California portions of Sandy (Mesquite) Valley and Stewart Valley or other adjacent watersheds;
  - ii. Contain waters in a general physiographic setting similar to the affected waters (i.e., alluvial fan washes) or that provide similar habitat function and values. Proposed mitigation sites shall be described in terms of habitat function and values, in the context of the habitat function and values that were impacted at the project site, in a proposal subject to approval by the CPM in consultation with CDFG;
  - iii. Contain waters of a similar or better quality than the affected waters. Subject to review and approval of the CPM in consultation with CDFG, lands degraded by unauthorized off-road vehicles (ORV) may be considered if the project owner can demonstrate that the unauthorized ORV can be excluded and controlled with road decommissioning and signage;
  - iv. Contain waters that are hydrologically unimpaired upstream by dams or diversions. Subject to review and approval of the CPM in consultation with CDFG, impaired waters may be considered if it can be demonstrated that the hydrologic functions can be restored and are accompanied by a restoration proposal;
  - v. Do not contain hazardous wastes that cannot be removed; and
  - vi. Contain water and mineral rights as part of the acquisition, unless the CPM, in consultation with CDFG, agrees in writing to the acceptability of the land.
- b. Integrating Special-Status Plant Mitigation with Other Mitigation Lands. Any portion of the acquired Desert Tortoise or other required compensation lands that meets the criteria above for state waters may be used to fulfill that portion of the obligation for state waters mitigation.
- c. Security for Implementation of Mitigation: The project owner shall provide financial assurances to the CPM to guarantee that an

adequate level of funding is available to implement the acquisitions and enhancement of state waters as described in this condition. These funds shall be used solely for implementation of the measures associated with the project. Financial assurance can be provided to the CPM in the form of an irrevocable letter of credit, a pledged savings account or security prior to initiating ground-disturbing project activities. Prior to submittal to the CPM, the mitigation security shall be approved by the CPM, in consultation with CDFG. The final amount due shall be determined by updated appraisals and the PAR analysis conducted pursuant to **BIO-12** (Desert Tortoise Compensatory Mitigation).

- d. Prepare Management Plan for Stewardship of Acquired Lands: The project owner shall submit a draft State Waters Mitigation Management Plan subject to review and approval by the CPM in consultation with CDFG. The goal of the plan is to protect the integrity of the washes and their habitat functions and values from unauthorized ORV and other threats, or to restore degraded functions and values as described in #2 (a) above. Acquired lands must be protected in perpetuity under a conservation easement as described in **BIO-12** (Desert Tortoise Compensatory Mitigation).
  - e. Compensation Lands Acquisition Requirements. The project owner shall comply with the requirements relating to acquisition of the compensation lands described in **BIO-12** (Desert Tortoise Compensatory Mitigation).
2. Avoidance and Minimization Measures. The measures described below shall be implemented during construction, operation, and closure for any project-related activity that may directly or indirectly affect offsite waters adjacent to the project boundary, and to minimize impacts to the hydrologic and geomorphic functions of waters onsite, including water quality. Such activities include ground or vegetation disturbing activities, weed and vegetation management activities, and pre-construction mobilization. The project owner shall provide a discussion of work in or adjacent to waters of the state, and the avoidance and minimization measures employed to protect offsite waters from accidental or indirect effects in the Annual Compliance Reports.
- a) Guidelines for Stream Crossings. The project owner shall minimize disturbance to surface drainage patterns and sediment transport in watercourses downstream of the project. Arizona crossings shall be employed for improvements to project access roads wherever such crossings do not present a safety hazard and where the roadbed elevation allows the construction of such crossings. Crossings shall be constructed to accommodate the full natural width of the channel (bank-to-bank) for single-thread channels, and the full width of the floodplain for braided distributary channels. Streams that have been graded for temporary construction access shall be restored to original

contours and surface drainage patterns and shall be stabilized according to specifications in **SOIL-1**.

- b) Diffuser Design. For any diverted watercourse, the project owner shall maintain pre-development surface drainage patterns downstream of the project, in location and approximate volume rate of flows. Flows shall not be discharged indiscriminately as sheet flow across the entire length of the diffusers, irrespective of the natural surface drainage patterns, but shall instead be designed to discharge within existing watercourse boundaries downstream, or within the active floodplain of braided distributary stream types.
- c) Documentation at the Site and Project Entry. The project owner shall provide a copy of this condition from the Energy Commission Final Decision to all contractors, subcontractors, and the owner's project supervisors and Designated Biologist. Copies shall be readily available at work sites at all times during periods of active work and must be presented to any Energy Commission (CEC) personnel upon demand.
- d) Best Management Practices (BMPs). A site-specific SWPPP will be implemented in accordance with requirements of the Construction General Permit (CGP). The SWPPP will identify appropriate BMPs, as well as monitoring, sampling and inspections consistent with the project's calculated risk level. During construction, operation, closure, and pre-construction mobilization, the following BMPs shall be implemented to avoid accidental impact during construction or indirect effects to state waters:
  - i) During the pre-construction planning stage, identify gravel storage areas, staging areas, access roads, parking, turnarounds, and equipment refueling & maintenance areas to minimize impacts to any delineated state waters outside of the permitted work area. Staging, storage, equipment maintenance and re-fueling shall be located a minimum of 30 feet from the uphill side of streams and their active floodplain to protect water quality downstream. The boundaries of those work areas shall be clearly marked on all final site plan and construction drawings.
  - ii) Prior to the start of construction, establish the stream zones offsite or outside the permitted work area that are adjacent to work activities as Environmentally Sensitive Areas (ESAs). No earth-moving activities, vegetation removal, vehicles, heavy equipment, material storage, equipment maintenance or re-fueling, or other construction activities shall be permitted within the ESAs. Work shall not begin until the boundaries of the ESAs are delineated on the ground with orange safety netting where they occur adjacent to work activities (e.g., along the project boundary) under supervision of the Biological Monitor. The ESAs shall be depicted on all final maps and specifications.

