

Attachment I

During-Construction Mitigation Measures

Devers-Palo Verde No. 2 Transmission Project Mitigation Monitoring, Compliance, and Reporting Program



California Public Utilities Commission
and
Bureau of Land Management
U.S. Department of Interior

December 22, 2011

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
BIOLOGICAL RESOURCES				
<p>— MM B-1a: Prepare and implement a Habitat Restoration/Compensation Plan. SCE shall restore all areas disturbed by project construction, including temporary disturbance areas around tower construction sites, laydown/staging areas, temporary access and spur roads, and existing tower locations that are removed during construction of the Proposed Project. Where onsite restoration is planned for mitigation of temporary impacts to sensitive vegetation communities, SCE shall identify a qualified Habitat Restoration Specialist to be approved by the CPUC/BLM. Hydro-seeding, drill seeding, or an otherwise proved restoration technique shall be utilized on all disturbed surfaces using a locally endemic native seed mix approved by the CPUC/CDFG/FWS and BLM. SCE shall flag the limits of disturbance at each construction site. The Plan shall incorporate the measures identified in the June 2006 Memorandum of Understanding regarding vegetation management along rights-of-way for electrical transmission and distribution facilities on Federal lands. In project areas that occur in the WRCMSHCP plan area, SCE shall use the applicable Best Management Practices identified in the WRCMSHCP.</p>	<p>All vegetated areas disturbed by construction activities, including temporary disturbances</p>	<p>BLM and CPUC/CDFG to review findings and restoration success submitted by the approved Habitat Restoration Specialist.</p>	<p>BLM and CPUC</p>	<p>Prior to and during construction</p>
<p>— (MM B-2a) All seeds and straw material shall be certified weed free. All gravel and fill material used during project construction and maintenance shall be certified weed free by the local County Agriculture Commissioner's Office.</p>	<p>All locations along the proposed route that occur on BLM land will be surveyed.</p>	<p>Monitored during construction.</p>	<p>BLM, CPUC, CDFG, USFWS</p>	<p>During construction</p>

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM B-2b: Implement control measures for invasive and noxious weeds. SCE shall adhere to the BLM management guidelines for reducing the potential for the introduction of noxious weeds and invasive, non-native plant species by implementation of the following standards:</p> <ul style="list-style-type: none"> • Wash all equipment and vehicles. Vehicles and all equipment must be washed BEFORE AND AFTER entering all project sites unless otherwise directed in writing by the BLM. This includes wheels, undercarriages, bumpers and all parts of the vehicle. In addition, all tools such as chain saws, hand clippers, pruners, etc., must also be washed BEFORE AND AFTER entering all project areas. For example, vehicles traveling into contaminated areas are the main dispersal mechanism for yellow star-thistle. All washing must take place where rinse water is collected and disposed of in either a sanitary sewer or a landfill. • Keep written logs. When vehicles and equipment are washed, a daily log must be kept stating the location, date and time, types of equipment, methods used and staff present. The log shall contain the signature of the responsible crewmember. • Written logs will be available for CPUC/BLM inspection and shall be turned in to BLM on a weekly basis. 	Entire project area within BLM land	Biological monitor to evaluate impacted areas and implement mitigation measures.	BLM and CPUC	During construction
<p>— MM B-5a: Conduct pre-construction surveys and monitoring for breeding birds. SCE shall conduct protocol level surveys for nesting birds if construction activities are scheduled to occur during the breeding season for raptors and other migratory birds. Surveys shall be conducted in areas within 500 feet of tower sites, laydown/staging areas, substation sites, and access road/spur road locations. SCE shall be responsible for designating a CPUC/BLM-approved qualified biologist who can conduct pre-construction surveys and monitoring for breeding birds. If breeding birds with active nests are found, a biological monitor shall establish a 500-foot buffer around the nest and no activities will be allowed within the buffer until the young have fledged from the nest or the nest fails. The biological monitor shall conduct regular monitoring of the nest to determine success/failure and to ensure that project activities are not conducted within the 500-foot buffer until the nesting cycle is complete or the nest fails. The biological monitor shall be responsible for documenting the results of the surveys and the ongoing monitoring. A 300-foot buffer shall be implemented in the event that raptors or other species protected under the MBTA are located. This buffer will be evaluated after consultation with CPUC/BLM/CDFG/and USFWS.</p>	Entire project area in California	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM, USFWS, CDFG and CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— MM B-6a: Develop a transplanting plan. In coordination with the BLM, SCE shall prepare a transplanting plan in compliance with California laws and regulations regarding native and sensitive plants, prior to project construction activities. The plan will provide details on the plants being transplanted, including which species and how many individuals of each species; where the plants will be transplanted; how the plants will be transplanted; how the plants will be maintained during the transplanting efforts; and if the plants will be used to re-vegetated disturbed areas of the construction site.	Entire project area in California	Transplanting plan will be submitted for approval and executed accordingly.	BLM and CPUC	Prior to and during construction, as appropriate
— (MM B-6a) As a condition of the plan, a pre-construction survey will be conducted to mark (using bright-colored flagging) all plants that will be transplanted. Some cacti will need to be transplanted facing the same direction as they currently face (in other words, the north side of the plant must stay facing the north); these cacti will be identified in the plan and appropriately marked to identify which side faces north.	Entire project area in California	Transplanting plan will be submitted for approval and executed accordingly.	BLM and CPUC	Prior to and during construction, as appropriate
— (MM B-6a) For listed plant species SCE shall identify if the plants can be avoided. If avoidance is not possible, SCE shall purchase off site mitigation in coordination with the USFWS and CDFG.	Entire project area in California	Verify mitigation coordination with USFWS and CDFG.	BLM and CPUC	Prior to and during construction, as appropriate
— MM B-7b: Conduct pre-construction tortoise surveys. Prior to construction, SCE shall survey the transmission line corridor for desert tortoise burrows and pallets within fourteen (14) days preceding construction. Tortoise burrows and pallets encountered within the construction zone (if any) will be conspicuously flagged by the surveying biologist(s) and avoided during all construction activities.	All locations along the proposed route that support desert tortoise	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM, CPUC, USFWS, and CDFG	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— (MM B-7b)</p> <ul style="list-style-type: none"> • During construction activities, SCE shall inspect under equipment and vehicles prior to moving equipment. If tortoises are encountered, the vehicle will not be moved until such animals have voluntarily moved to a safe distance away from the parked vehicle or a qualified biologist moves the tortoise. • SCE shall monitor construction activities in all areas with the potential to support desert tortoise. • Desert tortoises will be handled only by a FWS/CDFG permitted and authorized tortoise handler and only when necessary. New latex gloves will be used when handling each desert tortoise to avoid the transfer of infectious diseases between animals. Desert tortoises will be moved the minimum distance possible within appropriate habitat to ensure their safety. In general, desert tortoises will not be moved in excess of 1,000 feet for adults and 300 feet for hatchlings. • Desert tortoises that are found above ground and need to be moved will be placed in the shade of a shrub. All desert tortoises removed from burrows will be placed in an unoccupied burrow of approximately the same size as the one from which it was removed. All excavation of desert tortoise burrows will be done using hand tools, either by, or under the direct supervision of, an authorized tortoise handler. If an existing burrow is unavailable, an authorized tortoise handler will construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original burrow. Desert tortoises moved during inactive periods will be monitored for at least two days after placement in the new burrows to ensure their safety. An authorized tortoise handler will be allowed some judgment and discretion to ensure that survival of the desert tortoise is likely. • If desert tortoises need to be moved at a time of the day when ambient temperatures could harm them (less than 40 degrees F or greater than 90 degrees F), they will be held overnight in a clean cardboard box. These desert tortoises shall be kept in the care of an authorized tortoise handler under appropriate controlled temperatures and released the following day when temperatures are favorable. All cardboard boxes will be appropriately discarded after one use. • All desert tortoises moved will be marked for future identification. An identification number using the acrylic paint/epoxy covering technique should be placed on the fourth costal scute. No notching would be authorized. 	All locations along the proposed route that support desert tortoise	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM, CPUC, USFWS, and CDFG	During construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— (MM B-7d) Clearing work areas of CVFTL in the Coachella Valley Preserve. A temporary fence or other effective barrier that does not allow lizards to enter the work areas shall be constructed around the perimeter of each of the work areas in the refuge. Any lizards found within the barrier shall be relocated outside of the work areas.</p>	All locations of the proposed route within the Coachella Valley fringe-toed lizard Critical Habitat that experienced permanent loss due to construction activities	Fencing to be verified by biological monitor.	BLM, CDFG, USFWS, and CPUC	During construction
<p>— MM B-7e: Conduct focused surveys for California gnatcatchers. SCE shall conduct protocol level surveys for California Gnatcatchers in all areas supporting suitable coastal sage or Riversidean sage scrub habitats that may be affected by the project (Devers-Valley No. 2 Alternative). This will include a minimum 300 foot buffer around construction areas. Presence/absence of this species shall be determined prior to construction activities. If direct impacts to coastal California gnatcatcher occupied habitat cannot be avoided, then impacts to this species shall be addressed through either the Section 7 or Section 10(a)(1)(B) Process under the Federal Endangered Species Act of 1973, as amended and consistent with the WRCMSHCP. SCE shall complete compliance with the Federal Endangered Species Act prior to Project construction .</p>	All locations of the project area that support suitable coastal sage scrub habitat (Devers-Valley No. 2 Alternative)	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM, CDFG, USFWS, and CPUC	Prior to and during construction
<p>— (MM B-7e) After definition of suitable habitat, the following requirements apply:</p> <ul style="list-style-type: none"> • Construction activities shall be restricted within coastal sage scrub habitat during the gnatcatcher breeding season (March 15 July 31); • SCE shall implement the applicable Best Management practices in the WRSMSHCP; • SCE shall restore, create, or enhance on site coastal sage scrub habitat; and/or • SCE shall purchase land or mitigation bank credits at an appropriate ratio to offset impacts to gnatcatchers and their habitat. 	All locations of the project area that support suitable coastal sage scrub habitat (Devers-Valley No. 2 Alternative)	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM, CDFG, USFWS, and CPUC	During and post construction
<p>— (MM B-7f) If these species are found, then SCE shall implement measure to avoid direct impacts, including the placement of exclusion fencing around work areas where impacts will occur, trapping of animals from inside impact areas, and placement of those animals outside of exclusion fencing until construction is completed. A qualified biological monitor shall be present during construction to ensure that animals are not harmed. Following completion of construction, SCE shall remove all exclusion fencing and recontour the soils to the pre-construction condition.</p>	All locations of the project area that support suitable habitat for Stephen's kangaroo rat and San Bernardino kangaroo rat	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM, CDFG, USFWS, and CPUC	Prior to, during, and post construction, as appropriate

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— (MM B-8a) Populations of sensitive plants shall be flagged and mapped prior to construction. If listed plants are located during the focused surveys, then modification of the placement of towers, access roads, laydown areas, and other ground disturbing activities would be implemented in order to avoid listed plants.	All areas with the potential to be disturbed by construction activities	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures. Impacts may be assessed by a biological opinion.	BLM, CDFG, USFWS, and CPUC.	Prior to and during construction
— MM B-9b: Conduct biological monitoring. SCE shall conduct biological monitoring of the project area including the laydown, staging, access roads, and any area subject to project disturbance. The biological monitor shall look for sensitive wildlife species (including forest watchlist animals and Forest Service Region 5 sensitive species) that may be located within or immediately adjacent to the construction areas. If sensitive species are found, the biological monitor shall move them out of harm's way (listed species require take authorization) to avoid direct impacts to these species. In the event that the wildlife species may cause harm to the biologist, the biologist shall notify the construction crews and monitor the species until it moves out of harm's way. The results of all monitoring shall be recorded in daily monitoring notes that shall be included as part of the required monitoring reports for the project. SCE shall notify the CPUC/BLM if any sensitive species are located during construction of the project. SCE shall notify the Forest Service of all sensitive species found on Forest Service land.	Entire project area	Biological monitor shall oversee monitoring activities and report findings to BLM and CPUC and when necessary ensure compliance with mitigation measures. The Forest Service shall be notified of any reported sightings of Region 5 and forest watchlist animals on Forest Service Lands.	BLM and CPUC	During construction
— MM B-9c: Implement a Worker Environmental Awareness Program. A Worker Environmental Awareness Program (WEAP) shall be implemented for construction crews by a qualified biologist(s) provided by SCE and approved by the CPUC/BLM prior to the commencement of construction activities. Training materials and briefings shall include but not be limited to, discussion of the Federal and State Endangered Species Acts, the consequences of noncompliance with these acts, identification and values of sensitive plant and wildlife species and significant natural plant community habitats, fire protection measures, sensitivities of working on forest service lands and identification of Forest Service sensitive species and MIS wildlife species, hazardous substance spill prevention and containment measures, and review of mitigation requirements.	Entire project area	A qualified biological monitor shall oversee implementation of the WEAP and submit copies of all documentation and training materials.	BLM and CPUC	Prior to and during construction
— (MM B-9c) SCE shall provide to the CPUC and BLM a list of construction personnel who have completed training, and this list shall be updated by SCE as required when new personnel start work. No construction worker may work in the field for more than 5 days without receiving the WEAP.	Entire project area	Submittals to be verified.	BLM and CPUC	During construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— (MM B-9d) Following the clearance surveys, exclusion fencing will be erected or a biological monitor will be onsite during construction activities.	All project areas that may support sensitive reptiles	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC	Prior to and during construction
— (MM B-9d) If potentially suitable burrows or rock piles are found, they will be checked for occupancy. Occupied burrows will be flagged and avoided (employing a 50 foot buffer) during construction. If the burrow cannot be avoided, it will be excavated and the occupant relocated to an unoccupied burrow outside the construction area and of approximately the same size as the one from which it was removed. If an existing burrow is unavailable, the biologist will construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original. Trenches, holes, or other excavations will be examined for banded Gila monster prior to filling. If individuals are found, the biological monitor will relocate them to nearby suitable habitat.	All project areas that may support sensitive reptiles	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC.	Prior to and during construction
— (MM B-9d) During construction, if a common chuckwalla, banded Gila monster, and/or desert rosy boa occur on the project site, construction activities adjacent to the individual's location will be halted and the animal will be allowed to move away from the construction site. If the individual is not moving, a qualified biologist will relocate it to nearby suitable habitat outside the construction area. It shall be placed in the shade of a shrub. The Forest Service will be notified of any sensitive wildlife identified on NFS lands. Also during construction, if a Sonoran desert tortoise occurs on the project site, construction activities adjacent to the individual's location will be halted and the <i>Guidelines for Handling Sonoran Desert Tortoises Encountered During construction Projects</i> will be followed by qualified personnel.	All project areas that may support sensitive reptiles	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC	During construction
— MM B-9e: Conduct pre-construction surveys and owl relocation. Prior to construction, SCE shall conduct pre-construction surveys for the western burrowing owl. Surveys shall be conducted prior to ground disturbance activities in appropriate areas within the potential impact areas of the project to determine the presence of burrowing owls and to ensure clearance of these areas.	All project areas with suitable burrowing owl habitat	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— (MM B-9e) If active owl burrows are discovered during pre-construction surveys, owls would be evicted from the burrows using either active or passive techniques as recommended by the BLM and Burrowing Owl Consortium. Owl relocation, as well as discouragement of owls from returning to the site, will occur in the following manner:</p> <ul style="list-style-type: none"> • During the non-breeding season (September 1 through January 31), burrowing owls occupying the Proposed Project site will be evicted by passive relocation. Passive relocation would include installation of one-way doors on burrow entrances that would let owls out of the burrow but would not let them back in. • If construction is to occur during the breeding season (February 1 through August 31) and prior to the relocation of the owls, 75 meter (246 foot) protective buffers would be maintained around burrows occupied by owls until a BLM approved biologist approves other action. Other actions could include passive relocation if it is determined that owls have not begun laying eggs or postponement of construction in the area until the young are fledged and no longer dependent upon the nest burrow. • Once fledglings are capable of independent survival and adult non-breeding owls have successfully been relocated offsite, potential owl habitat (squirrel burrows) would be collapsed in order to keep the owls from returning. Ground squirrels would be removed from the site by trapping and relocation or by other approved means. Following squirrel removal, existing ground squirrel burrows would be destroyed. 	All project areas with suitable burrowing owl habitat	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC	Prior to and during construction
<p>— (MM B-9f) A pre-construction survey for bighorn sheep shall be conducted on Forest Service lands prior to construction and maintenance of the transmission lines. If bighorn sheep are found, then SCE shall consult with the Forest Service, USFWS, and Bighorn Institute to identify appropriate avoidance measures</p>	All locations on BLM land and Forest Service lands where bighorn sheep breeding or lambing may occur	Biological monitor shall oversee monitoring, and if necessary, ensure compliance with mitigation measure. Biological Monitor shall notify BLM, CPUC, and Forest Service of the findings of the preconstruction surveys.	BLM, USFWS, and CPUC	Prior to, during and post construction
<p>— MM B-9g: Conduct pre-construction surveys and relocation for American badger. Prior to construction, SCE shall conduct pre-construction surveys for American Badger. Surveys will be conducted prior to ground disturbance activities in areas that contain habitat for this species.</p>	All locations where construction activities would occur near or on suitable habitat for the American badger	BLM and CPUC to verify documentation of survey and avoidance or excavation documentation.	BLM and CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— (MM B-9g) Badger dens located outside the project area shall be flagged for avoidance. Unoccupied dens located in the right of way shall be covered to prevent the animal from re-occupying the den prior to construction.	All locations where construction activities would occur near or on suitable habitat for the American badger	BLM and CPUC to verify documentation of survey and avoidance or excavation documentation.	BLM and CPUC	Prior to and during construction
— (MM B-9g) If occupied dens are identified in the area of the ROW that must be disturbed, the CDFG/BLM/Forest Service shall be consulted regarding options for action. Hand-excavation is an option if occupied dens cannot be avoided, but alternatives shall be considered due to potential danger to biologists. Dens shall only be hand-excavated before or after the breeding season (February 1–May 30). Any relocation of badgers shall take place after consultation with the BLM, Forest Service, and CDFG.	All locations where construction activities would occur near or on suitable habitat for the American badger	BLM and CPUC to verify documentation of survey and avoidance or excavation documentation.	BLM and CPUC	Prior to and during construction
— MM B-13a. Demonstrate compliance with the Western Riverside County MSHCP. SCE shall provide documentation that it has complied with the provisions of the MSHCP.	All locations along the ROW within the Western Riverside MSHCP boundaries	BLM and CPUC to review submitted compliance documentation.	CPUC	Prior to and during construction
— MM B-13b. Implement the Best Management Practices required by the Western Riverside County MSHCP. SCE shall provide documentation that is has implemented the Best Management Practices set forth in Appendix C of the Western Riverside MSCHP.	All locations within the Western Riverside MSHCP boundaries where construction activities would occur	BLM and CPUC to review submitted documentation.	CPUC	During construction
— MM B-15a. Utilize collision-reducing techniques in installation of transmission lines. SCE shall install the transmission line utilizing APLIC standards for collision-reducing techniques as outlined in "Mitigating Bird Collisions with Power Lines: The State of the Art in 1994 (APLIC, 1996)." <ul style="list-style-type: none"> • Placement of towers and lines will not be located significantly above existing transmission line towers and lines, topographic features, or tree lines to the maximum extent practicable. • Overhead lines that occur significantly above the above-mentioned features and that are located in highly utilized avian flight paths will be marked utilizing aerial marker spheres, swinging plates, spiral vibration dampers, bird flight diverters, avifauna spirals, or other diversion device as to be visible to birds and reduce avian collisions with lines. 	All locations along the ROW where potential avian collisions could occur	BLM and CPUC to verify the placement of towers and lines, and the existence of collision-reducing devices on towers and lines located above existing structures/features.	BLM and CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— MM B-16a. Prepare and implement a raven control plan. SCE shall prepare a common raven control plan that identifies the purpose of conducting raven control, provides training in how to identify raven nests and how to determine whether a nest belongs to a raven or a raptor species, describes the seasonal limitations on disturbing nesting raptors species (excluding ravens), describes the procedure for obtaining a permit from USFWS's Division of Migratory Birds, and describes procedures for documenting the activities on an annual basis.	All locations along ROW that support desert tortoise	CPUC/BLM monitor verifies that SCE submitted raven control plan.	CPUC; BLM Palm Springs Field Office; USFWS Division of Migratory Bird	Prior to, during, and post construction
— (MM B-16a) SCE shall gain approval of the plan from the USFWS's Division of Migratory Birds.	All locations along ROW that support desert tortoise	CPUC/BLM to verify approval.	CPUC; BLM Palm Springs Field Office; USFWS Division of Migratory Bird	Prior to, during, and post construction
— (MM B-16a) SCE shall provide this raven control plan to all transmission line companies that conduct operations within the ROW.	All locations along ROW that support desert tortoise	CPUC/BLM monitor verifies all SCE and other transmission line companies operating in ROW receive proper training.	CPUC; BLM Palm Springs Field Office; USFWS Division of Migratory Bird	Prior to, during, and post construction
— MM B-18a. No Activities in Riparian Conservation Areas. The final project design will include protective measures that prohibit construction activities on NFS lands in Riparian Conservation Areas in compliance with the Forest Plan. Examples of activities that will NOT be allowed include ground disturbance, adding potable water to these areas while implementing erosion control measures, and removing water from the waterways.	All locations within the San Bernardino National Forest	CPUC/BLM verifies that SBNF approves the construction plan and monitor verifies that construction does not occur in Riparian Conservation Areas.	San Bernardino National Forest	Prior to and during construction
— APM B-2. Vegetation. Avoid the introduction of noxious weeds and/or other invasive species through standard noxious weed measures. This will benefit most of the species covered by the [Coachella Valley Multiple Species Habitat Conservation] plan. (SCE)	Locations within project disturbance areas that occur on BLM land where noxious weeds are identified as part of MM B-2a.	CPUC to monitor	BLM and CPUC	During construction
— APM B-4. Vegetation/Wildlife. Avoid sand compaction at all sites in the Coachella Valley. This will benefit such species as the giant sand treader cricket, Coachella Valley Jerusalem cricket, and Coachella Valley milkvetch. (SCE)	Locations within project disturbance areas that have the potential to support the giant sand treader cricket, Coachella Valley Jerusalem cricket, and Coachella Valley milkvetch within the Coachella Valley MSHCP Plan Area.	CPUC to monitor	BLM and CPUC	During construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— APM B-6. Vegetation. Avoid vehicular travel in washes to protect triple-ridged milkvetch. (SCE)	Locations within project disturbance areas that have the potential to support triple-ridged milkvetch within the Coachella Valley MSHCP Plan Area.	CPUC to monitor	BLM and CPUC	During construction
— APM B-7. Vegetation/Wildlife. No activities whatever should occur in wetland areas. (SCE)	Locations within project disturbance areas that support federal jurisdictional wetlands, as defined by the USACE.	CPUC to monitor	BLM and CPUC	During construction
— APM B-9. Vegetation. Initiate transplant efforts for <i>Ferocactus</i> and <i>Coryphantha</i> as soon as probable losses can be determined. Any plans for transplanting must be developed in consultation with a BLM botanist and approved in writing by the BLM Authorized Officer. (BLM B-5.4 Vegetation)	Locations within project disturbance areas that support <i>Ferocactus</i> and <i>Coryphantha</i> species.	BLM to coordinate and review transplanting plan submitted by SCE.	BLM	Prior to and during construction
— APM B-11. Vegetation. The Authorized Officer may require vegetation in certain areas to be cleared by hand tools. Scalping of top soil and removal of low growing vegetation will not be allowed unless authorized by the Authorized Officer. (BLM B-5.6 Vegetation)	Locations within project disturbance areas that have the potential to support sensitive vegetation communities.	BLM to coordinate and review transplanting plan submitted by SCE.	BLM	Prior to and during construction
— APM B-12. Vegetation. Where possible, towers or access roads will be located so as to avoid sensitive plants or plant communities. Where this is not feasible, affected individual plants will be transplanted. Towers will also be placed so that lines will span critical wildlife habitat. (BLM B-5.7 Vegetation)	Locations within project disturbance areas that have the potential to support sensitive vegetation communities and/or species critical habitat as defined by the USFWS.	SCE will submit for review and approval a Sensitive Biological Resources Avoidance Plan and Plant Transplanting Plan, if necessary	BLM	Prior to and during construction
— APM B-18. Wildlife. Disturbed areas – To the maximum extent possible, transmission pylons and poles, equipment storage areas, and wire-pulling sites should be sited in a manner that avoids desert tortoise burrows. (SCE)	Locations within project disturbance areas that support desert tortoise burrows.	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with APM.	BLM, CPUC, USFWS, and CDFG	Prior to and during construction
— APM B-19. Wildlife. Restoration – Whenever possible, spur roads and access roads and other disturbed sites created during construction should be recontoured and restored. (SCE)	All sensitive vegetation communities disturbed by construction activities, including temporary disturbances	BLM and CPUC/CDFG to review findings and restoration success submitted by the approved Habitat Restoration Specialist.	BLM and CPUC	Prior to, during, and post construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— APM B-20. Wildlife. Ravens – All transmission lines should be designed in a manner that would reduce the likelihood of nesting by common ravens. Each transmission line company should remove any common raven nests that are found on its structures. Transmission line companies must obtain a permit from USFWS's Division of Migratory Birds to take common ravens or their nests. (SCE)	Locations along ROW that support desert tortoise	Same as MM B-16a	BLM and CPUC	Prior to, during, and post construction
— APM B-21. Wildlife. No clearing of or other disturbance to riparian habitats. If unavoidable, riparian habitats must be replaced or restored. This action will benefit several riparian bird species including summer tanager, yellow warbler, yellow breasted chat, least Bell's vireo, and southwestern willow flycatcher. (SCE)	Locations within project disturbance areas that have the potential to support riparian bird species including summer tanager, yellow warbler, yellow breasted chat, least Bell's vireo, and southwestern willow flycatcher.	SCE will submit for review and approval a Sensitive Biological Resources Avoidance Plan and Habitat Restoration/Compensation Plan, if necessary	BLM and CPUC	Prior to and during construction
— APM B-22. Wildlife. Avoid impact to mesquite-dominated habitats to protect crissal thrasher. (SCE)	Locations within project disturbance areas that support mesquite-dominated habitats suitable for crissal thrasher within the Coachella Valley MSHCP Plan Area.	BLM/CPUC/SCE to monitor compliance	BLM and CPUC	Prior to and during construction
— APM B-23. Wildlife. Minimize impact to or removal of creosote bush to benefit LeConte's thrasher. (SCE)	Locations within project disturbance areas that support creosote bush suitable for LeConte's thrasher within the Coachella Valley MSHCP Plan Area.	BLM/CPUC/SCE to monitor compliance	BLM and CPUC	Prior to and during construction
— APM B-24. Wildlife. Avoid any alterations to the vegetation structure of Washington fan palm oases to benefit southern yellow bat. (SCE)	Locations within project disturbance areas that support Washington fan palm oases suitable for southern yellow bat within the Coachella Valley MSHCP Plan Area.	BLM/CPUC/SCE to monitor compliance	BLM and CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— APM B-25. Wildlife. Avoid any alterations of mesquite hummock habitat to benefit Coachella Valley round-tailed ground squirrel. (SCE)	Locations within project disturbance areas that support mesquite hummock habitat suitable for Coachella Valley round-tailed ground squirrel within the Coachella Valley MSHCP Plan Area.	BLM/CPUC/SCE to monitor compliance	BLM and CPUC	Prior to and during construction
— APM B-26. Wildlife. Wash communities along the entire route and sand dune communities in the Coachella Valley (see Map 10-AZ in the Draft SEIS and Figure 4.5-1 in the CPUC Draft EIR, 1987) will be spanned to the extent possible. (BLM B-5.2 Wildlife)	Locations within project disturbance areas that support riparian or sand dune vegetation communities within the Coachella Valley.	BLM/CPUC/SCE to monitor compliance	BLM and CPUC	Prior to and during construction
— APM B-27. Wildlife. Prior to construction activities, the Holder shall have a qualified tortoise biologist present a class or briefing to construction workers. Subjects addressed shall include tortoise sensitivity to human disturbance, daily and seasonal activity patterns, and proper handling for removal from roadways. (BLM B-5.4 Wildlife)	All project areas that may support desert tortoise.	A qualified biological monitor shall implement desert tortoise training	BLM and CPUC	Prior to and during construction
— APM B-28. Wildlife. The Holder shall hire a qualified tortoise biologist to conduct daily inspections of roads and work areas within tortoise habitat during the tortoise season of activity (February 15 to June 15, July 15 to October 15). Tortoises found to be in jeopardy will be removed to a nearby site. Tortoises may be held for short periods, if judged necessary, to allow construction crews to pass through an area. The Holder will provide proper facilities for such temporary holding. (BLM B-5.6 Wildlife)	Locations along the proposed route that support desert tortoise	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC	During construction
— APM B-29. Wildlife. The Holder shall restrict the speed on all roads within tortoise habitat to a maximum of 25 miles per hour. The Holder is responsible for ensuring compliance with this limit by its employees. (BLM B-5.6 Wildlife)	SCE access roads along the proposed route within desert tortoise habitat	BLM/CPUC/SCE to monitor compliance	BLM and CPUC	During construction
— APM B-30. Wildlife. Within tortoise habitat in California, spur roads shall not be bladed except where necessary to allow access for construction vehicles. Required vehicles shall enter on one pathway which is flagged and developed only by the passage of vehicles crushing vegetation. The spur shall be flagged by a qualified tortoise biologist prior to use. The spur shall avoid tortoise burrows and large perennial plants, yet be as short as possible within these requirements. (BLM B-5.7 Wildlife)	New SCE stub roads along the proposed route within desert tortoise habitat	SCE will submit for review and approval a Sensitive Biological Resources Avoidance Plan.	BLM and CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— APM B-31. Wildlife. Any desert tortoise observed on access roads or work areas will be moved immediately away from the roadway into safe areas. (BLM B-5.8 Wildlife)	Locations along the proposed route that support desert tortoise	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC	During construction
— APM B-32. Wildlife. In areas considered to comprise suitable tortoise habitat, or other areas where tortoise are observed, all access roads and tower construction sites will be surveyed by a qualified biologist to delineate burrows or individuals for protection. Burrows near construction sites will be clearly delineated on the ground. Road, footing, and work area alignments should be modified to the extent possible to avoid adversely affecting any tortoise burrows encountered during these surveys. Where tortoise burrows will be unavoidably destroyed, they should be excavated carefully using hand tools, under the supervision of a field biologist with demonstrated prior experience with this species. See Map 11-AZ in Appendix F in the Draft EIS (1988) and Figure 4.5-2 in the Devers–Palo Verde No. 2 EIR (1987). Also see Appendix E for link and milepost descriptions and mitigation measures. (BLM B-5.9 Wildlife)	Locations along the proposed route that support desert tortoise	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC	Prior to and during construction
— APM B-33. Wildlife. If possible, no new roads, tower sitings, or spur roads will be built in blow sand areas. However, if new spur roads are required through wind-blown sand habitat, the road will be returned to natural conditions and effectively closed (gated or bermed) following construction. Pre-construction surveys will identify wind-blown sand dune habitats. (BLM B-5.10 Wildlife)	Locations within project disturbance areas that support wind-blown sand dune vegetation communities within the Coachella Valley.	SCE to monitor compliance	BLM and CPUC	Prior to and during construction
— APM B-34. Wildlife. Where the project crosses through the Coachella Valley Preserve, the Holder will cooperate with the Preserve in closing (gating) existing access roads.	All project areas within the Coachella Valley Preserve	SCE will contact the Coachella Valley Preserve manager to coordinate access	BLM and CPUC	Prior to and during construction
— (APM B-34) (a) A qualified biologist will also be present with work crews to survey and clear work areas daily for Coachella Valley fringe-toed lizard (CVFTL), flat-tailed horned lizard (FTHL), and other sensitive species in the Preserve to identify if any additional areas of occupied CVFTL and FTHL habitat are present along the route or at construction staging areas. (b) This survey will be conducted during appropriate seasons (March 15 to May 15) and conditions for species identification. For any areas of suitable habitat, this measure will apply.	All Project areas within the Coachella Valley Preserve that support sensitive species habitat.	Training and survey results shall be submitted to all responsible agencies.	BLM and CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— (APM B-34) In the Coachella Valley, compacted soils should be scarified and seeded with a mix of native plant seeds, including bugseed (<i>Dicoria canescens</i>), to promote revegetation of plant species valuable to the lizard.	Locations within Project disturbance areas that support habitat for the Coachella Valley fringe-toed lizard within the Coachella Valley.	BLM/CPUC to monitor compliance	BLM and CPUC	During and post construction
— (APM B-34) Construction activity and surface disturbance will be prohibited during the period from January 1 to March 31 for the protection of the bighorn sheep lambing areas. (BLM B-5.11 Wildlife)	Locations on BLM land and Forest Service lands where bighorn sheep breeding or lambing may occur	Biological monitor shall oversee monitoring, and if necessary, ensure compliance with mitigation measure. Biological Monitor shall notify BLM, CPUC, and Forest Service of the findings of the construction clearance surveys.	BLM, CPUC, and USFS	Prior to and during construction
— APM B-35. Wildlife. Avoid upland areas where desert tortoises might occur and/or have a biologist present during construction activities that involve earth moving in order to move any tortoises (in burrows or cover-sites, or on the surface) that would likely be impacted. (BLM B-5.17 Wildlife)	Locations along the proposed route that support desert tortoise	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC	During construction
— APM B-36. Wildlife. Avoid construction activities that would tend to create wind barriers that might result in sand stabilization in order to minimize impacts to populations of the Coachella Valley fringe-toed lizard. (BLM B-5.18 Wildlife)	All Project areas that support Coachella Valley fringe-toed lizard habitat.	SCE will implement APM B-8	BLM	During construction
— APM B-37. Wildlife. Mitigation for the coastal California gnatcatcher should include protocol-driven pre-construction surveys. If gnatcatchers are found to be present, suitable habitat should be avoided, including relocating towers and access. If habitat cannot be avoided, SCE should either restore damaged habitat, as at the Weapons Support Facility, Fallbrook Detachment, San Diego County (Soil Ecology and Research Group, 2004), or participate in land set-aside programs such as the Natural Community Conservation Planning program (NCCP). Another potential mitigation action would be that of assisting in the provision of funding for monitoring programs that may be undertaken through the Western Riverside County Multiple Species Habitat Conservation Plan. (SCE)	Locations of the Project area that support suitable coastal sage scrub habitat for the coastal California gnatcatcher.	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC	Prior to, during and post construction
— APM B-39. Wildlife. Stephens' kangaroo rat habitat would be avoided, where possible. (SCE)	Locations of the Project area that support suitable habitat for Stephen's kangaroo rat	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
VISUAL RESOURCES				
<p>— MM V-1a. Reduce visibility of construction activities and equipment. Substation construction sites and all staging and material and equipment storage areas, including storage sites for excavated materials shall be appropriately located away from areas of high public visibility. If visible from nearby roads, residences, public gathering areas, or recreational areas, facilities, or trails, construction sites and staging and storage areas shall be visually screened using temporary screening fencing. Fencing will be of an appropriate design and color for each specific location. Additionally, avoid construction in areas visible from recreation facilities and areas during holidays and periods of heavy recreational use. This measure encompasses BLM permit requirements BLM B-7.1 and B-7.2.</p>	Mitigation Measure V-1a applies to all sites and all routes.	CPUC and BLM to verify in the field during construction and following construction.	CPUC, BLM on BLM-administered lands	During construction
<p>— MM V-1b. Reduce construction night lighting impacts. SCE shall design and install all lighting at construction and storage yards and staging areas such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nighttime sky is minimized.</p>	Mitigation Measure V-1b applies to all static sites.	Monitor implementation in the field during construction.	CPUC, BLM on BLM-administered lands	During construction
<p>— MM V-2a. Reduce in-line views of land scars. Construct access or spur roads at appropriate angles from the originating, primary travel facilities to minimize extended, in-line views of newly graded terrain. Contour grading should be used where possible to better blend graded surfaces with existing terrain.</p>	All grading sites for access roads, spur roads, and ancillary facilities	Verify compliance during construction.	CPUC, BLM on BLM-administered lands	Prior to and during construction
<p>— MM V-2b. Reduce visual contrast from unnatural vegetation lines. In those areas where views of land scars are unavoidable, the boundaries of disturbed areas should be aggressively revegetated to create a less distinct and more natural-appearing line to reduce visual contrast. Furthermore, all graded roads and areas not required for on-going operation, maintenance, or access shall be returned to pre-construction conditions. This measure partially encompasses BLM permit requirement BLM B-7.9.</p>	All grading sites for access roads, spur roads, and ancillary facilities	Verify implementation following construction.	CPUC, BLM on BLM-administered lands	Prior to and during construction
<p>— MM V-2c. Reduce color contrast of land scars. In those areas where views of land scars from sensitive public viewing locations are unavoidable, disturbed soils shall be treated with Eonite or similar treatments to reduce the visual contrast created by the lighter-colored disturbed soils with the darker vegetated surroundings. SCE will consult with the Authorized Officer on a site-by-site basis for the use of Eonite. This measure partially encompasses BLM permit requirement BLM B-6.4.</p>	Locations of all land scars that would be visible to the public	Verify implementation following construction.	CPUC, BLM on BLM-administered lands	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— V-3a: Reduce visual contrast of towers and conductors. The following design measures are to be applied to all new structures and conductors in order to reduce the degree of visual contrast caused by the new facilities:</p> <ul style="list-style-type: none"> • all new and replacement structures are to as closely as possible match the design of the existing structures with which they will be seen • all new and replacement structures are to be paired as closely as possible with the existing structure(s) in the corridor in order to avoid or reduce the number of off-setting (from existing structures) tower placements • all new and replacement structures are to match the heights of the existing DPV1 structures to the extent possible as dictated by variation in terrain • all new and reconducted spans are to match existing conductor spans as closely as possible in order to avoid or reduce the occurrence of unnecessary visual complexity associated with asynchronous conductor spans, particularly at sensitive crossings such as I-10, Dillon Road, and SR 62 • all new conductors are to be non-specular in design in order to reduce conductor visibility and visual contrast • to the extent feasible no new access roads are to be constructed downhill from existing or proposed towers to reduce the potential for skylining. 	Applies to all tower locations and route segments.	SCE to submit final design plans and implementation is to be verified during and following construction.	CPUC, BLM on BLM-administered lands	Prior to construction for design plans. During and following construction for verification.
<p>— MM V-6c. Reduce night lighting impacts. SCE shall design and install all permanent lighting such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nighttime sky is minimized.</p>	Applies to all permanent ancillary facilities including substations, switchyards, series capacitor banks, and optical repeater stations.	Verify implementation following construction.	CPUC, BLM on BLM-administered lands	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM V-40a. Reduce visual contrast of towers and conductors. The following design measures are to be applied to all new structures and conductors in order to reduce the degree of visual contrast caused by the new facilities: (a) all new structures are to as closely as possible match the design of the existing structures with which they will be seen; (b) all new structures are to be paired as closely as possible with the existing structure(s) in the corridor in order to avoid or reduce the number of off-setting (from existing structures) tower placements; (c) all new structures are to match the heights of the existing D-V1 structures to the extent possible as dictated by variation in terrain; (d) all new spans are to match existing conductor spans as closely as possible in order to avoid or reduce the occurrence of unnecessary visual complexity associated with asynchronous conductor spans, particularly at sensitive crossings such as SR 62, I-10, SR 111, SR 243, SR 79, Gilman Springs Road, Ramona Expressway, Menifee Road, and SR 74; (e) all new conductors are to be non-specular in design in order to reduce conductor visibility and visual contrast, and (f) no new access roads are to be constructed downhill from existing or proposed towers to reduce the potential for skylining.</p>	<p>Applies to all tower locations and route segments [Similar to Mitigation Measure V-3a, but applies to Devers-Valley #2 Alternative]</p>	<p>CPUC, BLM, and Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.</p>	<p>CPUC, BLM on BLM-administered lands, Forest Service on National Forest Lands</p>	<p>Prior to and during construction</p>
<p>— V-40c: Reduce visual contrast of towers and conductors near the Pacific Crest Trail. For towers located south of I-10 and outside of the SBNF, the following provisions apply:</p> <ul style="list-style-type: none"> • Where towers could be practicably back-dropped, utilize mitigation suggested for mid-slope and Ridge Crossing on SBNF lands (as defined in Mitigation Measure V-40b). • The PCT shall not be crossed with construction roads. • Locate towers so that the PCT is in the middle of the span (if this does not involve placement of extra or taller span towers to accomplish such action) 	<p>Towers located south of I-10 and outside of the SBNF</p>	<p>CPUC, BLM, and Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.</p>	<p>CPUC, BLM on BLM-administered lands, Forest Service on National Forest Lands</p>	<p>Prior to and during construction</p>
<p>— APM V-1. Non-specular conductors will be used [to reduce glare and visual contrast]. (BLM B-6.1) [bracketed text added by SCE].</p>	<p>500 kV transmission lines</p>	<p>SCE shall provide project design plans. Implementation is to be verified during and following construction.</p>	<p>BLM and CPUC</p>	<p>Prior to construction for design plans. During and following construction for verification.</p>

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— APM V-2. For the proposed alignment, tower spacing will correspond to the spacing of the existing transmission line structures. Additionally, new tower heights will be adjusted such that the top elevations of each set of towers (new and existing) are horizontal with each other. This will coordinate perceptions of towers and conductors as one element. Site-specific conditions will determine when such mitigation is feasible. Other exceptions to these two measures are where towers will be sited to avoid sensitive features and/or to allow conductors to clearly span features. (BLM B-6.2) [PEA adds: "SCE will comply with the above mitigation measure to the extent possible. However, the ISO has specified that the capacity of the line be 2700 amps under normal conditions and 3600 amps under emergency conditions. This capacity rating is an increase from the 1988 DPV2 capacity rating. This capacity rating necessitates that the heights of some of the proposed Dever-Harquahala towers be slightly taller than [adjacent towers], and in some locations tower spacing may not correspond to the adjacent DPV1 structures, to provide adequate ground clearance." (PEA, p. 6-31).</p>	500 kV transmission line – all segments	SCE shall provide project design plans. Implementation is to be verified during and following construction.	BLM and CPUC	Prior to construction for design plans. During and following construction for verification.
<p>— APM V-4. Improvements to existing access and new access will be accomplished according to Mitigation Measures 1 and 2 as identified under soils. (BLM B-6.4).</p>	500 kV transmission line	SCE shall provide project design plans. Implementation is to be verified during and following construction.	BLM and CPUC	Prior to construction for design plans. During and following construction for verification.
<p>— APM V-5. Standard tower spacing would be modified to correspond with spacing of existing transmission line towers where feasible and within limits of standard tower design to reduce visual contrast. (BLM B-6.8a).</p>	500 kV transmission line	SCE shall provide project design plans. Implementation is to be verified during and following construction.	BLM and CPUC	Prior to construction for design plans. During and following construction for verification.
<p>— APM V-6. Towers would be placed so as to avoid features and/or to allow conductors to clearly span the feature (within limits of standard tower design) to minimize the amount of sensitive feature disturbed and/or reduce visual contrast (e.g., avoiding skyline situations through placement of tower to one side of a ridge or adjusting tower location to avoid highly visible locations and utilize screening of nearby landforms). (BLM B-6.8b).</p>	500 kV transmission line	SCE shall provide project design plans. Implementation is to be verified during and following construction.	BLM and CPUC	Prior to construction for design plans. During and following construction for verification.
<p>— APM V-7. The proposed steel lattice towers would be constructed using a dulled galvanized steel finish, which would result in visual contrast reduction. (SCE).</p>	500 kV transmission line route – all segments	SCE shall provide project design plans. Implementation is to be verified during and following construction.	BLM and CPUC	Prior to construction for design plans. During and following construction for verification.