- ~~iii) Construction activities shall be timed with awareness of precipitation forecasts, and shall be started only if the local weather forecast predicts no probability of rain for a period of 72-24 hours. Construction activities shall cease and water quality, erosion and sediment control measures shall be implemented prior to storm events to prevent erosion and sedimentation, and contamination of stormwater runoff. Activities outside of the sensitive areas described above are not confined to this time period, but at no time shall heavy equipment operate during wet weather. Extra sediment, pollutant, and erosion control materials shall be stockpiled onsite to address any unanticipated rain events.~~
- iv) The project owner shall minimize road building, construction activities and vegetation clearing on streams within the site wherever possible by limiting the width of the work area. Access to the site shall be on existing access roads.
- v) In the event of wet weather, the project owner shall not allow water containing mud, silt, or other pollutants from grading, aggregate washing, or other activities to enter streams outside the permitted work area, or be placed in locations that may be subjected to storm runoff. Prior to the start of work, including any equipment move-on or materials storage, install silt-fencing, straw bales, sediment catch basins, straw or coir logs or rolls, or other sediment barriers to keep erodible soils and other pollutants from entering state waters outside the permitted work area.
- vi) No broken concrete, debris, soil, silt, sand, gravel, rubbish, cement or concrete wash water, oil or petroleum products, or other contaminants shall be allowed to enter into, or placed where it may be washed by rainfall or runoff into waters of the state outside the permitted work area. The contractor shall immediately contain and clean up any petroleum or other chemical spills with absorbent materials such as sawdust or cat litter. For other hazardous materials, follow cleanup instructions on the package.
- e) Changes of Conditions. A formal notification shall be provided to the CPM and CDFG if a change of conditions is identified. As used here, change of condition refers to the process, procedures, and methods of operation of a project; the biological and physical characteristics of a project area; or the laws or regulations pertinent to the project as defined below. A copy of the change of conditions notification shall be included in the annual reports or until it is deemed unnecessary by the CPM, in consultation with CDFG. A change in biological conditions includes, but is not limited to, the following: the presence of biological resources within or adjacent to the project area, whether native or non-native, not previously known to occur in the area; or the presence of biological resources within or adjacent to the project area, whether

native or non-native, the status of which has changed to endangered, rare, or threatened, as defined in section 15380 of Title 14 of the California Code of Regulations. A change in physical conditions includes unexpected, substantial physical changes that result from project implementation, and do not include the types of changes that are typical of alluvial fan stream systems; such changes include, but are not limited to, the following: an adverse, substantial change in the morphology of a river, stream, channel or lake, such as the lowering of a bed or scouring of a bank, or substantial changes in stream form and configuration caused by storm events; the substantial movement of a river or stream channel to a different location; a substantial reduction of or other change in vegetation on the bed, channel, or bank of a drainage that is outside of approved vegetation management; or substantial changes to the hydrologic regime such as fluctuations in the timing or volume of water flows in a river or stream.

**Verification:** No less than 60 days prior to beginning project ground-disturbing activities, the project owner shall provide to the CPM design drawings of drainage diffusers or other discharge points depicting how these structures restore pre-development drainage patterns (location and rate of flows) to any watercourses located downstream of the project boundaries. At the same time the project owner shall provide design drawings for temporary and permanent stream crossings.

No less than 30 days prior to the start of construction-related ground disturbance activities, the project owner shall provide written verification (i.e., through incorporation into the BRMIMP) to the CPM that the above BMPs will be implemented.

The project owner shall provide the CPM, no less than 30 days prior to the start of any project related ground-disturbing activities, written verification that an approved security for compensatory mitigation in accordance with this condition of certification has been established. A draft proposal for compensatory land acquisition shall be submitted no later than 18 months following project approval.

Acquisition shall be completed within 36 months following the start of project construction approval and evidenced by a copy of the final recorded deed showing transfer of mitigation land or documentation of other approved mitigation transaction as approved by the CPM.

No less than 90 days prior to the acquisition of the compensation lands, the project owner shall submit a ~~formal~~ draft acquisition proposal, including Property Analysis Record (PAR), to the CPM and CDFG. A draft management plan for the acquired lands shall be submitted to the CDFG and CPM no less than 60 days after acquisition of the compensation land.