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— APM V-8. Non-specular conductors would be used to reduce glare and resulting visual contrast. (SCE).	500 kV transmission line route – all segments	SCE shall provide project design plans. Implementation is to be verified during and following construction.	BLM and CPUC	Prior to construction for design plans. During and following construction for verification.
— APM V-9. Towers would be located adjacent to existing structures where feasible. Exceptions are at locations where the tower heights and/or spans would be modified based on terrain features allowing for adequate conductor clearance to ground and other facilities within the right-of-way. (SCE).	500 kV transmission line route – all segments.	SCE shall provide project design plans. Implementation is to be verified during and following construction.	BLM and CPUC	Prior to construction for design plans. During and following construction for verification.
— APM V-10. At all highway and recreation routes-of-travel crossings, including the I-10 crossing, towers would be placed at the maximum feasible distance, except in locations where matching existing tower spacing is deemed appropriate, and when feasible, at 90 degree angles from the crossing. (SCE)	500 kV transmission line route – all segments	SCE shall provide project design plans. Implementation is to be verified during and following construction.	BLM and CPUC	Prior to construction for design plans. During and following construction for verification.
LAND USE				
— (MM L-1a) Public liaison person and toll-free information hotline. SCE shall identify and provide a public liaison person before and during construction to respond to concerns of neighboring property owners about noise, dust, and other construction disturbance. Procedures for reaching the public liaison officer via telephone or in person shall be included in notices distributed to the public. SCE shall also establish a toll-free telephone number for receiving questions or complaints during construction and shall develop procedures for responding to callers. Procedures for handling and responding to calls shall be addressed in the Construction Notification Plan.	Construction activity in all segments.	CPUC/BLM monitor verifies that SCE identifies public liaison and toll free hotline	CPUC; BLM Palm Springs field office	Prior to and during construction
— APM L-2: Although the Holder (ROW grant holder, SCE) may restore and maintain existing access roads, they cannot be either widened or upgraded without approval of the Authorized Officer. (BLM B-1.1)	500 kV transmission line	BLM/SCE to monitor compliance	BLM	Prior to and during construction
— APM L-8: Link 14 crosses an open pit gravel operation. Potential impacts would be mitigated during construction by coordinating with the owner/operator to avoid critical mining periods and high volume earth-moving days. Operational mitigation would include spanning the mine. (SCE)	Gravel mining operation.	CPUC/BLM/SCE to monitor compliance	BLM and CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
WILDERNESS AND RECREATION				
— (MM WR-1a) SCE shall schedule construction activities to avoid heavy recreational use periods, including major holidays, in coordination with, and at the discretion of the authorized officer. SCE shall locate construction equipment to avoid temporary preclusion of recreation areas per the recommendations of the authorized officer.	See above	CPUC/BLM monitor verifies that SCE postpones construction activities per the discretion of the authorized officer for the recreation area.	CPUC; BLM Palm Springs field office	Prior to and during construction
— (MM WR-1a) SCE shall locate construction equipment to avoid temporary preclusion of recreation areas per recommendations of the authorized officer.	See above	Monitor ensures that construction equipment is located appropriately.	CPUC; BLM Palm Springs field office	During construction
— (MM WR-1a) SCE shall also prepare a public notice of construction activities consistent with Mitigation Measure L-1a (Prepare Construction Notification Plan)	See above	Monitor ensures that SCE notifies public appropriately.	CPUC; BLM Palm Springs field office	Prior to and during construction
— (MM WR-1a) SCE shall document its coordination efforts with the authorized officer, and provide this documentation to the California Public Utilities Commission and the Bureau of Land Management 30 days prior to construction.	See above	CPUC/BLM monitor verifies that SCE postpones construction activities per the discretion of the authorized officer for the recreation area.	CPUC; BLM Palm Springs field office	30 days prior to and during construction.
AGRICULTURE				
— (MM AG-1a) The purpose of this agreement will be to set forth the use of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Williamson Act lands during construction in order to: (1) schedule proposed construction activities at a location and time when damage to agricultural operations would be minimized.	Locations where 10 acres or more of Farmland and/or Williamson Act land are temporarily disturbed.	CPUC/BLM monitors verify that agreements between SCE and affected landowners ensure that construction schedules occur during time periods agreed upon.	CPUC, BLM Palm Springs field office	Prior to and during construction
— (MM AG-1a) (2) ensure that any areas damaged or disturbed by construction are restored to a condition mutually agreed upon by the landowner and SCE.	Locations where 10 acres or more of Farmland and/or Williamson Act land are temporarily disturbed.	CPUC/BLM monitors verify that agreed upon restoration occurs.	CPUC, BLM Palm Springs field office	During and post construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— (MM AG-1a) SCE shall coordinate with the agricultural landowners in the affected areas where Farmland or Williamson Act land will be temporarily disturbed in order to determine when and where construction should occur in order to minimize damage to agricultural operations. This includes avoiding construction during peak planting, growing, and harvest seasons. If damage or destruction does occur, SCE shall perform restoration activities on the disturbed area in order to return the area to a pre-determined condition or the pre-construction condition, whichever option is agreed upon by the landowner and SCE. This could include activities such as soil preparation, regrading, and reseeding. This measure applies to agricultural landowners with land that is impacted by the Proposed Project. SCE shall provide proof of the continued use of Farmland and/or Williamson Act lands through the submittal of a signed agreement between an individual property owner and SCE. The signed agreements shall be submitted to the CPUC and BLM for review and approval prior to the start of construction.</p>	<p>Locations where 10 acres or more of Farmland and/or Williamson Act land are temporarily disturbed.</p>	<p>CPUC/BLM monitors verify that signed agreements between SCE and affected landowners have been submitted, and ensure that construction schedules occur during time periods agreed upon in the agreement and that agreed upon restoration occurs.</p>	<p>CPUC, BLM Palm Springs field office</p>	<p>Prior to, during, and post construction.</p>
CULTURAL & PALEONTOLOGICAL RESOURCES				
<p>— (MM C-1b) All potentially NRHP-eligible resources (as determined by the BLM and CPUC) that will not be affected by direct impacts, but are within 50 feet of direct impact areas will be designated as Environmentally Sensitive Areas (ESAs). Protective fencing, or other markers, at the BLM's discretion, shall be erected and maintained to protect ESAs from inadvertent trespass for the duration of construction in the vicinity.</p>	<p>All locations within ground-disturbing activities within potentially NRHP-eligible resources</p>	<p>BLM, CPUC, and USFS, where applicable, to review inventory findings and eligibility evaluation. CPUC EM to verify fencing.</p>	<p>BLM and CPUC</p>	<p>Prior to and during construction</p>
<p>— (MM C-1b) Construction personnel and equipment shall be instructed on how to avoid ESAs. ESAs shall not be identified specifically as cultural resources</p>	<p>All locations within ground-disturbing activities within potentially NRHP-eligible resources</p>	<p>BLM, CPUC, and USFS, where applicable, to review inventory findings and eligibility evaluation. CPUC EM to verify ESA avoidance instruction.</p>	<p>BLM and CPUC</p>	<p>Prior to and during construction</p>

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— (MM C-1c) The HPTP shall include provisions for analysis of data in a regional context, reporting of results within one year of completion of field studies, curation of artifacts (except from private land) and data (maps, field notes, archival materials, recordings, reports, photographs, and analysts' data) at a facility that is approved by BLM, and dissemination of reports to local and State repositories, libraries, and interested professionals. The BLM will retain ownership of artifacts collected from BLM managed lands. The Applicant shall attempt to gain permission for artifacts from privately held land to be curated with the other project collections.	All locations within ground-disturbing activities with potentially NRHP-eligible resources.	BLM and CPUC to review and approve HPTP. BLM conduct required Native American consultation. BLM draft and negotiate agreement document for appropriate signatures (BLM, SHPOs, Advisory Council on Historic Preservation, Native American Tribes).	BLM and CPUC.	Prior to and during construction
— (MM C-1c) The HPTP shall specify that archaeologists and other discipline specialists conducting the studies meet the Secretary of the Interior's Standards (per 36 CFR 61).	All locations within ground-disturbing activities with potentially NRHP-eligible resources.	BLM and CPUC to review and approve HPTP.	BLM and CPUC	Prior to and during construction
— MM C-1d: Conduct data recovery to reduce adverse effects. If National Register of Historic Places (NRHP)-eligible resources, as determined by the BLM and SHPO, cannot be protected from direct impacts of the Proposed Project, data-recovery investigations shall be conducted by the Applicant to reduce adverse effects to the characteristics of each property that contribute to its NRHP-eligibility. For sites eligible under Criterion d, significant data would be recovered through excavation and analysis. For properties eligible under Criteria a, b, or c, data recovery may include historical documentation, photography, collection of oral histories, architectural or engineering documentation, preparation of a scholarly work, or some form of public awareness or interpretation.	Within 100 ft of resources identified in HPTP that require data-recovery mitigation.	BLM and CPUC review and approve field closure report of data-recovery fieldwork.	BLM and CPUC	Prior to, during, and post construction
— (MM C-1d) Data gathered during the evaluation phase studies and the research design element of the Historic Properties Treatment Plan (HPTP) shall guide plans and data thresholds for data recovery; treatment will be based on the resource's research potential beyond that realized during resource recordation and evaluation studies. If data recovery is necessary, sampling for data-recovery excavations will follow standard statistical sampling methods, but sampling will be confined, as much as possible, to the direct impact area. Data-recovery methods, sample sizes, and procedures shall be detailed in the HPTP consistent with Mitigation Measure C-1c (Develop and implement Historic Properties Treatment Plan) and implemented by the Applicant only after approval by the BLM and CPUC.	Within 100 ft of resources identified in HPTP that require data-recovery mitigation.	BLM and CPUC review and approve final report of data recovery, curation of artifacts and data, and dissemination of final report.	BLM and CPUC	Prior to, during, and post construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— (MM C-1d) Following any field investigations required for data recovery, the Applicant shall document the field studies and findings, including an assessment of whether adequate data were recovered to reduce adverse project effects, in a brief field closure report. The field closure report shall be submitted to the BLM and CPUC for their review and approval, as well as to appropriate State repositories and local governments.	Within 100 ft of resources identified in HPTP that require data-recovery mitigation.	BLM and CPUC review and approve final report of data recovery, curation of artifacts and data, and dissemination of final report.	BLM and CPUC	During construction; Final report of data-recovery investigations within one year of completion of fieldwork.
— MM C-1e: Monitor construction. The Applicant shall implement archaeological monitoring by a professional archaeologist during subsurface construction disturbance at all locations identified in the Historic Properties Treatment Plan (HPTP). Full-time monitoring shall occur when ground-disturbing activities take place at all archaeological High-Sensitivity Areas described above and at all cultural resource Environmentally Sensitive Areas (ESAs)	All locations identified in the HPTP.	BLM and CPUC receive and act on reports of failure of ESAs to protect cultural resources.	BLM and CPUC	During construction
— (MM C-1e) These locations and their protection boundaries shall be defined and mapped in the HPTP. Intermittent monitoring may occur in areas of moderate archaeological sensitivity at the discretion of the BLM and CPUC. Archaeological monitoring shall be conducted by a qualified archaeologist familiar with the types of historical and prehistoric resources that could be encountered within the project, and under direct supervision of a principal archaeologist. The qualifications of the principal archaeologist and archaeological monitors shall be approved by the BLM and CPUC. A Native American monitor may be required at culturally sensitive locations specified by the BLM following government-to-government consultation with Native American tribes. The monitoring plan in the HPTP shall indicate the locations where Native American monitors will be required and shall specify the tribal affiliation of the required Native American monitor for each location. The Applicant shall retain and schedule any required Native American monitors.	All locations identified in the HPTP.	The qualifications of the principal archaeologist and archaeological monitors shall be approved by the BLM and CPUC. BLM and CPUC will also verify Native American Monitoring where appropriate.	BLM and CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— (MM C-1e) Compliance with and effectiveness of the cultural resources monitoring plan shall be documented by the Applicant in a monthly report to be submitted to the BLM and CPUC, and, on San Bernardino National Forest, to the USFS, and on Agua Caliente land to the THPO, for the duration of project construction. In the event that cultural resources are not properly protected by ESAs, all project work in the immediate vicinity shall be diverted by the archaeological monitor until authorization to resume work has been granted by the BLM and CPUC. The Applicant shall notify the BLM of any damage to cultural resource ESAs. The Applicant shall consult with the BLM and CPUC to mitigate damages and to increase effectiveness of ESAs. At the discretion of the BLM and CPUC, such mitigation may include, but not be limited to modification of protective measures, refinement of monitoring protocols, data-recovery investigations, or payment of compensatory damages in the form of non-destructive cultural resources studies or protection.</p>	All locations identified in the HPTP.	BLM and CPUC, as well as USFS and Agua Caliente THPO, as appropriate, review and approve monthly monitoring reports.	BLM and CPUC	During construction
<p>— (MM C-1f) The following issues shall be addressed in training or in preparation for construction:</p> <ul style="list-style-type: none"> • All construction contracts shall include clauses that require construction personnel to attend training so they are aware of the potential for inadvertently exposing buried archaeological deposits, their responsibility to avoid and protect all cultural resources, and the penalties for collection, vandalism, or inadvertent destruction of cultural resources. • The Applicant shall provide a background briefing for supervisory construction personnel describing the potential for exposing cultural resources, the location of any potential ESA, and procedures and notifications required in the event of discoveries by project personnel or archaeological monitors. Supervisors shall also be briefed on the consequences of intentional or inadvertent damage to cultural resources. Supervisory personnel shall enforce restrictions on collection or disturbance of artifacts or other cultural resources. • Upon discovery of potential buried cultural materials by archaeologists or construction personnel, or damage to an ESA, work in the immediate area of the find shall be diverted and the Applicant's archaeologist notified. Once the find has been inspected and a preliminary assessment made, the Applicant's archaeologist will consult with the BLM or CPUC, as appropriate, to make the necessary plans for evaluation and treatment of the find(s) or mitigation of adverse effects to ESAs. 	Entire project	BLM and CPUC review and approve contract specifications. BLM and CPUC receive prompt notification of new resource discoveries and violations.	BLM and CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM C-2a: Consult agencies and Native Americans. If human remains are discovered during construction, all work will be diverted from the area of the discovery and the BLM authorized officer will be informed immediately. The Applicant shall follow all State and federal laws, statutes, and regulations that govern the treatment of human remains. The Applicant shall assist and support the BLM in all required government-to-government consultations with Native Americans and appropriate agencies and commissions, as requested by the BLM. The applicant shall comply with and implement all required actions and studies that result from such consultations, as directed by the BLM.</p>	Entire Project	Applicant, monitors, or construction personnel report discoveries to BLM and CPUC. BLM and CPUC conduct and document consultation with appropriate Native American tribes and agencies. BLM and CPUC document final disposition or treatment of Native American human remains.	BLM and CPUC	During construction
<p>— (MM C-3a) Actions that are required during or after construction shall be defined, detailed, and scheduled in the Historic Properties Treatment Plan and implemented by the Applicant, consistent with Mitigation Measure C-1c (Develop and implement Historic Properties Treatment Plan).</p>	Entire project	Monitoring of the plan shall occur during construction	BLM and CPUC	During construction
<p>— MM C-4c: Monitor construction for paleontology. Based on the paleontological sensitivity assessment and Monitoring and Treatment Plan consistent with Mitigation Measure C-4b (Develop Paleontological Monitoring and Treatment Plan), the Applicant shall conduct full-time construction monitoring in areas where and when sediments of high paleontological sensitivity will be disturbed. Construction activities shall be diverted when data recovery of significant fossils is warranted.</p>	Locations identified in paleontological treatment plan.	Progress reporting to BLM and CPUC as identified in treatment plan.	BLM and CPUC	During construction
<p>— MM C-4d: Conduct paleontological data recovery. If avoidance of significant paleontological resources is not feasible or appropriate, treatment (including recovery, specimen preparation, data analysis, curation, and reporting) shall be carried out by the Applicant, in accordance with the approved Treatment Plan per Mitigation Measure C-4b (Develop Paleontological Monitoring and Treatment Plan).</p>	Locations identified in paleontological treatment plan.	BLM and CPUC review and approve treatment plan. BLM and CPUC review and approve of final data-recovery report and disposition of fossils.	BLM and CPUC	During construction; report within one year of data-recovery fieldwork.

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM C-4e: Train construction personnel. All construction personnel shall be trained regarding the recognition of possible buried paleontological resources and protection of all paleontological resources during construction, prior to the initiation of construction or ground-disturbing activities. The Applicant shall complete training for all construction personnel. Training shall inform all construction personnel of the procedures to be followed upon the discovery of paleontological materials. Training shall inform all construction personnel that Environmentally Sensitive Areas (ESAs) must be avoided and that travel and construction activity must be confined to designated roads and areas. All personnel shall be instructed that unauthorized collection or disturbance of federally protected fossils on or off the right-of-way by the Applicant, his representatives, or employees will not be allowed. Violators will be subject to prosecution under the appropriate State and federal laws and will be grounds for removal from the project. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order. The following issues shall be addressed in training or in preparation for construction:</p>	Entire project	BLM and CPUC review verification of required training.	BLM and CPUC	Prior to and during construction
<p>— (MM C-4e) All construction contracts shall include clauses that require construction personnel to attend training so they are aware of the potential for inadvertently exposing buried paleontological deposits, their responsibility to avoid and protect all such resources, and the penalties for collection, vandalism, or inadvertent destruction of paleontological resources.</p>	Entire project	BLM and CPUC to review and approve contract specifications.	BLM and CPUC	Prior to and during construction
<p>— (MM C-4e) The Applicant shall provide a background briefing for supervisory construction personnel describing the potential for exposing paleontological resources, the location of any potential ESA, and procedures and notifications required in the event of discoveries by project personnel or paleontological monitors. Supervisory personnel shall enforce restrictions on collection or disturbance of fossils.</p>	Entire project	BLM and CPUC review verification of required training.	BLM and CPUC	Prior to and during construction
<p>— (MM C-4e) Upon discovery of potential buried paleontological materials by paleontologists or construction personnel, work in the immediate area of the find shall be diverted and the Applicant's paleontologist notified. Once the find has been inspected and a preliminary assessment made, the Applicant's paleontologist will notify the BLM and CPUC and proceed with data recovery in accordance with the approved Treatment Plan consistent with Mitigation Measure C-4b (Develop Paleontological Monitoring and Treatment Plan).</p>	Entire project	BLM and CPUC receive prompt notification of new resource discoveries and violations.	BLM and CPUC	During construction.

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM C-5a: Protect and monitor NRHP-eligible properties. The Applicant shall design and implement a long-term plan to protect National Register of Historic Places (NRHP)-eligible sites from direct impacts of project operation and maintenance and from indirect impacts, such as erosion that result from the presence of the project. The plan shall be developed in consultation with the BLM to design measures that will be effective against project maintenance impacts and project-related vehicular impacts. The plan shall also include protective measures for NRHP-eligible properties within the DPV corridor that will experience operational and access impacts as a result of the Proposed Project. The proposed measures may include restrictive fencing or gates, permanent access road closures, signage, stabilization of erosion, site capping, site patrols, and interpretive/educational programs, or other measures that will be effective for protecting NRHP-eligible properties. The plan shall be property specific and shall include provisions for monitoring and reporting its effectiveness and for addressing inadequacies or failures that result in damage to NRHP-eligible properties. The plan shall be submitted to the BLM and CPUC for review and approval at least 30 days prior to project operation.</p>	All locations identified in long-term protection plan.	BLM and CPUC review and approval of long-term protection plan; compliance with reporting and monitoring provisions in the approved protection plan.	BLM and CPUC	30 days before and during Project operation.
<p>— APM C-8: All cultural resource work undertaken by the Holder on public lands shall be carried out by qualified professionals designated on a currently valid Cultural Resource Use Permit for the appropriate state. (BLM B-9.8)</p>	500 kV transmission line	CPUC and BLM shall verify that qualified professionals are used.	BLM and CPUC	Prior to and during construction
<p>— APM C-10: Vehicles and equipment shall be confined and operated only within areas specified by the Authorized Officer. (BLM B-9.10)</p>	Entire project	BLM/CPUC/SCE to monitor compliance	BLM and CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
NOISE				
<p>— MM N-1a: Implement best management practices for construction noise. SCE shall employ the following noise-suppression techniques to minimize the impact of temporary construction noise and avoid possible violations of local rules, standards, and ordinances:</p> <ul style="list-style-type: none"> • Construction noise shall be confined to daytime, weekday hours (e.g., 7:00 a.m. to 6:00 p.m.) or an alternative schedule established by the local jurisdiction; • Construction equipment shall use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer; • Construction traffic shall be routed away from residences and schools, where feasible; • Unnecessary construction vehicle use and idling time shall be minimized to the extent feasible. The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. A “common sense” approach to vehicle use shall be applied; if a vehicle is not required for use immediately or continuously for construction activities, its engine should be shut off. (Note: certain equipment, such as large diesel-powered vehicles, require extended idling for warm-up and repetitive construction tasks.) 	All Project work areas located within the limits of a local jurisdiction (county, city) with designated noise rules, standards, or ordinances, as well as work areas within a wilderness area, recreation area, wildlife refuge or within one-quarter mile of a noise-sensitive receptor such as a residence, hospital, school, park, wilderness area, or recreation area	Review SCE’s procedures for implementing best management practices for noise to ensure completeness; ensure implementation during construction	BLM and CPUC, local jurisdictions	During construction
<p>— APM N-1: The proposed construction would comply with local noise ordinances. There may be a need to work outside of the aforementioned local ordinances in order to take advantage of low electrical draw periods during the nighttime hours. SCE would comply with variance procedures requested by local authorities if required. (SCE)</p>	Entire project	Provide copies of noise-related variances	BLM and CPUC	Prior to and during construction
TRANSPORTATION AND TRAFFIC				
<p>— MM T-7a: Repair roadways damaged by construction activities. If roadways, sidewalks, medians, curbs, shoulders, or other such features are damaged by the project’s construction activities, as determined by the CPUC Environmental Monitor or the affected public agency, SCE shall coordinate repairs with the affected public agencies and ensure that any such damage is repaired to the pre-construction condition within 60 days from the end of all construction within each affected county.</p>	All roads used to access the construction sites	Verify that each affected roadway has been satisfactorily restored and/or constructed within 30 days of the end of the construction period.	BLM and CPUC, affected local jurisdictions.	During and after construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
PUBLIC HEALTH AND SAFETY				
— MM P-1a: Develop Hazardous Substance Control and Emergency Response Plan. A Hazardous Substance Control and Emergency Response Plan shall be prepared for the project, and a copy shall be kept on site (or in vehicles) during construction and maintenance of the project. SCE shall document compliance by submitting the plan to the CPUC or BLM or USFWS, as appropriate, for review and approval at least 60 days before the start of construction.	All locations along the proposed and alternative routes.	Review and approve plan and ensure it is implemented in the field.	BLM, CPUC, and USFWS	Prior to and during construction
— MM P-1b: Conduct environmental training and monitoring program. An environmental training program shall be established to communicate environmental concerns and appropriate work practices, including spill prevention, emergency response measures, and proper Best Management Practice (BMP) implementation, to all field personnel prior to the start of construction. The training program shall emphasize site-specific physical conditions to improve hazard prevention (e.g., identification of potentially hazardous substances) and shall include a review of all site-specific plans, including but not limited to, the project's Storm Water Pollution Prevention Plan and the Hazardous Substances Control and Emergency Response Plan.	All locations along the proposed and alternative routes.	Review documentation of training	BLM, CPUC, and USFWS	Prior to and during construction
— (MM P-1b) SCE shall document compliance by (a) submitting to the CPUC or BLM or USFWS, as appropriate, for review and approval an outline of the proposed Environmental Training and Monitoring Program, and (b) maintaining for monitor review a list of names of all construction personnel who have completed the training program.	All locations along the proposed and alternative routes.	Review documentation of training	BLM, CPUC, and USFWS	Prior to and during construction
— (MM P-1b) Best Management Practices, as identified in the project Storm Water Pollution Prevention Plan and the Hazardous Substances Control and Emergency Response Plan, shall be implemented during the construction of the project to minimize the risk of an accidental release and provide the necessary information for emergency response.	All locations along the proposed and alternative routes.	Monitor BMP implementation	BLM, CPUC, and USFWS	During construction
— MM P-1c: Ensure proper disposal of construction waste. All non-hazardous construction and demolition waste, including trash and litter, garbage, and other solid waste shall be disposed of properly. Petroleum products and other potentially hazardous materials shall be removed to a hazardous waste facility permitted or otherwise authorized to treat, store, or dispose of such materials.	All locations along the proposed and alternative routes.	Observe construction activities for compliance and review manifest for hazardous waste disposal.	BLM and CPUC	During construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM P-1d: Maintain emergency spill supplies and equipment. Hazardous material spill kits shall be maintained at all construction sites for small spills. This shall include oil-absorbent material, tarps, and storage drums to be used to contain and control any minor releases. Emergency spill supplies and equipment shall be kept adjacent to all work areas and staging areas, and shall be clearly marked.</p>	All locations along the proposed and alternative routes.	Observe construction sites and activities for compliance	BLM and CPUC	During construction
<p>— (MM P-2a) Excavated materials containing elevated levels of pesticide or herbicide will require special handling and disposal procedures. Standard dust suppression procedures (as defined in Mitigation Measure AQ-1a shall be used in construction areas to reduce airborne emissions of these contaminants and reduce the risk of exposure to workers and the public. Regulatory agencies for the state of California (as appropriate) and the appropriate county shall be contacted to provide oversight regarding the handling, treatment, and/or disposal options.</p>	All proposed and alternative route segments that are within or immediately adjacent to agricultural uses.	Observe construction sites and activities for compliance. Review documentation for required special handling and disposal.	CPUC, BLM, and appropriate local and State regulatory agencies	During construction
<p>— MM P-3a: Observe exposed soil for evidence of contamination. During grading or excavation work, the construction contractor shall observe the exposed soil for visual evidence of contamination. If visual contamination indicators are observed during construction, the contractor shall stop work until the material is properly characterized and appropriate measures are taken to protect human health and the environment. The contractor shall comply with all local, State, and federal requirements for sampling and testing, and subsequent removal, transport, and disposal of hazardous materials. Additionally, in the event that evidence of contamination is observed, the contractor shall document the exact location of the contamination and shall immediately notify the CPUC or BLM, describing proposed actions. A weekly report listing encounters with contaminated soils and describing actions taken shall be submitted to the CPUC or BLM.</p>	All proposed and alternative route segments that are within or immediately adjacent to industrial and/or commercial land use areas.	Observe construction sites and activities for compliance and review weekly reports.	BLM and CPUC	During construction
<p>— MM P-4a: Prepare Spill Prevention, Countermeasure, and Control Plans. To minimize, avoid, and/or clean up unforeseen spill of hazardous materials during operation of the proposed facilities, SCE shall update or prepare, if necessary, the Spill Prevention, Countermeasure, and Control plan for each substation, series capacitors, and the switchyard. SCE shall document compliance by providing a copy of the Spill Prevention, Control, and Countermeasures plans to the CPUC or BLM or USFWS, as appropriate, for review and approval at least 60 days before the start of operation.</p>	All proposed existing, and alternative substations, switching stations, and series capacitor banks.	Review and approve plans and observe construction sites and activities for compliance	BLM, CPUC, and USFWS	During construction and 60 days before operation

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
AIR QUALITY				
<p>— (MM AQ-1a)</p> <ul style="list-style-type: none"> • CARB certified non-toxic soil binders shall be applied to all active unpaved roadways, unpaved staging areas, and unpaved parking area(s) throughout construction (as allowed by responsible agencies such as the BLM or USFWS) in amounts meeting manufacturer’s recommendations to meet the CARB certification fugitive dust reduction efficiency of 84 percent. • Water the disturbed areas of the active construction sites, where CARB certified soil binders have not been applied, at least three times per day. • Enclose, cover, water three times daily, or apply non-toxic soil binders according to manufacturer’s specifications to exposed piles with a five percent or greater silt content. • Install wheel washers/cleaners or wash the wheels of trucks and other heavy equipment where vehicles exit the site or unpaved access roads and sweep paved streets daily with water sweepers if visible soil material from the construction sites or unpaved access roads are carried onto adjacent public streets. • Establish a vegetative ground cover or allow natural revegetation to occur on temporarily disturbed areas following the completion of construction (in compliance with biological resources impact mitigation measures), or otherwise create stabilized surfaces on all unpaved areas at each of the construction sites within 21 days after active construction operations have ceased. • Increase the frequency of watering, or implement other additional fugitive dust mitigation measures, to all disturbed fugitive dust emission sources when wind speeds (as instantaneous wind gusts) exceed 25 miles per hour (mph). • Travel route planning will be completed to identify required travel routes to minimize unpaved road travel to each construction site to the extent feasible. 	Riverside County (MDAQMD and SCAQMD jurisdiction)	Verify SCAQMD or local jurisdiction (within Coachella Valley) concurrence with the Plan. Inspect activities for dust control.	BLM, USFWS, CPUC, MDAQMD, and SCAQMD in California. May also involve local city jurisdictions within the Coachella Valley that have received delegation of Rule 403.1 compliance from SCAQMD.	During construction
— MM AQ-1b: Use ultra low-sulfur diesel fuel. CARB-certified ultra low-sulfur diesel (ULSD) fuel containing 15 ppm sulfur or less shall be used in all diesel-powered construction equipment.	Riverside County (MDAQMD and SCAQMD jurisdiction)	Inspect fuel purchase records	CPUC	During construction
— MM AQ-1c: Restrict engine idling. Diesel engine idle time shall be restricted to no more than a 10 minutes duration.	Riverside County (MDAQMD and SCAQMD jurisdiction)	Inspect activities for compliance with idle time restriction.	CPUC	During construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM AQ-1d: Use lower emitting off-road diesel-fueled equipment. All off-road construction diesel engines not registered under CARB's Statewide Portable Equipment Registration Program, which have a rating of 50 hp or more, shall meet, at a minimum, the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, section 2423(b)(1) unless that such engine is not available for a particular item of equipment. In the event a Tier 2 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a Tier 1 engine. In the event a Tier 1 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a catalyzed diesel particulate filter (soot filter), unless certified by engine manufacturers that the use of such devices is not practical for specific engine types. Equipment properly registered under and in compliance with CARB's Statewide Portable Equipment Registration Program are considered to comply with this mitigation measure.</p>	Riverside County (MDAQMD and SCAQMD jurisdiction)	Inspect off-road equipment and off-road equipment records kept for APM-10.	CPUC	During construction
<p>— MM AQ-1e: Use on-road vehicles that meet California on-road standards. All on-road construction vehicles working within California shall meet all applicable California on-road emission standards and shall be licensed in the State of California. This does not apply to construction worker personal vehicles.</p>	Riverside County (MDAQMD and SCAQMD jurisdiction)	Inspect on-road equipment	CPUC	During construction
<p>— MM AQ-1f: Use lower emitting off-road gasoline-fueled equipment. All off-road stationary and portable gasoline powered equipment shall have EPA Phase 1/Phase 2 compliant engines, where the specific engine requirement shall be based on the new engine standard in effect two years prior to the initiating project construction.</p>	Riverside County (MDAQMD and SCAQMD jurisdiction)	Inspect off-road equipment	CPUC	During construction
<p>— MM AQ-1g: Reduce helicopter use during construction. Helicopter use in California shall be limited to that necessary for conductor installation, using helicopters of the smallest practical size; and helicopters shall not be used for delivering supplies or personnel within California federal or State ozone nonattainment areas except as specifically excepted by the CPUC due to limitations in road access and/or to reduce other adverse environmental impacts associated with road construction/travel (such as to biological resources or cultural resources).</p>	Riverside County (MDAQMD and SCAQMD jurisdiction)	Visual inspection of material delivery and conductor installation at construction sites	CPUC	During construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— MM AQ-1h: Schedule deliveries outside of peak hours. For marshalling and construction yards west of the eastern border of the City of Indio, all material deliveries to the yards and from the yards to the construction sites shall be scheduled to occur outside of peak “rush hour” traffic hours (7:00 to 10:00 a.m. and 4:00 to 7:00 pm) to the extent feasible, and other truck trips during peak traffic hours shall be minimized to the extent feasible.	Riverside County west of the eastern border of the City of Indio (SCAQMD jurisdiction)	Inspect marshalling yard activities for delivery incoming and outgoing traffic.	CPUC	During construction
APM A-1, Heavy duty off-road diesel engines would be properly tuned and maintained to manufacturers’ specifications to ensure minimum emissions under normal operations. (SCE)	Entire project	CPUC/SCE to monitor compliance	CPUC	During construction
— APM A-2, Water or chemical dust suppressants would be applied to unstabilized disturbed areas and/or unpaved roadways in sufficient quantity and frequency to maintain a stabilized surface. (SCE)	Entire project	CPUC/SCE to monitor compliance	CPUC	During construction
— APM A-3. Water or water-based chemical additives would be used in such quantities to control dust on areas with extensive traffic including unpaved access roads; water, organic polymers, lignin compounds, or conifer resin compounds would be used depending on availability, cost, and soil type. (SCE)	500 kV transmission lines	CPUC/SCE to monitor compliance	CPUC	During construction
— APM A-4. Surfaces permanently disturbed by construction activities would be covered or treated with a dust suppressant after completion of activities at each site of disturbance. (SCE)	Entire project	CPUC/SCE to monitor compliance	CPUC	During and post construction
— APM A-5. Vehicle speeds on unpaved roadways would be restricted to 15 miles per hour. (SCE)	Entire project.	CPUC/SCE to monitor compliance	CPUC	During construction
— APM A-6. Vehicles hauling dirt would be covered with tarps or by other means. (SCE)	Entire project.	CPUC/SCE to monitor compliance	CPUC	During construction
— APM A-7. Site construction workers would be staged offsite at or near paved intersections and workers would be shuttled in crew vehicles to construction sites. As part of the construction contract, SCE would require bidders to submit a construction transportation plan describing how workers would travel to the job site. (SCE)	Entire project.	CPUC/SCE to monitor compliance with transportation plan requirements.	CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
HYDROLOGY AND WATER RESOURCES				
— MM H-1a: Restore disturbed soil with re-vegetation or construction of permanent erosion-control structures. Soil disturbance at towers and access roads shall be the minimum necessary and designed to prevent long-term erosion through revegetation or construction of permanent erosion control structures according to plans to be reviewed and approved by the U.S. Forest Service. Copies of the final approved plans shall be submitted to the CPUC/BLM for their files.	Forest Service land in areas of steep terrain	Final design plans shall include re-vegetation and erosion control specifications. CPUC/BLM to verify implementation.	BLM and CPUC	Prior to, during, and post construction
— APM W-1: During the first year following construction, potential soil erosion sites will be inspected by the Holder after each major rainstorm as access permits. For the purpose of this measure, a major rainstorm is defined as any singular storm where the total precipitation exceeds the arithmetic mean for similar events in the area and results in flooding. Examples include cloudbursts (high quantity – short duration) or storms where saturated soils produce runoff (high quantity – long duration). (BLM B-4.1)	Entire project.	CPUC/BLM to ensure that SCE inspects all sites subject to potential erosion following each major rainstorm.	BLM and CPUC	During the first year following construction.
— APM W-2: Construction equipment will be kept out of flowing stream channels except when absolutely necessary to construct crossings. (BLM B-4.2)	All project locations where flowing stream channels are present.	BLM/CPUC to monitor compliance	BLM and CPUC	Prior to and during construction.
— APM W-3: Erosion control and hazardous material plans will be incorporated into the construction bidding specifications to ensure compliance. (BLM B-4.3)	Entire project.	CPUC/BLM to verify based on review of specifications	BLM and CPUC	Prior to and during construction
— APM W-4: Appropriate design of tower footing foundations, such as raised foundations and/or enclosing flood control dikes, will be used to prevent scour and/or inundation by a 100-year flood. (BLM B-4.4)	All locations where Project infrastructure would be placed in a FEMA-designated 100-year Flood Hazard Area.	BLM/CPUC to monitor compliance	BLM and CPUC	Prior to and during construction.
— APM W-5: Towers will be located to the extent feasible to avoid active drainage channels, especially downstream of steep hillslope areas, to minimize the potential for damage by flash flooding and mud and debris flows. (BLM B-4.5)	Entire project.	BLM / CPUC to monitor compliance	BLM and CPUC	Prior to and during construction.
— APM W-6: Diversion dikes or other structural enhancements will be required to divert runoff around a tower structure if (a) the location in an active channel cannot be avoided; and (b) where there is a very significant flood scour/deposition threat, unless specifically exempted by the BLM Authorized Officer. (BLM B-4.6)	Entire project	BLM / CPUC to monitor compliance	BLM and CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— APM W-7: Runoff from roadways will be collected and diverted from steep, disturbed, or otherwise unstable slopes. (BLM B-4.7)	All roadways along the project.	BLM / CPUC to monitor compliance	BLM and CPUC	During construction
— APM W-8: Ditches and drainage concourses will be designed to handle the concentrated runoff, will be located to avoid disturbed areas, and will have energy dissipations at discharge points. (BLM B-4.8)	All ditches and drainage concourses designed for the project.	BLM / CPUC to monitor compliance	BLM and CPUC	Prior to and during construction
— APM W-9: Cut and fill slopes will be minimized by a combination of benching and following natural topography where possible. (BLM B-4.9)	All locations where construction would occur on a slope.	BLM / CPUC to monitor compliance	BLM and CPUC	Prior to and during construction
GEOLOGY, MINERAL RESOURCES & SOILS				
— MM G-1a: Protect desert pavement. Grading for new access roads or work areas in areas covered by desert pavement shall be avoided if possible. If avoidance of these areas is not possible, the desert pavement surface shall be protected from damage or disturbance from construction vehicles by use of temporary mats on the surface. A plan for identification and avoidance or protection of sensitive desert pavement shall be prepared and submitted to the CPUC, BLM, and USFWS for review and approval at least 60 days prior to start of construction.	All locations where desert pavement may be present, including the following proposed route segments: Midpoint Substation to Cactus City Rest Area; Cactus City Rest Area to Devers Substation; and the following alternative routes: the reroute associated with the Desert Southwest Transmission Project; Alligator Rock–North of Desert Center; Devers-Valley No. 2.	CPUC and BLM to review plan and ensure that it is implemented in the field.	BLM, CPUC, and USFWS	Prior to and during construction.

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM G-2a: Conduct geotechnical studies for soils to assess characteristics and aid in appropriate foundation design. Design-level geotechnical studies shall be performed by the Applicant to identify the presence, if any, of potentially detrimental soil chemicals, such as chlorides and sulfates. Appropriate design measures for protection of reinforcement, concrete, and metal-structural components against corrosion shall be utilized, such as use of corrosion-resistant materials and coatings, increased thickness of project components exposed to potentially corrosive conditions, and use of passive and/or active cathodic protection systems. The geotechnical studies shall also identify areas with potentially expansive or collapsible soils and include appropriate design features, including excavation of potentially expansive or collapsible soils during construction and replacement with engineered backfill, ground-treatment processes, and redirection of surface water and drainage away from expansive foundation soils. Study results and proposed solutions shall be provided to the CPUC and BLM, as appropriate, for review and approval at least 60 days before construction.</p>	All Project locations where permanent Project structures will be installed.	Review study results and proposed solutions. Ensure that study recommendations are implemented during construction.	BLM and CPUC	60 days prior to construction and during construction
<p>— MM G-3a: Conduct geotechnical surveys for landslides. The Applicant shall perform design-level geotechnical surveys in areas crossing and adjacent to hills and mountains. These surveys will acquire data that will allow identification of specific areas with the potential for unstable slopes, landslides, earth flows, and debris flows along the approved transmission line route and in other areas of ground disturbance, such as grading for access and spur roads. The investigations shall include an evaluation of subsurface conditions, identification of potential landslide hazards, and provide information for development of excavation plans and procedures. Where landslide hazard areas cannot be avoided, appropriate engineering design and construction measures shall be incorporated into the project designs to minimize potential for damage to project facilities. A report documenting these surveys and design measures to protect structures shall be submitted to the CPUC and BLM for review and approval at least 60 days before construction.</p>	Devers-Valley Alternative MPs DV7.5–DV12.0, DV16–DV18, DV23–DV30, and DV32.5–DV35.0.	CPUC and BLM to review study results and proposed solutions. Ensure that study recommendations are implemented during construction.	BLM and CPUC	60 days prior to construction and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM G-5a: Design project facilities to avoid impact from ground failure. Since seismically induced ground failure has the potential to damage or destroy project components, the Applicant shall complete design-level geotechnical investigations at tower locations in areas with potential liquefaction-related impacts. These studies shall specifically assess the potential for liquefaction and lateral spreading hazards to affect the approved project and all associated facilities. Where these hazards are found to exist, appropriate engineering design and construction measures shall be incorporated into the project designs. A report documenting results of the geotechnical surveys shall be submitted to the CPUC and BLM for review and approval at least 60 days before construction.</p>	<p>Devers-Valley Alternative MPs DV13-DV15 and DV30.0-DV32.5.</p>	<p>CPUC and BLM to review study results and ensure that study recommendations are implemented during construction.</p>	<p>BLM and CPUC</p>	<p>60 days prior to construction and during construction</p>
<p>— MM G-6a: Coordinate with quarry operations. Operations and management personnel for the Indio Pit quarry shall be consulted regarding locations of active mining and for coordination of construction activities in and through those areas. A plan to avoid or minimize interference with mining operations shall be prepared in conjunction with mine/quarry operators prior to construction. SCE shall document compliance with this measure prior to the start of construction by submitting the plan to the CPUC and BLM for review at least 60 prior to the start of construction.</p>	<p>At the Indio Pit gravel quarry located approximately between Project MPs E205 and E206</p>	<p>CPUC and BLM to review plan and ensure that that the plan is implemented during construction.</p>	<p>BLM and CPUC</p>	<p>60 days prior to construction and during construction</p>
<p>— MM G-7a: Minimize project structures within active fault zones. SCE shall perform a geologic/geotechnical study to confirm the location of mapped traces of active and potentially faults crossed by the project route. For crossings of active faults, the towers shall be placed as far as feasible outside the area of mapped fault traces. Compliance with this measure shall be documented to the CPUC and BLM in a report submitted for review and approval at least 60 days prior to the start of construction.</p>	<p>At crossings of the active Banning Fault, approximately between Proposed Route MPs E205 and E206 and at MP E224.5. Also, at the Dillon Road Substation site associated with the DSW Alternative and at the Banning, Garnet Hill, San Jacinto, and Casa Loma Fault crossings that would be associated with the DV Alternative. In addition, at expansion of Devers Substation.</p>	<p>CPUC and BLM to review report and ensure that that the recommendations of the report are implemented during construction.</p>	<p>BLM and CPUC</p>	<p>60 days prior to construction and during construction</p>

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— APM G-8: Mitigation of potentially significant impacts to the western end of the proposed transmission line due to (1) potential surface fault rupture along the Banning, Mission Creek, and Mecca Hills faults, and (2) potential for severe seismic shaking can be achieved by standard design methods listed below:</p> <p>a. Individual towers will be sited so as not to straddle active fault traces.</p> <p>b. The alignment will be designed to cross an active fault such that future rupture on the fault would not cause excessive stress on the line or the towers.</p> <p>c. Standard foundation and structural design measures will be utilized to minimize the impact from severe seismic shaking. (BLM B-2.8)</p>	At areas identified in APM - the Banning, Mission Creek, and Mecca Hills faults.	SCE shall submit final design plans for review and approval by CPUC and BLM	BLM and CPUC	Prior to and during construction
<p>— APM G-11: New access roads, which are required, will be designed to minimize ground disturbance from grading. They will follow natural ground contours as closely as possible and include specific features for road drainage, including water bars on slopes over 25 percent. Other measures could include drainage dips, side ditches, slope drains, and velocity reducers. Where temporary crossings are constructed, the crossings will be restored and repaired as soon as possible after completion of the discrete action associated with construction of the line in the area. (BLM B-3.2)</p>	Entire project	SCE shall submit final design plans for review and approval by CPUC and BLM	BLM and CPUC	Prior to, during and post construction
<p>— APM G-12: Side casting of soil during grading will be minimized. Excess soil and excavated soil will be properly stabilized or, dispersed around tower construction sites or on stub or access roads. (BLM B-3.3)</p>	Entire project	CPUC and BLM to monitor compliance	BLM and CPUC	During construction
<p>— APM G-13: During grading operations, care would be exercised to minimize side casting. No earth would be removed below final elevations, and no cuts would be made deeper than necessary for clearing and road construction. (SCE)</p>	Entire project.	SCE to monitor compliance	BLM and CPUC	During construction
<p>— (APM G-14) Trees and brush would be cleared only when necessary to provide electrical clearance, line reliability, or suitable access for maintenance and construction. (SCE)</p>	Entire project	SCE to monitor compliance	BLM and CPUC	During and post construction
<p>— APM G-15: Counterpoise may need to be installed if the local soil conditions indicate that the soil has a resistance above 30 ohms. This is accomplished by attaching a 0.375-inch cable to the tower steel. The cable is installed 1 foot underground and extends approximately 100 feet within the ROW from two or more footings. (SCE)</p>	Entire project	SCE to monitor compliance	BLM and CPUC	Prior to and during construction

Attachment I Table 1. Mitigation Measures to be Implemented During Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— APM G-18: Whenever possible to minimize the potential for slope instability, towers would be located to avoid gullies or active drainages, and over-steepened slopes. (SCE)	Devers-Valley No. 2 Alternative	SCE shall submit final design plans for review and approval by CPUC and BLM	BLM and CPUC	Prior to and during construction
— (APM G-19) Where temporary crossings are constructed, the crossings would be restored and repaired as soon as possible after completion of the discrete action associated with construction of the line. Side casting of soil during grading would be minimized. Excess soil would be properly stabilized, or if necessary, hauled to an approved disposal site. (SCE)	Devers-Valley No. 2 Alternative	CPUC and BLM monitor during construction	BLM and CPUC	During construction

Attachment I Table 2. Mitigation Measures to be Implemented During Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
BIOLOGICAL RESOURCES				
B-1a (rev): Prepare and implement a Habitat Restoration/Compensation Plan. SCE shall restore all areas disturbed by project construction, including temporary disturbance areas around tower construction sites, laydown/staging areas, temporary access and spur roads, and existing tower locations that are removed during construction of the Proposed Project. Where onsite restoration is planned for mitigation of temporary impacts to sensitive vegetation communities, SCE shall identify a qualified Habitat Restoration Specialist to be approved by the CPUC/BLM. Hydroseeding, drill seeding, or an otherwise proved restoration technique shall be utilized on all disturbed surfaces using a locally endemic native seed mix approved by the CPUC/CDFG/FWS and BLM. SCE shall flag the limits of disturbance at each construction site. The Plan shall incorporate the measures identified in the June 2006 Memorandum of Understanding regarding vegetation management along rights-of-way for electrical transmission and distribution facilities on Federal lands. In project areas that occur in the WRCMSHCP plan area, SCE shall use the applicable Best Management Practices identified in the WRCMSHCP.	All vegetated areas disturbed by construction activities, including temporary disturbances, at the Colorado River Substation and associated facilities	BLM and CPUC/CDFG to review findings and restoration success submitted by the approved Habitat Restoration Specialist with respect to the performance standards	BLM and CPUC	Prior to and during construction
B-7b (rev): Conduct pre-construction tortoise surveys. Prior to construction, SCE shall survey the transmission line corridor for desert tortoise burrows and pallets within fourteen (14) days preceding construction. Tortoise burrows and pallets encountered within the construction zone (if any) will be conspicuously flagged by the surveying biologist(s) and avoided during all construction activities.	All locations at the Colorado River Substation and associated facilities that support desert tortoise	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM, CPUC, USFWS, and CDFG	Prior to and during construction

Attachment I Table 2. Mitigation Measures to be Implemented During Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— [MM B-7b (rev)]</p> <ul style="list-style-type: none"> • During construction activities, SCE shall inspect under equipment and vehicles prior to moving equipment. If tortoises are encountered, the vehicle will not be moved until such animals have voluntarily moved to a safe distance away from the parked vehicle or a qualified biologist moves the tortoise. • SCE shall monitor construction activities in all areas with the potential to support desert tortoise. • Desert tortoises will be handled only by a FWS/CDFG permitted and authorized tortoise handler and only when necessary. New latex gloves will be used when handling each desert tortoise to avoid the transfer of infectious diseases between animals. Desert tortoises will be moved the minimum distance possible within appropriate habitat to ensure their safety. In general, desert tortoises will not be moved in excess of <u>1,640 feet (500 meters)</u> 1,000 feet for adults and 300 feet for hatchlings. • Desert tortoises that are found above ground and need to be moved will be placed in the shade of a shrub. All desert tortoises removed from burrows will be placed in an unoccupied burrow of approximately the same size as the one from which it was removed. All excavation of desert tortoise burrows will be done using hand tools, either by, or under the direct supervision of, an authorized tortoise handler. If an existing burrow is unavailable, an authorized tortoise handler will construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original burrow. Desert tortoises moved during inactive periods will be monitored for at least two days after placement in the new burrows to ensure their safety. An authorized tortoise handler will be allowed some judgment and discretion to ensure that survival of the desert tortoise is likely. • If desert tortoises need to be moved at a time of the day when ambient temperatures could harm them (less than 40 degrees F or greater than 90 degrees F), they will be held overnight in a clean cardboard box. These desert tortoises shall be kept in the care of an authorized tortoise handler under appropriate controlled temperatures and released the following day when temperatures are favorable. All cardboard boxes will be appropriately discarded after one use. • All desert tortoises moved will be marked for future identification. An identification number using the acrylic paint/epoxy covering technique should be placed on the fourth costal scute. No notching would be authorized. 	<p>All locations at the Colorado River Substation and associated facilities that support desert tortoise</p>	<p>Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.</p>	<p>BLM, CPUC, USFWS, and CDFG</p>	<p>During construction</p>

Attachment I Table 2. Mitigation Measures to be Implemented During Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— [MM B-8b]</p> <p>3. Specific measures to be implemented and monitored throughout substation construction and operation, including but not limited to</p> <ul style="list-style-type: none"> a. prevent overspray of herbicides, pesticides, soil tackifiers, or other potential toxins into suitable habitat during weed control or other site maintenance activities. b. on-site management of runoff to prevent nuisance runoff from draining into suitable habitat and prevent erosion of the habitat during heavy rains. c. management and control of weeds on and adjacent to the site to prevent weed invasions into suitable adjacent special-status plant habitat; d. prevent damage to suitable special-status plant habitat that may result from collecting or disposing accumulating sand; <p>4. Schedule and format for reporting to CPUC on implementation and progress of the components listed above.</p> <p>The Plan shall be reviewed and approved by the CPUC at least 60 days prior to construction.</p>	Colorado River Substation and associated facilities	Special-Status Plant Impact Avoidance and Minimization Plan will be submitted for approval and executed accordingly.	CPUC and BLM	Prior to, during and post construction
<p>B-9d (rev): Conduct pre-construction reptile surveys. Prior to construction, SCE shall conduct surveys in areas of suitable habitat for <u>Mojave fringe-toed lizard</u>, Sonoran desert tortoise, common chuckwalla, banded Gila monster, and desert rosy boa within 48 hours prior to the start of construction activities. If <u>Mojave fringe-toed lizards</u>, common chuckwallas, banded Gila monsters and/or desert rosy boas are found on the construction site, they will be relocated to nearby suitable habitat outside the construction area.</p>	All areas of the Colorado River Substation and associated facilities that may support sensitive reptiles	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC	Prior to and during construction
<p>— [MM B-9d(rev)] Following the clearance surveys, exclusion fencing will be erected or a biological monitor will be onsite during construction activities.</p>	All areas of the Colorado River Substation and associated facilities that may support sensitive reptiles	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC	Prior to and during construction

Attachment I Table 2. Mitigation Measures to be Implemented During Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— [MM B-9d(rev)] If potentially suitable burrows or rock piles are found, they will be checked for occupancy. Occupied burrows will be flagged and avoided (employing a 50-foot buffer) during construction. If the burrow cannot be avoided, it will be excavated and the occupant relocated to an unoccupied burrow outside the construction area and of approximately the same size as the one from which it was removed. If an existing burrow is unavailable, the biologist will construct or direct the construction of a burrow of similar shape, size, depth, and orientation as the original. Trenches, holes, or other excavations will be examined for banded Gila monster prior to filling. If individuals are found, the biological monitor will relocate them to nearby suitable habitat.	All areas of the Colorado River Substation and associated facilities that may support sensitive reptiles	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC	Prior to and during construction
— [MM B-9d(rev)] During construction, if a <u>Mojave fringe-toed lizard</u> , common chuckwalla, banded Gila monster, and/or desert rosy boa occur on the project site, construction activities adjacent to the individual's location will be halted and the animal will be allowed to move away from the construction site. If the individual is not moving, a qualified biologist will relocate it to nearby suitable habitat outside the construction area. It shall be placed in the shade of a shrub. The Forest Service will be notified of any sensitive wildlife identified on NFS lands. Also during construction, if a Sonoran desert tortoise occurs on the project site, construction activities adjacent to the individuals' location will be halted and the USFWS's 2009 <i>Desert Tortoise Field Manual</i> or more current guidance provided by CDFG and USFWS <i>Guidelines for Handling Sonoran Desert Tortoises Encountered During Construction Projects</i> will be followed by qualified personnel.	All areas of the Colorado River Substation and associated facilities that may support sensitive reptiles	Biological monitor shall oversee surveys and monitoring, and if necessary, ensure compliance with mitigation measures.	BLM and CPUC	During construction
B-9g(rev): Conduct pre-construction surveys and <u>passive relocation for American badger and desert kit fox</u>. Prior to construction, SCE shall conduct pre-construction surveys for American badger and desert kit fox. Surveys will be conducted prior to ground disturbance activities in areas that contain habitat for this <u>these</u> species.	All locations at Colorado River Substation and associated facilities where construction activities would occur near or on suitable habitat for the American badger and desert kit fox	BLM and CPUC to verify documentation of survey and avoidance or excavation documentation.	BLM and CPUC	Prior to and during construction
— [MM B-9g(rev)] Badger and desert kit fox dens located outside the project area shall be flagged for avoidance. Unoccupied dens located in the right-of-way project area shall be covered to prevent the animal from re-occupying the den prior to construction.	All locations at Colorado River Substation and associated facilities where construction activities would occur near or on suitable habitat for the American badger and desert kit fox	BLM and CPUC to verify documentation of survey and avoidance or excavation documentation.	BLM and CPUC	Prior to and during construction

Attachment I Table 2. Mitigation Measures to be Implemented During Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— [MM B-9g(rev)] If occupied dens are identified in the area of the ROW that must be disturbed, the CDFG/BLM/Forest Service shall be consulted regarding options for action. Hand-excavation is an option if occupied dens cannot be avoided, but alternatives shall be considered due to potential danger to biologists. <u>After verification that the den is unoccupied, it shall be excavated and backfilled by hand to ensure that no badgers or kit fox are trapped in the den.</u> Dens shall be hand-excavated only before or after the breeding season (February 1–May 30). Any relocation of badgers or desert kit fox shall take place after consultation with the BLM, Forest Service, and CDFG.</p>	All locations at Colorado River Substation and associated facilities where construction activities would occur near or on suitable habitat for the American badger and desert kit fox	BLM and CPUC to verify documentation of survey and avoidance or excavation documentation.	BLM and CPUC	Prior to and during construction
<p>— [MM B-9j]</p> <p>3. <i>Preparation of Management Plan.</i> SCE shall submit to the CPUC, BLM, and CDFG a Management Plan that describes site-specific enhancement measures for the Mojave fringe-toed lizard habitat on the acquired compensation lands. The objective of the Management Plan shall be to enhance the value of the compensation lands for Mojave fringe-toed lizards, and may include enhancement actions such as weed control, fencing to exclude livestock, erosion control, or protection of sand sources or sand transport corridors.</p>	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities	Review MFTL Habitat Management Plan	BLM, CPUC and CDFG	During construction

Attachment I Table 2. Mitigation Measures to be Implemented During Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— [MM B-9j] Restoration/Enhancement of Protected Land If sufficient compensatory mitigation land is unavailable for acquisition as described above, a portion of the compensation funds may be used to implement MFTL habitat restoration/enhancement measures on land protected by a conservation easement or BLM land that will not be developed in the future (e.g., ACEC, wilderness area, DWMA). Land targeted for restoration/enhancement shall also be occupied by MFTL or adjacent to MFTL-occupied land. Compensatory mitigation land shall be determined to be unavailable if after 18 months after the beginning of project ground disturbance SCE (or NFWF if NFWF option is selected) is able to determine through due diligence that: (1) land owners are unwilling to sell sufficient acreage or (2) acquisition cost per acre exceeds fair market value.</p> <p>The amount of land on which to implement MFTL habitat restoration/enhancement measures shall be twice the number of mitigation acres that could not be acquired. For example, if 1000 acres is required (based on the acreage of the final project footprint at a ratio of 3:1 or 0.5:1) and only 800 acres could be acquired, enhancement measures shall be implemented over a 400-acre area ((1000-800) x 2 = 400).</p> <p>MFTL habitat enhancement measures may include, but would not be limited to:</p> <ul style="list-style-type: none"> • Long-term eradication of invasive plants, particularly Sahara mustard and Russian thistle; and/or • Removal of upwind barriers to dispersal (e.g., removal of upwind tamarisk windrows, or of land uses that would tend to stop moving sand from reaching protected habitat downwind). <p>The restoration/enhancement area shall be approved by CDFG, BLM, and CPUC.</p>	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities (if sufficient compensatory mitigation land is unavailable for acquisition)	Review restoration/enhancement area compensation fund usage; review and observe habitat restoration/enhancement measures	BLM, CPUC and CDFG	Prior to, during and post construction
<p>— [MM B-9j] In addition, a site-specific Habitat Enhancement Plan shall be prepared by SCE that describes the methodology for implementation of site-specific enhancement measures for Mojave fringe-toed lizard habitat on the subject lands. The objective of the Management Plan shall be to enhance the value of the subject lands for Mojave fringe-toed lizards in perpetuity.</p>	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities (if sufficient compensatory mitigation land is unavailable for acquisition)	Review Habitat Enhancement Plan	BLM, CPUC and CDFG	During construction

Attachment I Table 2. Mitigation Measures to be Implemented During Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— [MM B-9j] Verification No later than 30 days prior to beginning Project ground-disturbing activities, SCE shall provide written verification of an approved form of Security. Actual Security shall be provided no later than 7 days prior to the beginning of Project ground-disturbing activities. SCE, or an approved third party, shall complete and provide written verification of the proposed compensation lands acquisition within 18 months of the start of Project ground-disturbing activities.</p> <p>No less than 90 days prior to acquisition of the property, SCE shall submit a formal acquisition proposal to the CPUC, BLM, and CDFG describing the parcels intended for purchase.</p> <p>SCE, or an approved third party, shall provide the CPUC, BLM, and CDFG, with a management plan for the compensation lands and associated funds within 180 days of the land or easement purchase, as determined by the date on the title. SCE, or an approved third party, shall provide the CPUC, BLM, and CDFG, with a management plan for restoration/enhancement activities on protected or qualifying BLM land no later than 60 days prior to construction; the restoration/enhancement management plan must include a detailed monitoring and reporting component. The CPUC shall review and approve the management plan(s), in consultation with BLM and CDFG.</p>	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities	Ensure appropriate documentation submitted	BLM, CPUC and CDFG	Prior to and during construction
<p>— [MM B-9j] The project owner shall provide written verification to the CPUC, BLM, and CDFG that the compensation lands or conservation easements have been acquired and recorded in favor of the approved recipient no later than 18 months from the start of ground-disturbing activities.</p>	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities	Review written verification of acquisition of compensation lands	BLM, CPUC and CDFG	During or post construction
<p>B-15a (rev): Utilize collision-reducing techniques in installation of transmission lines and telecommunication linear facilities. SCE shall install the transmission line and telecommunication linear facilities utilizing APLIC standards for collision-reducing techniques as outlined in "Mitigating Bird Collisions with Power Lines: The State of the Art in 1994 (APLIC, 1996)."</p> <ul style="list-style-type: none"> • Placement of towers and lines will not be located significantly above existing transmission line towers and lines, topographic features, or tree lines to the maximum extent practicable. • Overhead lines that occur significantly above the above-mentioned features and that are located in highly utilized avian flight paths will be marked utilizing aerial marker spheres, swinging plates, spiral vibration dampers, bird flight diverters, avifauna spirals, or other diversion device as to be visible to birds and reduce avian collisions with lines. 	All locations at Colorado River Substation and associated telecom facilities where potential avian collisions could occur	Design plans to be submitted showing collision reducing techniques. BLM and CPUC to verify the placement of poles and lines, and the existence of collision-reducing devices on poles and lines located above existing structures/features on telecommunication facilities.	BLM and CPUC	Prior to and during construction

Attachment I Table 2. Mitigation Measures to be Implemented During Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
CULTURAL RESOURCES				
<p>C-5a (rev): Protect and monitor NRHP-eligible properties. The Applicant shall design and implement a long-term plan to protect National Register of Historic Places (NRHP)-eligible sites from direct impacts of project operation and maintenance and from indirect impacts, such as erosion that result from the presence of the project. The plan shall be developed in consultation with the BLM to design measures that will be effective against project maintenance impacts and project-related vehicular impacts. The plan shall also include protective measures for NRHP-eligible properties within the DPV corridor that will experience operational and access impacts as a result of the Proposed Project. The proposed measures may include restrictive fencing or gates, permanent access road closures, signage, stabilization of erosion, site capping, site patrols, and interpretive/educational programs, or other measures that will be effective for protecting NRHP-eligible properties. The plan shall be property specific and shall include provisions for monitoring and reporting its effectiveness and for <u>evaluating potential addressing inadequacies that present the possibility of allowing or failures that result in damage to NRHP-eligible properties.</u> The plan shall be submitted to the BLM and CPUC for review and approval at least 30 days prior to project operation.</p>	All locations at Colorado River Substation and associated facilities identified in long-term protection plan	BLM and CPUC review and approval of long-term protection plan; compliance with reporting and monitoring provisions in the approved protection plan.	BLM and CPUC	Post construction (30 days before and during project operation)
PUBLIC HEALTH AND SAFETY				
<p>P-1a (rev): Develop Hazardous Substance Control and Emergency Response Plan. A Hazardous Substance Control and Emergency Response Plan (<u>Plan</u>) shall be prepared by SCE for the project, and a copy shall be kept on-site (or in vehicles during construction and maintenance of the project. <u>The Plan shall define an emergency response program to ensure quick and safe cleanup of accidental spills, including prescriptions for hazardous-material handling procedures to reduce the potential for a spill during construction. The Plan shall also identify areas where refueling and vehicle-maintenance activities shall occur, and identify areas for storage of hazardous materials. The directions and requirements listed in this plan shall also be reiterated in the Stormwater Pollution Prevention Plan (SWPPP) prepared for the project. SCE shall submit the Plan SCE shall document compliance by submitting the plan to the CPUC or BLM or USFWS, as appropriate, for review and approval at least 60 days before the start of construction.</u></p>	Colorado River Substation and associated facilities	Review and approve plan and ensure it is implemented in the field.	BLM, CPUC, and USFWS	Prior to and during construction

Attachment I Table 2. Mitigation Measures to be Implemented During Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>P-1c (rev): Ensure proper disposal of construction waste. All non-hazardous construction and demolition waste, including trash and litter, garbage, and other solid waste shall be <u>stored in totally enclosed containment, and shall be disposed of properly, through a permitted waste management provider.</u> Petroleum products and other potentially hazardous materials shall be removed to a hazardous waste facility permitted or otherwise authorized to treat, store, or dispose of such materials. <u>Storage of fuels and hazardous materials shall be prohibited within 200 feet of groundwater supply wells and within 400 feet of community or municipal wells. SCE shall document compliance by providing a list of permitted waste management providers and hazardous waste facilities to be used for disposal of construction and demolition waste to the CPUC or BLM or USFWS, as appropriate, for review and approval at least 60 days before the start of construction.</u></p>	<p>Colorado River Substation and associated facilities</p>	<p>Review list of waste management providers and facilities; observe construction activities for compliance and review manifest for hazardous waste disposal.</p>	<p>BLM and CPUC</p>	<p>Prior to and during construction</p>
<p>P-4a(rev): Prepare Provide Proof of Approved Spill Prevention, Countermeasure, and Control Plans. <u>In accordance with Title 40 of the CFR, Part 112, and in order to minimize, avoid, and/or clean up unforeseen spill of hazardous materials during operation of the proposed facilities, the Colorado River Regional Water Quality Control Board (RWQCB) will require SCE shall to update or prepare, if necessary, the and implement a Spill Prevention, Countermeasure, and Control (SPCC) Plan for each substation, series capacitors, and the switchyard. If an existing SPCC Plan is available it may be updated for compliance with this measure. In accordance with state and federal requirements, each SPCC Plan shall include engineered and operational methods for preventing, containing, and controlling potential releases, and provisions for quick and safe cleanup. SCE shall document compliance by providing a copy of the approved Spill Prevention, Control, and Countermeasures-SPCC Plans to the CPUC or BLM or USFWS, as appropriate, for review and approval at least 60 days before the start of operation. For any substation, series capacitor, or switchyard that is not required by the RWQCB to possess a SPCC Plan, SCE shall submit to the CPUC or BLM or USFWS, as appropriate, at least 60 days before the start of operation, proof that a SPCC Plan is not required by the RWQCB.</u></p>	<p>Colorado River Substation and associated facilities</p>	<p>Review and approve plans or documentation; observe construction sites and activities for compliance</p>	<p>BLM, CPUC, and USFWS</p>	<p>Prior to, during and post construction (60 days before operation)</p>

Attachment I Table 2. Mitigation Measures to be Implemented During Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
HYDROLOGY AND WATER QUALITY				
H-5a: Construction site dewatering management. If groundwater is unexpectedly encountered during project construction, dewatering activities shall be performed in accordance with the California Stormwater Quality Association (CASQA) Handbook for Construction or other similar guidelines, as approved by the County of Riverside. Examples of construction site dewatering Best Management Practices include but are not limited to the following: fiber rolls, gravel bag berms, straw bale barriers, sediment basins and sediment traps, weir tanks, dewatering tanks, and various filters (gravity bag filter, sand media particulate filter, pressurized bag filter, cartridge filter).	Colorado River Substation and associated facilities	Monitor dewatering BMPs implementation if groundwater is encountered	BLM and CPUC	During construction
— [MM H-5a] The project Applicant shall notify the Colorado River Basin Regional Water Quality Control Board (RWQCB) and County at the onset of dewatering and submit written description of all executed dewatering activities, including steps taken to return encountered groundwater to the subsurface, upon the completion of dewatering activities at the affected site(s).	Colorado River Substation and associated facilities	Ensure RWQCB and Riverside County notification and review documentation	BLM and CPUC	During construction
— [MM H-7a] The County of Riverside shall be notified prior to installation of the secondary supply well, should it be necessary. The Applicant shall submit the Groundwater Well Contingency Plan to the CPUC and the County of Riverside for review and approval thirty (30) days before the start of extraction of groundwater for construction or operation.	Colorado River Substation	Review Plan and ensure Riverside County is notified prior to installation of the secondary supply well	BLM and CPUC	Prior to, during and post construction (if secondary well installed)

Attachment I Table 2. Mitigation Measures to be Implemented During Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— [MM H-7b] Monitoring shall be performed during pre-construction, construction, and project operation with the intent to establish pre-construction and project-related groundwater level and water quality trends that can be quantitatively compared against observed and simulated trends near the project pumping well(s). During pre-construction monitoring, it shall be determined whether groundwater can be pumped from above the Colorado River accounting surface of 234 feet above mean sea level (amsl). If it is not possible to verify that groundwater for the Proposed Project would be exclusively pumped from above the Colorado River accounting surface, then Mitigation Measure H-7c (Water Supply Plan for Use of Colorado River Water) would be required.</p> <p>The monitoring wells shall include the following: SCE's primary supply well (proposed), SCE's secondary supply well (per Mitigation Measure H-7a), State Well Number 7S/21E-5F1 (approximately 4,800 feet northeast of the new project well), and at least one off-site down-gradient well. Water quality monitoring shall include annual sampling and testing for Total Dissolved Solids (TDS), which include minerals, salts, and metals dissolved in water. Water quality samples shall be drawn from each of the aforementioned monitoring well locations.</p>	Colorado River Substation	Review groundwater level and water quality trends; verify whether groundwater would be exclusively pumped from above the Colorado River accounting surface	BLM and CPUC	Prior to, during and post construction
<p>— [MM H-7b] The Plan shall include a schedule for submittal of both quarterly monitoring data reports during construction (one report every three months, from the onset of construction activities), and annual monitoring data reports during construction, operation, and maintenance (one report every twelve months, from the onset of construction, for a duration of at least five years, described below). Monitoring data reports shall be submitted by the Applicant to the CPUC for review and approval, as specified in the Plan. Quarterly and annual reports shall include water level monitoring data and water quality monitoring data. Annual summary reports shall include but are not limited to the following:</p> <ul style="list-style-type: none"> • Daily usage, monthly range, and monthly average of daily water usage in gallons per day; • Total water used on a monthly and annual basis in acre-feet; • Summary of all water level and water quality data; and <p>Identification of trends that indicate potential for offsite wells to experience deterioration of water level or water quality.</p>	Colorado River Substation	Review Plan and quarterly and annual reports	BLM and CPUC	During and post construction

Attachment I Table 2. Mitigation Measures to be Implemented During Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— [MM H-7b] Based on the results of the quarterly and annual trend analyses during the first 5 years of the project from the initiation of project construction, the Applicant shall determine if the project pumping has resulted in water level decline of 5 feet or more below the baseline trend at nearby private wells. If drawdown of 5 feet or more occurs at off-site wells, the Applicant shall immediately reduce groundwater pumping until water levels stabilize or recover, sustaining drawdown of less than 5 feet. Alternatively, the Applicant shall provide compensation to the well owner, including reimbursement of increased energy costs, or deepening the well or pump setting.</p>	Colorado River Substation	Review quarterly and annual trend analyses; observe reduction in pumping or ensure compensation to well owner, if necessary	BLM and CPUC	During and post construction
<p>— [MM H-7b] The Applicant shall file an annual “Notice of Extraction and Diversion of Water” with the State Water Resources Control Board in accordance with Water Code Sections 4999 et seq. The Applicant shall include a copy of the filing in the annual compliance report. The report will allow the CPUC to review submitted data monitoring reports for compliance. Following review and approval of the fifth annual summary report, the CPUC will determine whether groundwater wells surrounding the project site are affected by project activities in a way that requires additional mitigation and, if so, shall determine what measures are needed.</p>	Colorado River Substation	Review annual summary reports	BLM, CPUC and SWRCB	During and post construction

Attachment I Table 2. Mitigation Measures to be Implemented During Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— [MM H-7c] The activities proposed for mitigation will be outlined in a Water Supply Plan that will be provided to the CPUC for review and approval prior to the onset of groundwater pumping at the project site. The Water Supply Plan shall include the following at a minimum:</p> <ul style="list-style-type: none"> • Identification of water offset activities and associated water source(s) to replace the quantity of water diverted from the Colorado River over the life of the project on an acre-foot per acre-foot basis; • Demonstration of the Applicant's legal entitlement to the water or ability to conduct the activity; • Include a discussion of any needed governmental approval of the identified activities, including a discussion of whether that approval that requires; • Discuss whether any governmental approval of the identified activities will be needed, and, if so, whether that additional approval will require compliance with CEQA or NEPA; • Demonstration of how water diverted from the Colorado River will be replaced for each identified activity; • An estimated schedule of completion for each identified activity; • Performance measures that would be used to evaluate the amount of water replaced by each identified activity; • Monitoring and Reporting Plan outlining the steps necessary and proposed frequency of reporting to show that each identified activity is achieving the intended benefits and replacing Colorado River diversions; and • If the application for allocation from the Colorado River is accepted by the USBR, the Applicant shall submit to the CPUC for their approval, a copy of a water allocation from the Colorado River issued by the appropriate agency. <p>The Applicant shall implement the activities reviewed and approved in the Water Supply Plan in accordance with the agreed upon schedule in the Water Supply Plan. If agreement on identification or implementation of mitigation activities cannot be achieved, the Applicant shall immediately halt construction or operation until assurance that the agreed upon activities can be identified and implemented.</p> <p>The Applicant shall submit the Water Supply Plan to the CPUC for review and approval thirty (30) days before the start of extraction of groundwater for construction or operation.</p>	<p>Colorado River Substation, if groundwater pumping would draw water from below the Colorado River accounting surface of 234 feet above mean sea level (amsl)</p>	<p>Review Water Supply Plan; observe compliance with Plan activities in accordance with the agreed upon schedule</p>	<p>BLM and CPUC</p>	<p>Prior to, during and post construction</p>

Attachment I Table 2. Mitigation Measures to be Implemented During Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
GREENHOUSE GAS				
GHG-1: Avoid sulfur hexafluoride emissions. SCE shall ensure that project equipment, specifically the circuit breakers at the Colorado River Substation, maintains a leakage rate of 0.5 percent per year or less for sulfur hexafluoride (SF ₆). To accomplish this, SCE shall include this limit as a performance specification for the gas insulated switchgear that would be installed as part of the project. Maintenance, repair, and replacement of all gas insulated switchgear shall be consistent with manufacturer's recommendations for achieving this performance specification and in compliance with CARB regulations for reducing sulfur hexafluoride emissions from gas insulated switchgear (17 CCR 95350).	Colorado River Substation	Potential for SF ₆ leaks is minimized according to a leak reduction standard that would be consistent with the CARB Climate Change Scoping Plan	BLM and CPUC	Prior to and post construction (during operation)

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
AIR QUALITY				
<p>MM-AIR-1 Sunlight and SCE shall require all on-site construction equipment to meet EPA Tier 2 or higher emissions standards according to the following:</p> <ul style="list-style-type: none"> • April 1, 2010, to December 31, 2011: All off-road diesel-powered construction equipment greater than 50 horsepower (hp) shall meet Tier 2 off-road emissions standards. In addition, all construction equipment shall be outfitted with the BACT devices certified by the California Air Resources Board (CARB). Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 2 or Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. • January 1, 2012, to December 31, 2014: All off-road diesel-powered construction equipment greater than 50 hp shall meet Tier 3 off-road emissions standards. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. • Post-January 1, 2015: All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. • A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided when each applicable unit of equipment is mobilized. 	All Areas associated with Red Bluff substation construction	Copies of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided to the BLM and CPUC when each applicable unit of equipment is mobilized.	BLM, CPUC	Prior to and during construction
<p>AM-AIR-6 SCE would develop and implement a dust control plan to ensure compliance with SCAQMD Rule 403 during substation construction. Although preparation of a written dust control plan is not a formal requirement of SCAQMD Rule 403, compliance with all of the substantive provisions of Rule 403 (See Tables 3.2-2 and 3.2-3 in Chapter 3) is a legal requirement and is accommodated in the emissions analyses prepared for this EIS.</p>	All Areas associated with Red Bluff substation construction	Review the dust control plan and monitor implementation during construction.	BLM, CPUC	Prior to and during construction
<p>AM-AIR-7 SCE would require bidders for the construction contract to submit a transportation plan describing how workers would travel to the Project site.</p>	All Areas associated with Red Bluff substation construction.	Verification of submittal of transportation plans	BLM, CPUC	Prior to and during construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
VEGETATION				
MM-BIO-1 Construction Monitoring. A BLM-approved biologist shall conduct construction monitoring during all construction activities to ensure that construction activities are contained within the staked and flagged construction areas at all times.	All Areas associated with Red Bluff substation construction	BLM to approve biologist resumes prior to and during construction. Monitoring shall be conducted during construction.	BLM, CPUC	Prior to and during construction
—[MM-BIO-1] The construction monitor shall also be present during all ground disturbing activities to either actively or passively relocate special status wildlife species, other than the desert tortoise, nesting bird species, and burrowing owl (e.g., rosy boa, chuckwalla, Palm Springs round-tailed squirrel, American badger, and Colorado Valley woodrat [and burro deer, Nelson's bighorn sheep, and mountain lion if need be]), found within the construction zones to a suitable location outside of the project footprint. The construction monitor shall also inspect fencing and netting at all construction ponds to ensure that the ponds are not accessible to potential avian or canid desert tortoise predators or to wildlife that could drown or become entrapped within the enclosures. Netting and fencing must prevent the ponds from becoming water source "subsides" to predators or from becoming hazards to native wildlife. The construction monitor shall have the authority to stop work and report directly to the Applicant's Environmental Manager to ensure compliance with the Project Description, applicant-proposed measures, and mitigation measures. The construction monitor shall provide the Applicant's Environmental Manager with weekly updates and quarterly monitoring reports.	All Areas associated with Red Bluff substation construction	Monitoring shall be conducted during construction. Review weekly updates and quarterly monitoring reports.	BLM, CPUC	During construction
—[MM-BIO-1] After construction has been completed, the construction monitor shall provide the Applicant's Environmental Manager with a final monitoring report. The Applicant's Environmental Manager shall provide BLM with weekly status updates on the status of construction and monitoring efforts and shall provide BLM with copies of the quarterly monitoring reports and the final monitoring report. BLM shall be responsible for ensuring that construction monitoring is conducted during all construction activities.	All Areas associated with Red Bluff substation construction	Weekly status updates on the status of construction and monitoring efforts, quarterly monitoring reports and the final monitoring report shall be reviewed by the BLM and submitted to the CPUC.	BLM, CPUC	During and post construction
MM-BIO-2 Off-site Compensation: 1. This Mitigation Measure provides further detail and specificity to the habitat compensation land requirements described in Applicant Measure AM-BIO-1. The draft Habitat Compensation Plan shall be revised to reflect acreages and habitat types as described herein, The revised habitat Compensation Plan shall be submitted for approval to BLM, USFWS, CDFG, and CPUC before its finalization and implementation.	All habitat disturbance areas associated with Red Bluff substation construction	The draft Habitat Compensation Plan shall be revised to reflect acreages and habitat types. The revised habitat Compensation Plan shall be submitted for approval to BLM, USFWS, CDFG, and CPUC	BLM, CPUC, USFWS, CDFG	During and post construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>—[MM-BIO-2] The Applicant (Sunlight or SCE) shall acquire and protect, in perpetuity, compensation habitat to mitigate impacts to biological resources listed below. The compensation lands shall be placed under conservation management to be funded through the terms described herein. The acreages and ratios shall be based upon final calculation of impacted acreage for each resource and on ratios set forth in Applicant Measure AM-BIO-1 and in the draft Habitat Compensation Plan dated 17 Dec 2010. Acreages of anticipated compensation requirements as summarized throughout this measure are based on impacts analysis of Alternative 1 in Sections 4.3 and 4.4 and ratios described in Applicant Measure AM-BIO-1. Acreages shall be adjusted as appropriate for other alternatives. Desert dry wash woodland (101 acres at 3:1 ratio).</p> <ul style="list-style-type: none"> • Occupied desert tortoise habitat (2,757 acres at 1:1 ratio; 1,214 acres at 2:1 ratio; 191 acres at 5:1 ratio). • occupied or suitable habitat for breeding or wintering burrowing owls (13 acres for each occupied burrow, estimated as two burrows), • state-jurisdictional streambeds (302 acres, including the desert dry wash woodland, above, at 3:1 ratio), • creosote bush scrub (4,072 acres at 1:1 ratio). • occupied foxtail cactus habitat (estimated as two acres, at 1:1 ratio), • undisturbed habitat for most wildlife species including desert kit fox and American badger (i.e., away from sources of noise or other disturbance such as highways, wind farms, etc.) (4,173 acres, at 1:1 ratio), • occupied chuckwalla and rosy boa habitat (Red Bluff Substation A site, 149 acres, at 1:1 ratio), • suitable/occupied upland shrubland nesting habitat for migratory birds (4,173 acres, at 1:1 ratio), • suitable foraging habitat for golden eagles, and within foraging range of a known nesting site (4,173 acres, at 1:1 ratio), • suitable or occupied roosting habitat for special status bats (101 acres desert dry wash woodland at Solar Farm B and 149 acres rocky slopes at Red Bluff Substation A), and • suitable or occupied habitat for Palm Springs round-tailed ground squirrel (estimated as 92 acres, based on Gen-Tie Line A-1 disturbance), Colorado Valley woodrat (estimated as 149 acres at Red Bluff Substation A location). 	<p>All habitat disturbance areas associated with Red Bluff substation construction</p>	<p>The Applicant (Sunlight or SCE) shall acquire and protect, in perpetuity, compensation habitat to mitigate impacts to biological resources as verified by USFWS, CDFG, BLM and CPUC.</p>	<p>BLM, CPUC, USFWS, CDFG</p>	<p>During and post construction</p>
<p>Of the resources listed above, BLM's focus is on desert dry wash woodland, occupied desert tortoise habitat, occupied or suitable habitat for breeding or</p>				

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
wintering burrowing owls, and state-jurisdictional streambeds. Under Alternative 1, a total of 4,176-acres would be disturbed. Total habitat compensation lands shall be no fewer than 6,707 acres, including, at minimum, 6,140-acres of occupied desert tortoise habitat and 819 acres of state-jurisdictional streambeds (including at least 288 acres of desert dry wash woodland). Further details are described in text and Table 4.3-10, below. Final compensation requirements shall be adjusted to account for any deviations in project disturbance, according to final design, as-built project footprint or, if a different Project alternative is approved, adjusted to reflect that alternative. Desert Sunlight shall be responsible for all compensation for habitat disturbance at the Solar Farm Layout and Gen-Tie Lines; SCE shall be responsible for all compensation for habitat disturbance at the Red Bluff Substation site.				

Table 4.3-10. Minimum Total Compensation Acreage

Acres of Resource	Impact	Compensation Ratio	Compensation Acres
Previously disturbed (no compensation)	3	0	0
Desert tortoise habitat (moderate density) ¹	1,214	2:1	2,428
State-jurisdictional desert dry wash and desert dry wash woodland (302 ac.), less 24 acres desert dry wash woodland within DWMA/ CHU2	278	3:1	834 (to include 288 acres dry wash woodland)
Wildlife Management Areas Chuckwalla DWMA, Chuckwalla CH3	191	5:1	955

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
Minimum Total Habitat Compensation Requirement	6,707			
¹ Draft Habitat Compensation Plan, Table 2 (Desert Sunlight Holdings, 17 Dec 2010) ² Table 4.3-5 Summary of Impacts on Jurisdictional Resources ³ Table 4.4-5				
<p>2. Of the total acreage to be disturbed under Alternative 1, three (3) acres have been previously disturbed and no compensation is required; 1,214 acres are moderate-density occupied desert tortoise habitat to be compensated at a ratio of 2:1; 302 acres (including 101 acres of desert dry wash woodland) are state-jurisdictional streambeds to be compensated at a ratio of 3:1; and 191 acres are within the Chuckwalla DWMA and/or Chuckwalla Critical Habitat Unit, to be compensated at a ratio of 5:1.</p> <p>3. Compensation habitat for biological resources may be “nested.” For example, compensation for the roosting habitat of bats that roost in desert dry wash woodland (Appendix H) would be fulfilled by desert dry wash woodland compensation lands, and would be counted as providing compensation for both the roosting bats and desert dry wash woodland. Similarly, compensation for the roosting habitat of bats that roost in rock crevices (Appendix H) may be fulfilled by compensation lands that also provide habitat for rosy boa and chuckwalla. Thus, compensation for impacts to bat roosting habitat may be fully nested within other compensation requirements.</p> <p>4. Where impacted habitats meet criteria as two or more compensation ratios, the highest ratio will apply. For example, the Red Bluff Substation A site would affect a total of 149 acres, all within the Chuckwalla DWMA and CHU (Table 4.4-5); impacts to the Chuckwalla DWMA and CHU would require mitigation at a 5:1 ratio. Although 29 of the 149 acres are desert dry wash woodland (Table 4.3-6) would require compensation at a lower, 3:1 ration (if they were outside the DWMA and CHU), all 149 acres of impacts to the Chuckwalla DWMA and CHU shall be compensated at the 5:1 ratio. However, compensation lands for desert dry wash woodland at the 3:1 ratio (i.e., 87 acres) may be nested within the overall 5:1 compensation,</p> <p>5. Compensation land selection criteria. Criteria for the acquisition, initial protection and habitat improvement, and long-term maintenance and management of compensation lands for impacts to biological resources shall include all of the following:</p> <p style="margin-left: 20px;">a. compensation lands selected for acquisition to meet BLM, USFWS,</p>				

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>CDFG, and CPUC requirements shall be equal to or better than the quality and function of the habitat impacted;</p> <p>b. provide habitat acreage with capacity to regenerate naturally when disturbances are removed;</p> <p>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;</p> <p>d. be contiguous and biologically connected to lands currently occupied by desert tortoise, ideally with populations that are stable, recovering, or likely to recover;</p> <p>e. not have a history of intensive recreational use or other disturbance that might cause future erosional damage or other habitat damage, and make habitat recovery and restoration infeasible;</p> <p>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;</p> <p>g. not contain hazardous wastes that cannot be removed to the extent that the site could not provide suitable habitat;</p> <p>h. must provide wildlife movement value equal to that on the Project site; and</p> <p>i. have water and mineral rights included as part of the acquisition, unless the BLM and CPUC, in consultation with CDFG and USFWS, agree in writing to the acceptability of land without these rights.</p> <p>j. Additional selection criteria for desert tortoise compensation lands.</p> <p>i. compensation lands for impacts to desert tortoise shall be within the Eastern Colorado Desert Tortoise Recovery Unit, and</p> <p>ii. shall have 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;</p> <p>k. Additional Selection Criteria for special-status plant compensation lands. The compensation lands selected for acquisition for impacts to special-status plants shall include at least one of the following categories:</p> <p>i. 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</p>				

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>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).</p> <p>ii. 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.</p> <p>i. If all or any portion of the acquired compensation lands meets the habitat occupancy or suitability requirement for more than one of the resources listed above, that portion of those compensation lands may also be used to fulfill that portion of the obligation to acquire compensation lands to mitigate impacts to those resources.</p> <p>6. The total amount of compensation mitigation lands required under this measure may exceed the requirements of AM BIO-1, in order to provide mitigation for all of the resources identified in this measure.</p>				
<p>—[MM-BIO-2]</p> <p>7. Review and Approval of Compensation Lands Prior to Acquisition. The Project owner (SCE) shall submit a formal acquisition proposal to the BLM, USFWS, CDFG, and CPUC describing the parcel(s) intended for purchase. This acquisition proposal shall discuss the suitability of the proposed parcel(s) as compensation lands in relation to the selection criteria listed above, and must be approved by the BLM and CPUC in coordination with CDFG and USFWS.</p>	All habitat disturbance areas associated with Red Bluff substation construction	SCE shall submit a formal acquisition proposal to the BLM, USFWS, CDFG, and CPUC, and must be approved by the BLM and CPUC in coordination with CDFG and USFWS.	BLM, CPUC, USFWS, CDFG	During and post construction
<p>—[MM-BIO-2]</p> <p>8. 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 biological resources. The Management Plan shall be submitted for review and approval to the BLM and CPUC, in consultation with CDFG and USFWS.</p>	All habitat disturbance areas associated with Red Bluff substation construction	The Management Plan shall be submitted for review and approval to the BLM and CPUC, in consultation with CDFG and USFWS.	BLM, CPUC, USFWS, CDFG	During and post construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>—[MM-BIO-2]</p> <p>9. Compensation Lands Acquisition Requirements. The Project owner shall comply with the following requirements relating to acquisition of the compensation lands after the BLM, USFWS, CDFG, and CPUC have approved the proposed compensation lands:</p> <p>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 BLM, USFWS, CDFG, and CPUC. All documents conveying or conserving compensation lands and all conditions of title are subject to review and approval by the BLM and CPUC. 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.</p> <p>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 BLM USFWS, CDFG, and CPUC. Any transfer of a conservation easement or fee title must be to CDFG, to 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 BLM and CPUC. 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 BLM and CPUC. If an entity other than CDFG holds a conservation easement over the compensation lands, the BLM and CPUC may require that CDFG or another entity approved by the BLM, USFWS, CDFG, and CPUC, in consultation with CDFG, be named a third party beneficiary of the conservation easement. The Project owner shall obtain approval of the BLM, USFWS, CDFG, and CPUC of the terms of any transfer of fee title or conservation easement to the compensation lands.</p> <p>c. Initial Protection and Habitat Improvement. The Project owner shall fund activities that the BLM and CPUC require 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 \$330 per acre of compensation land, but actual costs will</p>	<p>All habitat disturbance areas associated with Red Bluff substation construction</p>	<p>Preliminary Report, Title/Conveyance, Initial Protection and Habitat Improvement, Property Analysis Record, Long-term Maintenance and Management Funding, agreement is with the long-term maintenance and management fund holder/manager shall be submitted to the BLM, CPUC, USFWS an CDFG.</p>	<p>BLM, CPUC, USFWS, CDFG</p>	<p>During and post construction</p>

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>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 BLM and CPUC in consultation with USFWS and 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.</p>				
<p>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 BLM and CPUC before it can be used to establish funding levels or management activities for the compensation lands.</p>				
<p>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 \$1,450 for every acre of compensation lands. If compensation lands will not be identified and a PAR or PAR-like analysis completed within the time period specified for this payment, the Project owner shall either: (i) provide initial payment equal to the amount of \$1,450 multiplied by the number of acres the Project owner proposes to acquire for compensatory mitigation; or (ii) provide security to the BLM and CPUC under subsection (g), "Mitigation Security," below, in an amount equal to \$1,450 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. 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 \$1,450 per acquired acre will be</p>				

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>required for long-term maintenance and management, the excess paid will be returned to the Project owner. The Project owner must obtain the BLM and CPUC's approval of the entity that will receive and hold the long-term maintenance and management fund for the compensation lands. The BLM and CPUC will consult with USFWS and CDFG before deciding whether to approve an entity to hold the Project's long-term maintenance and management funds.</p>				
<p>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:</p>				
<p>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 BLM and CPUC and is designed to protect or improve the habitat values of the compensation lands.</p>				
<p>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 BLM, USFWS, CDFG, and CPUC 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.</p>				
<p>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. However, for reporting purposes, the long-term maintenance and management funds for this Project must be tracked and reported individually to the BLM, USFWS, CDFG, and CPUC.</p>				
<p>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.</p>				

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>—[MM-BIO-2]</p> <p>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 and additional fees, management funds, and other costs associated with the NFWF account. 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.</p> <p>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 BLM, USFWS, CDFG, and CPUC. Such delegation shall be subject to approval by the BLM and CPUC, in consultation with CDFG 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 BLM and CPUC’s certification of the Project.</p> <p>j. The Applicant may choose to compensate and mitigate for impacts to state-listed endangered species pursuant to §2081 of the California Endangered Species Act using one or both of the “in-lieu fee” or “advance mitigation” mechanisms set forth in SB 34. Compensation lands acquired through SB 34 may in whole or in part satisfy the compensation habitat requirements set forth in this mitigation measure, only to the extent that they do in fact provide habitat values and mitigation for significant impacts to the species and biological resources identified above, and are consistent with the selection criteria described above.</p>	<p>All habitat disturbance areas associated with Red Bluff substation construction</p>	<p>Verification of funding provision shall be made by BLM, CPUC, USFWS, CDFG</p>	<p>BLM, CPUC, USFWS, CDFG</p>	<p>During and post construction</p>

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
—[MM-BIO-3] The Applicant and SCE shall be responsible for ensuring that all workers at the site, throughout the duration of construction, operation, and decommissioning activities, receives the training described in AM-BIO-4. Specific language in Mitigation Measure BIO-3 will take precedence over any discrepancy with the Applicant Measures cited herein.	All areas associated with Red Bluff substation construction	Verification of worker training.	BLM, CPUC	Prior to, during, and post construction
—[MM-BIO-4] Post-Project seeding and planting (revegetation) will occur at the decommissioning phase of the Project as described under an approved Restoration Plan (AM-BIO-5).	All areas associated with Red Bluff substation construction	Verification of restoration	BLM, CPUC	During and post construction
<p>MM-BIO-5 Desert Dry Wash Woodland Monitoring and Reporting Plan. In addition to complying with MMWAT-3 (Groundwater Level Monitoring, Mitigation, and Reporting), the Project owner shall prepare and submit a Desert Dry Wash Woodland Monitoring and Reporting Plan to BLM and CPUC for review and approval prior to commencing project-related pumping activities. Upon approval, the Project owner shall finalize and implement the Plan. The Desert Dry Wash Woodland Monitoring and Reporting Plan shall outline the following information and actions:</p> <ol style="list-style-type: none"> 1. Prior to Project operations, the baseline health and vigor four (4) groundwater dependent plant species (desert ironwood, blue palo verde, desert willow, and smoke tree) shall be recorded within four zones: immediately off-site at the project boundary, and at ¼-mile, ½-mile and 1-mile distances from proposed Project groundwater supply well locations. At minimum, the baseline conditions for 10 individuals for each of the target species within each sampling zone shall be recorded. At least one "control" site at least 2 miles from the project site, shall also be sampled. 2. A qualified botanist or plant physiologist shall develop a sampling protocol to be carried out in desert dry wash woodland at each sampling zone (above) and control site to monitor stress and mortality of target plants once operations begin. The protocol shall include a measure of pre-dawn water potential, as measured by standard plant physiology techniques. Through corresponding this data to climate factors and groundwater monitoring data collected under MM-WAT-3 as well as the control site, the survey shall, where possible, identify under what circumstances each factor may have the greatest effect on plants. This protocol shall be developed in coordination with BLM, CDFG, and CPUC and shall be approved by BLM, CDFG, and CPUC. 3. If a significant difference in plant stress or mortality are shown in one or more sample locations in comparison to the control site, the Project owner shall coordinate with BLM, CPUC, and CDFG to determine if the plant stress is due to climate factors (e.g., drought), pathogens (disease, insect infestation, 	All areas associated with Red Bluff substation construction	Review and approve Desert Dry Wash Woodland Monitoring and Reporting Plan prior to commencing project-related pumping activities. Verify implementation of the Plan.	BLM, CPUC	Prior to and during construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>etc.), or project activities. The Desert Dry Wash Woodland Monitoring and Reporting Plan shall identify what constitutes a significant difference in plant stress or mortality under this mitigation measure. If it is related to project activities, then the Project owner shall either refrain from pumping, reduce groundwater pumping to allow for recovery of the groundwater table, or provide additional habitat compensation as described below.</p>				
<p>—[MM-BIO-5] Monthly Desert Dry Wash Woodland Monitoring summary memos shall be submitted to BLM, CDFG, and CPUC during the construction period of the Project. In addition, annual Desert Dry Wash Woodland Monitoring reports shall be submitted for at least the first three years following completion of construction of the Project, if found necessary. The summary memos shall contain the monitoring data required as part of the monitoring program requirements under MM WAT-3. In addition, each Desert Dry Wash Woodland Monitoring Report shall provide maps and text discussion of each study site, changes in plant health and vigor, changes in groundwater levels in the production wells, and the year’s monitoring data.</p> <p>If results of the groundwater monitoring program under MM WAT-3 indicate that the project pumping has resulted in water level decline of one foot or more below the baseline trend, and vegetation monitoring for plant stress, mortality, and water potential have documented one or more of the sampling sites for the four groundwater dependent plant species as reaching the threshold (above), the Project owner shall reduce groundwater pumping until water levels stabilize or recover, provide for temporary supplemental watering, or compensate for additional impacts to desert dry wash woodland at the ratio of 3:1, consistent with Mitigation Measure MM BIO-2. Estimated acreage of additional dry wash woodland impacts shall be submitted to BLM and CPUC for approval. Upon approval, the Project owner shall initiate compensation according to the requirements and conditions for habitat compensation as described in Mitigation Measure MM BIO-2.</p>	All areas associated with Red Bluff substation construction	Review monthly Desert Dry Wash Woodland Monitoring summary memos and annual Desert Dry Wash Woodland Monitoring reports.	BLM, CPUC, CDFG	During construction
<p>—[AM-BIO-2] The following measures are required in the Plan and will be implemented by the Applicant to monitor and control invasive species:</p> <ul style="list-style-type: none"> • Preventative Measures During Construction <ul style="list-style-type: none"> – <u>Equipment Cleaning</u>: To prevent the spread of weeds into new habitats, and prior to entering the Project work areas, construction equipment will be cleaned of dirt and mud that could contain weed seeds, roots, or rhizomes. Equipment will be inspected to ensure they are free of any dirt or mud that could contain weed seeds and the tracks, feet, tires, and 	All areas associated with Red Bluff substation construction	Verify implementation of Integrated Weed Management Plan and mitigation requirements, review results of monitoring and management efforts.	BLM, CPUC	Prior to, during, and post construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>undercarriage will be carefully washed, with special attention being paid to axles, frame, cross members, motor mounts, underneath steps, running boards, and front bumper/brush guard assemblies. Other construction vehicles (e.g. pick-up trucks) that will be frequently entering and exiting the site will be inspected and washed on an as-needed basis.</p> <p>All vehicles will be washed off-site when possible. Should off-site washing prove infeasible, an on-site cleaning station will be set up to clean equipment before it enters the work area. Either high-pressure water or air will be used to clean equipment and the cleaning site will be situated away from any sensitive biological resources. If possible, water used to wash vehicles and equipment will be collected and re-used.</p> <ul style="list-style-type: none"> - <u>Site Soil Management</u>: Soil management will consist of limiting ground disturbance to the minimum necessary for construction activities and using dust suppressants to minimize the spread of seeds. Disturbed vegetation and topsoil will be re-deposited at or near the area from which they are removed to eliminate the transport of soil-borne noxious weed seeds, roots, or rhizomes. BLM-approved dust suppressants (e.g. water and/or palliative) will be minimized on the site as much as possible, but will use during construction to minimize the spread of airborne weed seeds, especially during very windy days. - <u>Weed-free Products</u>: Any use of hay or straw bales on the Project site will be limited to certified weed-free material. Other products such as gravel, mulch, and soil may also carry weeds and these products, too, will be certified weed-free. If needed, mulch will be made from the local, on-site native vegetation cleared from the Project area. Soil will not be imported onto the Project site from off-site sources. - <u>Personnel Training</u>. Weed management will be part of mandatory site training for all construction personnel and will be included in initial Worker Environmental Awareness Program training briefings. Training will include weed identification and the threat of impacts including impacts to local agriculture, vegetation communities, wildlife, and creating fire potential. Training will also cover the importance of preventing the spread of weeds. <ul style="list-style-type: none"> • <u>Containment and Control Measures</u> When Project monitoring (see below) indicates that invasive species are spreading, invasive species will be removed using mechanical and chemical methods. The Applicant will use mechanical weed removal methods as the preferred method, but herbicides may be used when conditions (such as wind, proximity of native vegetation) are such that the 				

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>effect on native species is expected to be minimal. During suppression or eradication activities, care will be taken to have the least affect on native plant species. Herbicides used will be limited to those approved by the BLM. Herbicides will be applied before the invasive species flower and set seed.</p>				
<p>If monitoring indicates the spread of athel, a woody invasive species, then athel will be controlled by cutting the trees and applying Garlon™ Ultra Herbicide to the stump immediately after cutting. Garlon™ is approved for use on athel by the BLM. All cut material generated during athel clearance will be removed from the site by truck. This material will be covered with a tarp or other material that will keep athel cuttings or seed from being spread by truck movement.</p>				
<p>The Applicant and its contractors will follow the BLM's Herbicide Use Standard Operating Procedures provided in Appendix B of the Record of Decision for the <i>Final Vegetation Treatments Using Herbicides Programmatic Environmental Impact Statement</i> (BLM 2007). Personnel responsible for weed control will be trained in the proper and safe use of all equipment and chemicals used for weed control.</p>				
<ul style="list-style-type: none"> • Monitoring <p>Baseline weed conditions will be assessed during the pre-construction phase of the Project, during pre-construction surveys and staking and flagging of construction areas. A stratified random sampling technique will be used to identify and count the extent of weeds on the site.</p> <p>Monitoring will take place each year during construction, and annually for three years following the completion of construction. The purpose of annual monitoring will be to determine if weed populations identified during baseline surveys have increased in density or are spreading as a result of the Project. Control methods will be implemented when measurable weed increases, as well as visually verified increases, are detected during monitoring. This will include small patches of unusually high density weeds (e.g., concentrations in swales) that are growing as a result of Project activities.</p> <p>During construction, daily monitoring records will be kept by biological monitors that will include information relevant to invasive weeds. During Project operations and maintenance, the facility owner or appropriate designee will be required to continually update the potential noxious and invasive weed list and provide monitoring and management appropriate to any new species in coordination with the BLM.</p> 				

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>After the three years of operations monitoring is complete, general management and monitoring of the Project area will be conducted by designated site personnel each year during both the germinating and early growing season (November through April) to eliminate new weed individuals prior to seed set. Throughout construction and long-term monitoring, personnel will be trained to identify weedy and native species and work with a trained vegetation monitor to determine where elimination is necessary.</p> <ul style="list-style-type: none"> • Reporting Results of monitoring and management efforts will be included in annual reports and a final monitoring report completed at the end of three years of post-construction monitoring. Copies of these reports will be kept on file at the site. Copies of each annual report as well as the final monitoring report will be sent to the BLM for review and comment. BLM will use the results of these reports to determine if any additional monitoring or control measures are necessary. • Success Criteria Weed control will be ongoing on the Project site for the life of the Project, but plan success will be determined by BLM after the three years of operations monitoring through the reporting and review process. Success criteria will be defined as having no more than ten percent increase in a weed species or in overall weed cover in any part of the Project. 				
<p>AM-BIO-4 Worker Environmental Awareness Program (WEAP). The Applicant will implement a WEAP to educate on-site workers about sensitive environmental issues associated with the Project. The program will be administered to all on-site personnel including surveyors, construction engineers, employees, contractors, contractor's employees, supervisors, inspectors, subcontractors, and delivery personnel. The program will be implemented during site mobilization, ground disturbance, grading, construction, operation, and closure. The program will:</p> <ul style="list-style-type: none"> • Be developed by or in consultation with a biologist and consist of an on-site or training center presentation in which supporting written material and electronic media, including photographs of protected species, is made available to all participants; • Discuss the locations and types of sensitive biological resources on the Project site and adjacent areas, and explain the reasons for protecting these resources and penalties for harm or damage to these resources; 	<p>All areas associated with Red Bluff substation construction</p>	<p>Review training materials and verify training of all workers on the Project through review of training logs.</p>	<p>BLM, CPUC</p>	<p>Prior to, during, and post construction</p>

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<ul style="list-style-type: none"> • Include a discussion of fire prevention measures to be implemented by workers during Project activities, including a request that workers dispose of cigarettes and cigars appropriately and not leave them on the ground or buried; • Describe the temporary and permanent habitat protection measures to be implemented at the Project site; • Identify whom to contact if there are further comments and questions about the material discussed in the program; and • Include a training acknowledgement form to be signed by each worker indicating that they received training and shall abide by the guidelines. <p>The training will place special emphasis on the special status species that have been observed in the Project locations or have a high likelihood to occur, including special status plant species, desert tortoise and other special status reptile species, Palm Springs round-tailed ground squirrel, burrowing owl, golden eagle, nesting bird species and bat species, and the American badger. BLM will be responsible for ensuring that each construction worker at the site, throughout the duration of construction activities, receives the above training.</p>				
<p>AM-BIO-5 The Applicant will prepare and implement a Vegetation Resources Management Plan that contains the following components:</p> <ul style="list-style-type: none"> • A <i>Vegetation Salvage Plan</i> which discusses the methods that will be used to transplant cacti present within the Project locations following BLM's standard operating procedures, as well as methods that will be used to transplant special status plant species that occur in the Project locations if feasible. The Plan will include the following: <ul style="list-style-type: none"> – Criteria for determining whether an individual plant is appropriate for salvage; – The appropriate season for salvage; – Equipment and methods for salvage, transport, and planting; – A requirement that plants be marked to identify the north-facing side prior to transport, and replanted in the same orientation; – Storage and/or pre-planting requirements for each species; – A requirement to collect seed and voucher specimens from the special status species located within the Project locations; – The proposed location and several alternative locations for transplanting the cacti; – A requirement for ten years of maintenance of the transplanted individuals, 	<p>All areas associated with Red Bluff substation construction</p>	<p>Review Vegetation Resources Management Plan that contains a Vegetation Salvage Plan and A Restoration Plan. Verify implementation.</p>	<p>BLM, CPUC</p>	<p>Prior to, during, and post construction</p>

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>including removal of invasive species and irrigation (if necessary);</p> <ul style="list-style-type: none"> – A requirement for ten years of monitoring to determine the percentage of surviving plants each year and to adjust maintenance activities using an adaptive management approach. • A <i>Restoration Plan</i> which discusses the methods that will be used to restore creosote bush scrub and desert dry wash woodland habitat that is temporarily disturbed by construction activities. The Plan will include the following: <ul style="list-style-type: none"> – A planting plan, including the number, size, and species of container plants and/or the amount and species of seed necessary to revegetate both habitat types; – The appropriate season for planting and/or seeding; – The methodology for planting and/or seeding; – A description of the method(s) for irrigation and an irrigation schedule for the restoration areas; – Success criteria for percent cover of native plant species over a ten year period following installation of container plants and/or completion of seeding, and a requirement for replacement plantings when success criteria are not met; – A requirement that the percent cover of invasive species in the restoration areas will be maintained no higher than 10 percent for up to 10 years following installation of container plants and/or completion of seeding; – A requirement for ten years of maintenance of the restored areas, including removal of invasive species and irrigation; – A requirement for ten years of monitoring of the restored areas to evaluate compliance with success criteria and to adjust maintenance activities using an adaptive management approach; and – A requirement for annual monitoring reports which will be submitted to BLM. 				
<p>The Vegetation Salvage Plan and Restoration Plan will specify success criteria and performance standards as required per Mitigation Measure BIO-4, Salvage and Restoration Plan Performance Standards. BLM will be responsible for reviewing and approving the Plan and for ensuring that the Applicant implements the Plan including maintenance and monitoring required in the Plan.</p>				

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
WILDLIFE				
—[MM-WIL-1] Inactive dens that would be directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse by badgers or kit foxes. Potentially and definitely active dens that would be directly impacted by construction activities shall be monitored by the Biological Monitor for three consecutive nights using a tracking medium (such as diatomaceous earth or fire clay) and/or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand. If tracks are observed, and especially if high or low ambient temperatures could potentially result in harm to badger or kit fox from burrow exclusion, various passive hazing methods may be used to discourage occupants from continued use. After verification that the den is unoccupied it shall then be excavated and backfilled by hand to ensure that no badgers or kit foxes are trapped in the den. In the event that passive relocation techniques fail, the Applicant will contact the California Department of Fish and Game to explore other relocation options, which may include trapping.	All areas associated with Red Bluff substation construction and areas within 90 feet of all Project facilities	Review monitoring, passive relocation, den decommissioning summary and CDFG coordination.	BLM, CPUC, CDFG	Prior to and during construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>MM-WIL-2 Nelson's Bighorn Sheep Protection Plan. If effects to Nelson's Bighorn Sheep cannot be avoided, the Applicant shall consult with the California Department of Fish and Game (CDFG) to determine the appropriate level of restoration and mitigation for effects to essential habitat and/or travel corridors for Nelson's bighorn sheep by implementing the following measures:</p> <p>(a) The project owner shall compensate or replace the permanent loss of Nelson's bighorn sheep habitat at a 1:1 ratio as approved by the CDFG. This may include monetary contributions or donations as mitigation which are tied to programs or activities designed to offset potential resource losses or for mitigation banking for habitat restoration, enhancement, and/or acquisition projects provided that an appropriate and cooperatively developed mitigation agreement has been finalized between the Applicant and CDFG.</p> <p>(b) Compensation or replacement mitigation should be oriented within or adjacent to the project area and designed to rectify the same functions, habitat types and species being impacted wherever possible. Off-site compensation should be considered when mitigation measures cannot be applied to adjacent areas or to benefit the same species that are impacted.</p> <p>(c) All final actions associated with compensation mitigation will be approved by CDFG to insure that agreements are consistent with the CDFG's Sonoran Desert Mountain Sheep Meta-Population Plan.</p>	Where applicable	Compensation documentation and/or proffer shall be verifies prior to working in areas which could affect Nelson's big horned sheep.	BLM, CPUC, CDFG	Prior to, during, and post construction
<p>—[MM-WIL-2] (d) Any roads or permanent structures built in Nelson's bighorn sheep habitat or movement corridors must be constructed in such a way as to allow continued bighorn movement, except in the case of the Solar Farm and Substation facilities which will be fenced. Some strategies could include under or over passes, ramps cut into steep side slopes, alternatives to continuous guard rails and/or fence specifications along roads that allow sheep movement. Plans for these structures will be developed in coordination with CDFG.</p>	Where applicable	Review roads and permanent structure installations	BLM, CPUC, CDFG	Prior to and during construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>MM-WIL-5 Prepare and Implement a Bird Monitoring and Avoidance Plan. Prior to the issuance of a ROW grant, the Applicant shall retain a BLM-approved, qualified biologist to prepare a Bird Monitoring and Avoidance Plan in consultation with CDFG and USFWS. This plan shall follow the Avian Protection Plan guidelines outlined by USFWS and Avian Power Line Interaction Committee (APLIC).</p> <p>The plan will require monitoring of (1) the death and injury of birds from collisions with facility features such feeder/distribution lines and solar panels, and (2) impacts to aquatic insects from polarized light from solar panels that may affect insectivorous (insect-eating) birds. The study design shall be approved by BLM in consultation with the CDFG and USFWS.</p> <p>Bird mortality study. The bird mortality component of the Bird Monitoring Study shall include at a minimum: detailed specifications on data, a carcass collection protocol, and a rationale justifying the proposed schedule of carcass searches. The study shall also include seasonal trials to assess bias from carcass removal by scavengers as well as searcher bias.</p> <p>Polarized light and insectivorous birds study. The study of polarized light impacts on insectivorous birds shall include at a minimum: detailed specifications regarding data requirements, including protocols for collection and identification of insect eggs found on solar panels, and a rationale for a data collection schedule.</p>	SCE feeder and distribution lines	BLM-approved, qualified biologist to prepare a Bird Monitoring and Avoidance Plan in consultation with CDFG and USFWS.	BLM, CDFG, USFWS, CDFG	Prior to and during construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>—[MM-WIL-5] During construction and for one year following the beginning of the solar farm operation the biologist shall submit annual reports to BLM, CDFG, and USFWS describing the dates, durations, and results of monitoring and data collection. The annual reports shall provide a detailed description of any project-related bird or wildlife deaths or injuries detected during the monitoring study or at any other time and data collected for the study of polarized light impacts on insectivorous birds. The report shall analyze any project-related bird fatalities or injuries detected, and provides recommendations (in consultation with the County) for future monitoring and any adaptive management actions needed.</p> <p>Thresholds. Thresholds will be determined by BLM in consultation with CDFG and USFWS. If BLM determines that either (1) bird mortality caused by solar facilities is substantial and is having potentially adverse impacts on special-status bird populations, or that (2) the attraction of polarized light from solar panels is causing reproductive failure of aquatic insect populations at high enough levels to adversely affect insectivorous special-status birds, the Applicant shall be required to implement some or all of the mitigation measures below.</p> <p>Implementation Measures. To minimize bird mortality caused by solar facilities, the Applicant may be required to install additional bird flight diverters alterations to project components that have been identified as key mortality features, or implement other appropriate actions approved by BLM and regulatory agencies based on the findings of the Bird Monitoring and Avoidance Plan. To minimize indirect impacts of polarized light on insectivorous birds, the Applicant may be required to install non-polarizing white borders and grids on or around solar panels, which Horvath et al. (2010) found to dramatically reduce the attractiveness of solar panels to aquatic insects, or other measures that are shown to be effective.</p> <p>If mitigation actions are required, the annual reporting shall continue until BLM, in consultation with CDFG and USFWS, determines whether more years of monitoring are needed, and whether additional mitigation and adaptive management measures are necessary. After the Bird Monitoring Study is determined by BLM to be complete, the Applicant shall prepare papers that describe the design and monitoring results of the two studies to be submitted to peer-reviewed scientific journals. Proof of submittal shall be provided to BLM, CDFG, and USFWS within one year after the monitoring studies are complete.</p>	SCE feeder and distribution lines	During construction and for one year following the beginning of the solar farm operation the biologist shall submit annual reports to BLM, CDFG, and USFWS describing the dates, durations, and results of monitoring and data collection.	BLM, CDFG, USFWS, CDFG	During and post construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>MM-WIL-6 Prepare and Implement Golden Eagle Nesting Surveys, Nest Site Monitoring, and Adaptive Management, as described below. Where details of this Mitigation Measure may conflict with Applicant Measure AM-WIL-3, this measure (MM-WIL-6) shall take precedence.</p> <p>1. For each year during which construction will occur, an inventory of all golden eagle territories within ten miles of project facilities shall be conducted to determine if whether any territory is active. Survey methods for the inventory shall be as described in the Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations (Pagel et al. 2010) or more current guidance from the USFWS. A nesting territory or shall be considered occupied or unoccupied based on criteria in Pagel (2010) or more current guidance from the USFWS.</p> <p>2. Inventory Data: Data collected during the inventory shall include at least the following: territory status (unknown, vacant, occupied, breeding successful, breeding unsuccessful); nest location, nest elevation; age class of golden eagles observed; nesting chronology; number of young at each visit; digital photographs; and substrate upon which nest is placed.</p>	All areas associated with Red Bluff substation construction	Inventory of all golden eagle territories within 10 miles of project facilities shall be submitted for review.	BLM, CPUC, USFWS	Prior to and during construction
<p>—[MM-WIL-6] 3. Monitoring and Adaptive Management Plan: If an occupied nest (as defined by Pagel et al. 2010) is detected within 10 miles of any project component, the Project owner or SCE shall prepare and implement a Golden Eagle Monitoring and Management Plan for the duration of construction to ensure that Project construction activities do not result in injury or disturbance to golden eagles. The monitoring methods shall be consistent with those described in the Interim Golden Eagle Inventory and Monitoring Protocols; and Other Recommendations (Pagel et al. 2010) or more current guidance from the USFWS. The Monitoring and Management Plan shall be prepared in consultation with BLM, USFWS, CDFG, and CPUC. It shall be implemented by Desert Sunlight or SCE, according to project component; each applicant shall designate a biologist, to be approved by BLM, USFWS, CDFG, and CPUC. Triggers for adaptive management shall include any evidence of Project-related disturbance to nesting golden eagles, including but not limited to: agitation behavior (displacement, avoidance, and defense); increased vigilance behavior at nest sites; changes in foraging and feeding behavior, or nest site abandonment. The Monitoring and Management Plan shall include a description of adaptive management actions, which shall include, but not be limited to, cessation of construction activities that are deemed by the Designated Biologist to be the source of golden eagle disturbance.</p>	All areas associated with Red Bluff substation construction	If an occupied nest is detected within 10 miles of any project component, the Project owner or SCE shall prepare a Golden Eagle Monitoring and Management Plan for review. Implementation shall be monitored.	BLM, CPUC, USFWS	Prior to, during, and post construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>MM-WIL-7 Alternate to long-distance (greater than 500 meters) desert tortoise translocation. The draft Desert Tortoise Translocation Plan defined under Applicant Measure AM-WIL-1 shall be updated to identify and describe, as an alternative to translocation, a strategy to remove desert tortoises on the project site from the wild and place them permanently in facilities approved by USFWS and CDFG, to be fully funded by the applicants. All suitable care or holding facilities for desert tortoises shall be listed and described in the draft plan, and capacity of each facility to accommodate desert tortoises from the project site shall be provided. The updated draft plan and shall be submitted to BLM, CPUC, USFWS and CDFG for review and approval. Upon approval of a final Desert Tortoise Translocation Plan and issuance of state and federal approvals, the applicant (Sunlight and/or SCE), shall either translocate tortoises into the wild or shall permanently place them in approved facilities, consistent with the Final Desert Tortoise Translocation Plan.</p>	All areas associated with Red Bluff substation construction	The draft Desert Tortoise Translocation Plan defined under Applicant Measure AM-WIL-1 shall be updated for review	BLM, CPUC, USFWS, CDFG	Prior to and during construction
<p>AM-WIL-1 A Desert Tortoise Translocation Plan (Ironwood Consulting 2010d) has been prepared for the Project and will be implemented by the Applicant to ensure that construction monitoring will be conducted by a BLM-, USFWS-, and CDFG-approved biologists during all construction activities and that any desert tortoise found with the construction zone will be translocated to a suitable location outside of the project footprint. The draft plan is attached as Appendix H of this document and will be reviewed and approved by BLM. The final plan will conform to the 2010 USFWS desert tortoise relocation guidelines titled Translocation of Desert Tortoises (Mojave Population) from Project Sites: Plan Development Guidance. Unpublished Report dated August 2010.</p> <p>The <i>Desert Tortoise Translocation Plan</i> contains an analysis of several recipient sites for desert tortoises to be translocated from the Solar Farm site and Red Bluff Substation. The final selected recipient site will be determined by BLM, the USFWS, and CDFG.</p>	All areas associated with Red Bluff substation construction	Verify implementation of <i>Desert Tortoise Translocation Plan</i> (Ironwood Consulting 2010d) an that monitoring is conducted by BLM-, USFWS-, and CDFG-approved biologists. Review and approve biologists, monitor during construction.	BLM, CPUC, USFWS, CDFG	Prior to and during construction
<p>—[AM-WIL-1] Desert tortoises found along the linear components of the Project, including the Gen-Tie Line, Telecommunications site, and access roads will be translocated out of harm's way pursuant to USFWS guidance (<i>U.S. Fish and Wildlife Service. 2009. Desert Tortoise Field Manual. Ventura Fish and Wildlife Office, Ventura, California</i>). Specifically, biological monitors will be present during all construction activities to ensure that active burrows are avoided. If a desert tortoise is found, the tortoise will be allowed to passively traverse the site while construction in the immediate area is halted. If the tortoise does not move out of harm's way after approximately 20 minutes, a biologist authorized to handle desert tortoise, will actively move the animal out</p>	All areas associated with Red Bluff substation construction	Verification that prior to clearance surveys, the perimeter of the Red Bluff Substation site is security fencing and desert tortoise exclusion fencing. All fencing activities will be monitored. Clearance surveys will then be reviewed. Health assessments and long term monitoring shall	BLM, CPUC, USFWS, CDFG	Prior to and during construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>of harm's way. Vehicles parked in desert tortoise habitat will be inspected immediately prior to being moved. If a tortoise is found beneath a vehicle, a biologist authorized to handle desert tortoise will be contacted to move the animal out of harm's way, or the vehicle will not be moved until the desert tortoise leaves of its own accord.</p> <p>For desert tortoises in the Solar Farm site and Red Bluff Substation, they will be relocated using the following three phase translocation process:</p> <ul style="list-style-type: none"> • Installation of Perimeter Fencing <ul style="list-style-type: none"> – Prior to clearance surveys (see below), the perimeter of the Solar Farm site and Red Bluff Substation site will be fenced with security fencing and desert tortoise exclusion fencing. All fencing activities will be monitored by a qualified biological monitor. All fencing will be checked and repaired, as necessary, on a daily basis to ensure its integrity. – All individual desert tortoises found above ground during construction of the perimeter fence will be given a unique identifier, fitted with a transmitter, and placed inside the Solar Farm site. • Clearance Surveys and Translocation <ul style="list-style-type: none"> – If construction is scheduled to commence in the non-active season for desert tortoise (approximately June 1 to September 1 and November 1 to April 1), prior to construction activities, the Solar Farm site and Red Bluff Substation site will be fenced into subsections with temporary desert tortoise exclusion fencing. Clearance surveys will then be performed for the desert tortoise within each of the subsections. If a desert tortoise or active burrow is found within a subsection, construction will not begin until the active season of the desert tortoise (approximately April 1 to June 1 and September 1 to November 1), when the species can be translocated. If two complete passes are conducted within a subsection without detecting a desert tortoise or active burrow, construction may commence within the subsection. All desert tortoises observed during the clearance surveys performed in the non-active season will be fitted with transmitters and translocated during the next active season. – If construction is scheduled to commence in the active season for desert tortoise, prior to construction activities, the Solar Farm site and Red Bluff Substation site will be fenced into subsections with temporary desert tortoise exclusion fencing. Clearance surveys will then be performed for the desert tortoise within each of the subsections. During the active 		<p>be reviewed. Emails from SCE shall be received prior to the 5th day of the month summarizing the translocation activities performed the previous month. Annual project reports will also be reviewed by BLM, USFWS, and CDFG.</p>		

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>season, a complete health assessment and disease testing will be performed on each individual desert tortoise found to determine if it should be translocated the recipient site or the Desert Tortoise Conservation Center. Individuals will be fitted with a transmitter and translocated to the recipient site or the Desert Tortoise Conservation Center.</p> <ul style="list-style-type: none"> • Long-term Monitoring <ul style="list-style-type: none"> – All translocated desert tortoises will be monitored at least once within 24 hours of their release, and a minimum of twice weekly for the first two weeks after translocation. Then, all translocated desert tortoises will be monitored for a period of five years, at a minimum of once a week between March 15 and May 31, twice a month from June 1 to November 15, and once a month between November 15 and March 15. During the 5-year long-term monitoring program, an equal number of resident desert tortoises at the control site will also be monitored along with the desert tortoises at the recipient site. – Health assessments will be conducted for all translocated individuals annually prior to overwintering (between October 15 and November 15) and subsequent to overwintering (between March 1 and April 1). A health assessment will also be completed for each translocated individual at the end of the 5-year monitoring period. Any health problems or mortalities observed will be reported to the USFWS and CDFG verbally within 48 hours or via email within 5 business days. Fresh carcasses will undergo a necropsy as directed by USFWS and CDFG and animals showing clinical signs of disease will be transported to the Desert Tortoise Conservation Center. – Vegetation transects will also be established in 2010 within the recipient sites and will be surveyed annually between March 15 and April 30 to measure potential changes in habitat characteristics. • Reporting <ul style="list-style-type: none"> – During translocation, all activities will be recorded on standardized data sheets and/or digital data recorders. The Lead Biologist for the translocation effort will send emails to BLM, USFWS, CDFG, and SCE prior to the 5th day of the month summarizing the translocation activities performed the previous month. Annual project reports will also be sent to BLM, USFWS, and CDFG. – During long-term monitoring, all activities will be recorded on standardized data sheets and/or digital data recorders. The Lead Biologist will send brief 				

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>quarterly status reports via email to BLM, USFWS, and CDFG. An annual report will also be submitted to BLM on or before January 15 so that the February 1 deadline for annual reports to the USFWS can be met. A final report will be submitted to BLM following the fifth year of monitoring, summarizing the overall success of the monitoring program.</p>				
<p>—[AM-WIL-1] During the construction and operations and maintenance phases of the Project, the following Best Management Practices will also be implemented by the Applicant to reduce adverse effects to desert tortoise:</p> <ol style="list-style-type: none"> 1. Speed limits on all unpaved areas of the Project will be a maximum of 15 miles per hour; 2. No dogs or firearms will be allowed on the Project site during construction or operation and maintenance activities; 3. Construction and operation and maintenance activities will be limited to daylight hours to the extent possible; 4. Trash will always be contained within raptor and raven-proof receptacles and removed from the site frequently, including trash collected in vehicles in the field; 5. Water required for construction purposes will not be stored in open containers or structures and will be transported throughout the site in enclosed water trucks; and 6. Water sources for the Project (such as wells) will be checked periodically by biological monitors to ensure they are not creating open water sources by leaking or consistently overfilling trucks. <p>All vehicles leaking fuel or other liquids will be immediately removed to the staging area and repaired – all vehicles will carry spill materials and all spills will be cleaned up promptly and disposed of correctly.</p>	All areas associated with Red Bluff substation construction	Monitor compliance with BMPs.	BLM, CPUC, USFWS, CDFG	During and post construction
<p>AM-WIL-2 Contribute to a USFWS Regional Raven Management Plan. The Applicant shall contribute to the U.S. Fish and Wildlife Service (USFWS) Regional Raven Management Program by making a one-time payment of \$105 per acre of project disturbance to the national Fish and Wildlife Federation Renewable Energy Action Team raven control account.</p>	All areas associated with Red Bluff substation construction	Verify contribution to USFWS Regional Raven Management Plan.	BLM, CPUC, USFWS	Prior to and during construction
<p>—[AM-WIL-2] A <i>Raven Management Plan</i> (Ironwood Consulting 2010e) has been prepared and will be implemented by the Applicant to minimize the potential for the project to attract ravens to the Project site. The draft plan is attached as Appendix H of this document and will be reviewed and approved by BLM.</p>	All areas associated with Red Bluff substation construction	BLM to review and approve Raven Management Plan. Monitor implementation of the approved plan.	BLM, CPUC	Prior to and during construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>—[AM-WIL-2] Specifically, the following measures will be implemented by the Applicant to reduce the potential for the Project to introduce food subsidies and open water sources for the species:</p> <ol style="list-style-type: none"> 1. Traffic speeds on all Project-related dirt roads will be limited to 15 miles per hour to reduce road killed animals. Biological monitors will be monitoring speeds during construction activities; 2. Refuse management will be an integral part of the construction process. A sufficient number of refuse containers will be supplied and all containers will have sealable and lockable lids with the goal of preventing strong winds from blowing garbage around, wildlife from entering refuse containers, and unauthorized people from tampering with refuse. Biological monitors will periodically check on refuse containers to ensure they are not overflowing and are being closed properly; 3. All work vehicles will have a sufficient supply of strong garbage bags to aid in collection and disposal of refuse at the end of each day into the large containers discussed above; 4. Waste management contractors will supply an adequate number of portable toilets to promote a hygienic environment; 5. The open ponds needed to store water required for construction purposes will be fenced and lined, and will have netting around them, as described in AM-WIL-4, to keep ravens away. Water will be transported throughout the site in enclosed water trucks; and 6. Water sources for the Project (such as wells) will be checked periodically by biological monitors to ensure they are not creating open water sources by leaking or consistently overfilling trucks. 	All areas associated with Red Bluff substation construction	Monitor implementation of mitigation measure requirements.	BLM, CPUC	Prior to and during construction
<p>—[AM-WIL-2] Throughout the construction and operation and maintenance phases of the Project five years post-construction, all incidental sightings of common ravens within the Project locations will be logged either by a biological monitor (during construction) or by a designated person by Sunlight and SCE (five years post-construction). In addition, for five years following construction, nest surveys for this species will be completed at least twice each spring between March 15 and June 1, and further assessments will be performed on the ground underneath raven nests during spring months to determine the presence of any desert tortoise predation.</p> <p>If monitoring data shows a potential increase in raven roosting or nesting behavior within the Sunlight Project components, additional measures will be implemented by the Applicant to minimize the attractiveness of the Project site</p>	All areas associated with Red Bluff substation construction	Annual monitoring report shall be submitted to BLM for review. If monitoring data shows a potential increase in raven roosting or nesting behavior within the SCE Project components, SCE will coordinate with BLM, USFWS, and CDFG to determine the appropriate control measures.	BLM, CPUC	During and post construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>to the species, including one or more of the following:</p> <ol style="list-style-type: none"> 1. Bird spikes installed on top of potential perches designed to prevent birds from gaining a foothold on the perch because of their porcupine design; 2. Repellant coils installed on top of potential perches to deter birds from gaining footholds because of their destabilizing coil design; 3. Bird control wire designed so that a line or grid of variable height posts is interconnected by a wire. This creates a confusing landing area in the same spirit as trip wires used for unsuspecting people; 4. Bird netting; and/or 5. Electric shock deterrents with low voltage pulses. <p>Inactive nests will be dismantled and passive deterrents will be installed. For active nests, a biological monitor will determine the number of fledglings and their status of development. Once the nest is determined to no longer be active, it will be removed and passive deterrents installed. Non-lethal deterrents will be the first course of action. However, ravens may adapt quickly to avoid passive deterrents. If problem ravens are proven to be an active threat to resident desert tortoises, then they could be subject to lethal removal in coordination with BLM, USFWS, and CDFG in compliance with the Migratory Bird Treaty Act and California Fish and Game Code.</p> <p>If monitoring data shows a potential increase in raven roosting or nesting behavior within the SCE Project components, SCE will coordinate with BLM, USFWS, and CDFG to determine the appropriate control measures, including continued raven nest monitoring and/or contribution to a region-wide raven control plan.</p> <p>On or before January 15th of each calendar year of monitoring, an annual report will be submitted to BLM that summarizes all monitoring activities sufficient for the BLM to provide necessary reporting to the USFWS and CDFG during their annual permitting report, due on or before February 1 of each year.</p>				
<p>AM-WIL-3 An <i>Avian and Bat Protection Plan</i> (Ironwood Consulting 2010f) has been prepared and will be implemented by the Applicant to specify necessary actions to be taken to protect nesting bird and bat species. The draft plan is attached as Appendix H of this document and will be reviewed and approved by BLM. The final plan will conform to the 2010 USFWS avian and bat guidelines titled <i>Considerations for Avian and Bat Protection Plans</i> U.S. Fish and Wildlife Service White Paper.</p>	All areas associated with Red Bluff substation construction and a 500-foot buffer	An <i>Avian and Bat Protection Plan</i> shall be reviewed and approved by BLM. Monitor implementation of the approved plan.	BLM, CPUC	Prior to and during construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>—[AM-WIL-3] The following measures will be implemented by the Applicant to protect burrowing owls in the Project locations during construction:</p> <ul style="list-style-type: none"> • Phase III burrow surveys will be completed within 30 days prior to planned construction in each construction unit and within a 150-meter (500 foot) buffer area. • All active burrowing owl nests will be avoided with a buffer of 75 meters (250 feet) during the nesting season (February 1 – August 31st). Initial avoidance buffers may be modified per the direction of a biological monitor based on the type of construction activity and bird species as approved by CDFG or USFWS. Outside nesting season or after determining that a nest has failed or young have fledged, owls will be passively relocated after concurrence of specific methods by CDFG. Passive relocation will include: <ul style="list-style-type: none"> – Identifying suitable relocation sites within one mile of the Project area; – Creating or enhancing at least two natural or artificial burrows per relocated owl; – Passively relocating burrowing owls; and – Monitoring and reporting the results of the passive relocation. 	<p>All areas associated with Red Bluff substation construction and 500-foot buffer</p>	<p>Phase III burrow surveys shall be reviewed by BLM and CPUC. Monitor implementation of the mitigation requirements.</p>	<p>BLM, CPUC, USFWS, CDFG</p>	<p>Prior to and during construction</p>

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>—[AM-WIL-3] The following measures will be implemented by the Applicant to protect nesting bird species in the Project locations during construction which are protected by the Migratory Bird Treaty Act and California Fish and Game Code Sections 3503 and 3513:</p> <ul style="list-style-type: none"> • Pre-construction surveys will be completed in the Project locations and in adjacent habitat areas and any nests observed will be identified and clearly marked. For passerines, an exclusion area where construction will not be allowed to commence will be established approximately 100 meters (330 feet) from any active nest. For raptors (other than golden eagles), the exclusion area will be established approximately 170 meters (500 feet) from any active nest (excluding nests of the common raven). For golden eagles, the exclusion area will be established approximately 1.6 kilometers (one mile) from any active nest. Initial protective buffers may be modified per the direction of a biological monitor based on type of construction activity and bird species and per approval by CDFG or USFWS. Nests will be checked within one week prior to planned construction to determine nest success and whether young have fledged. The exclusion boundary will not be removed until the biological monitor has determined that the nest has failed or young have fledged. • Vegetation clearing will be conducted outside of the bird breeding season (approximately February 1 to August 31) to the maximum extent practicable, taking into account the necessary timing of conservation measures for other species, including the desert tortoise. • Biological monitors will be present on-site during all phases of construction and will be tasked with monitoring avian nesting in adjacent habitats. If nests are found, the same procedures would be used as discussed above for pre-construction surveys. 	All areas associated with Red Bluff substation construction and 500-foot buffer	Pre-construction nesting bird surveys shall be reviewed by BLM and CPUC. Monitor implementation of the mitigation requirements, buffer restrictions and vegetation clearing restrictions.	BLM, CPUC, USFWS, CDFG	Prior to and during construction
<p>—[AM-WIL-3] The following measures will be implemented by the Applicant to protect roosting bats in the Project locations during construction:</p> <p>Pre-construction surveys will be completed in the Project locations and adjacent habitat areas and any active bat colonies will be identified and clearly marked. An exclusion area will be established approximately 50 meters (165 feet) from any active colony, and whenever possible, these areas will be avoided during construction activities.</p>	All areas associated with Red Bluff substation construction and 500-foot buffer	Roosting bat surveys shall be reviewed by BLM and CPUC. Monitor implementation of the mitigation requirements and buffer restrictions.	BLM, CPUC, USFWS, CDFG	Prior to and during construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>—[AM-WIL-3] For five years post-construction, the Applicant will record incidental sightings of raptors and bats in the Project locations. In addition, the Applicant will conduct nest surveys within the Project locations at least twice each spring between March 1 and June 1, separated by at least 30 days where all project-related infrastructure will be inspected for active and inactive raptor nests. The Applicant will submit quarterly status reports via email to BLM, USFWS, and CDFG. On or before January 15th of each calendar year, an annual report will be submitted to BLM that summarizes all monitoring activities sufficient for BLM to provide necessary reporting to the USFWS and CDFG in their annual permitting report, due on or before February 1st of each year. These reports may include recommendations for future adaptive management actions.</p>	All areas associated with Red Bluff substation construction and 500-foot buffer	Quarterly and annual status reports shall be reviewed by BLM, CPUC, USFWS, and CDFG. Monitor implementation of the mitigation requirements.	BLM, CPUC, USFWS, CDFG	During and post construction
CULTURAL AND PALEONTOLOGICAL RESOURCES				
<p>MM-CUL-1 The Memorandum of Agreement shall detail the process for activities to proceed in areas where historic properties are now known not to exist; the process for phased completion of field investigations for the evaluation of cultural resources and assessment of effects; a historic property treatment plan (HPTP); procedures to resolve adverse effects under Section 106; coordination between the CEQA process and Section 106 compliance; procedures for treatment of inadvertent discoveries; procedures for determining treatment and disposition of human remains; compliance monitoring; dispute resolution; and tribal participation. Resolution of effects to cultural resources eligible for or listed on the NRHP may include research and documentation, data recovery excavations, curation, public interpretation, use or creation of historic contexts (especially for historic landscapes and the potential DTC-C-AMA historic district), and/or report distribution.</p>	All areas associated with Red Bluff substation construction.	Memorandum of Agreement including a Historic Properties Treatment Plan (HPTP) and coordination between the CEQA process and section 106 compliance etc. shall be reviewed and approved by BLM and CPUC. Monitor implementation during construction.	BLM, CPUC	Prior to and during construction
<p>MM-CUL-2 On the basis of preliminary CRHR eligibility assessments, NRHP eligibility assessments made under the Memorandum of Agreement, or existing NRHP eligibility determinations, the BLM and CPUC may require the relocation of Project components to avoid or reduce damage to cultural resource values. Where operationally feasible, potentially NRHP-eligible resources shall be protected from direct Project impacts by Project redesign within previously surveyed and analyzed areas.</p>	All areas associated with Red Bluff substation construction.	Verify project re-design if applicable.	BLM, CPUC	Prior to and during construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>MM-CUL-3 Where the BLM and CPUC decide that CRHR or NRHP-eligible or –listed cultural resources cannot be protected from direct impacts by Project redesign, the Applicant shall comply with appropriate mitigative treatment(s) that will be detailed in the Memorandum of Agreement and cultural resources mitigation and monitoring plan.</p>	<p>All areas associated with Red Bluff substation construction.</p>	<p>Review cultural resources mitigation and monitoring plan. Monitor compliance with Memorandum of Agreement and cultural resources mitigation and monitoring plan during construction.</p>	<p>BLM, CPUC</p>	<p>Prior to and during construction</p>
<p>MM-CUL-4 All CRHR-listed or eligible cultural resources (as determined by the CPUC) and all NRHP-listed or eligible cultural resources (as determined by the BLM) that will not be affected by direct impacts, but are within 50 feet of Project locations, will be monitored by a qualified archaeologist. Protective fencing or other markers, at the BLM's discretion, shall be erected and maintained to protect these resources from inadvertent trespass for the duration of construction in the vicinity.</p>	<p>All CRHR-listed or eligible cultural resources and all NRHP-listed or eligible cultural resources that will not be affected by direct impacts, but are within 50 feet of Project locations.</p>	<p>Review qualifications of archaeologists, protective markers and monitoring.</p>	<p>BLM, CPUC</p>	<p>Prior to and during construction</p>
<p>MM-CUL-5 The historic property treatment plan that will be included in the Memorandum of Agreement will, at a minimum, employ avoidance, mitigation, and data recovery as mitigation alternatives. As part of the historic property treatment plan, the Applicant shall prepare a research design and a scope of work for evaluation of cultural resources and for data recovery or additional treatment of NRHP-listed or eligible sites that cannot be avoided. Data recovery of most resources would consist of sample excavation and/or surface artifact collection, and site documentation. A possible exception would be a site where burials, cremations, or sacred features are discovered that cannot be avoided. Additional content of the treatment plan will be dictated by the consultations associated with the Memorandum of Agreement.</p>	<p>All areas associated with Red Bluff substation construction.</p>	<p>Memorandum of Agreement including a Historic Properties Treatment Plan (HPTP) shall be reviewed and approved by BLM and CPUC. Monitor implementation during construction.</p>	<p>BLM, CPUC</p>	<p>Prior to and during construction</p>
<p>MM-CUL-6 Construction work within 100 feet of cultural resources that require data-recovery fieldwork shall not begin until authorized by the BLM.</p>	<p>Construction work within 100 feet of cultural resources that require data-recovery.</p>	<p>BLM to authorize construction work within 100 feet of cultural resources that require data-recovery.</p>	<p>BLM, CPUC</p>	<p>Prior to and during construction</p>

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>MM-CUL-7 Archaeological monitoring shall be conducted by a qualified archaeologist familiar with the types of historical and prehistoric resources that could be encountered within the Project area, and under direct supervision of a principal archaeologist. All cultural resources personnel will be approved by the BLM through the agency's Cultural Resource Use Permitting process. A Native American monitor may be required at culturally sensitive locations specified by the BLM following government-to-government consultation with Indian tribes. The monitoring plan shall indicate the locations where Native American monitors will be required and shall specify the tribal affiliation of the required Native American monitor for each location. The Applicant shall retain and schedule any required Native American monitors.</p>	<p>All areas associated with Red Bluff substation construction.</p>	<p>All cultural resources personnel will be approved by the BLM through the agency's Cultural Resource Use Permitting process. A Native American monitor may be required at culturally sensitive locations specified by the BLM following government-to-government consultation with Indian tribes. The monitoring plan shall indicate the locations where Native American monitors will be required and shall specify the tribal affiliation of the required Native American monitor for each location.</p>	<p>BLM, CPUC</p>	<p>Prior to and during construction</p>
<p>MM-CUL-8 In the event of inadvertent discoveries during construction, operation and maintenance, or decommissioning, procedures outlined in the Memorandum of Agreement and the monitoring and mitigation plan will be adhered to. At a minimum, this will include stop work orders in the vicinity of the find, recordation and evaluation of the find by a qualified archaeologist, notification of the find to BLM, and appropriate treatment measures, possibly including data recovery or avoidance.</p>	<p>All areas associated with Red Bluff substation construction.</p>	<p>In the event of inadvertent discoveries notify the BLM. Verify Memorandum of Agreement implementation.</p>	<p>BLM, CPUC</p>	<p>During construction</p>

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>—[AM-PR-1] A qualified paleontologist will develop a monitoring and mitigation plan prior to construction to mitigate adverse impacts on paleontological resources if excavation is to occur in an area of high paleontological sensitivity or expose new sediments with an unknown potential for paleontological sensitivity. The plan will include measures to be followed in the event that fossil materials are encountered during construction.</p> <ul style="list-style-type: none"> • The monitoring and mitigation plan shall include a schedule and plan for monitoring earth-moving activities, and a provision that monitoring personnel have the authority to temporarily halt or divert excavation activities to allow removal of fossil specimens and recording of information on the location, orientation, etc. associated with the collected specimen. • Worker awareness training will be implemented to ensure that the construction personnel understand the potential for fossil remains being uncovered and/or disturbed by earth-moving activities; where such remains are most likely to be encountered during earth moving; and requirements and procedures to be followed in the event of suspected fossil discoveries. The awareness training may be given along with other sensitivity trainings (e.g., for biological resources) or incorporated into tailgate safety meetings. • The Applicant will have a paleontology monitor on site during construction when there are ground-disturbing activities in areas of identified high paleontological sensitivity. 	All areas associated with Red Bluff substation construction.	The BLM will review paleontologist qualifications, monitoring and mitigation plan if excavation is to occur in an area of high paleontological sensitivity. During construction worker awareness training and monitoring shall be verified.	BLM, CPUC	Prior to and during construction
—[AM-PR-1] Recovered fossils will be curated with a museum or other curation facility approved by the BLM.	All areas associated with Red Bluff substation construction.	The BLM will review and approve curation museum or other facility.	BLM, CPUC	During and post construction
GEOLOGIC RESOURCES				
—[AM-GEO-3] New access roads, where required, will be designed to minimize ground disturbance during grading. Cut and fill slopes will be minimized by a combination of benching and following natural topography where feasible.	New access roads and cut and fill slopes part of Red Bluff Substation construction.	Verification that minimization of ground disturbance and cut and fill slopes shall be reviewed by the BLM and CPUC.	BLM, CPUC	Prior to and during construction
—[AM-GEO-3] Any disturbed areas associated with temporary construction will be returned to preconstruction conditions (to the extent feasible) after the completion of Project construction.	All areas associated with Red Bluff substation construction.	Monitor restoration of disturbed areas during and post construction.	BLM, CPUC	During and post construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
—[AM-GEO-4] Use nonhazardous dust suppressants approved by the BLM to suppress wind-blown dust generated at the site during construction. Dust suppressants are materials that work by either agglomerating the fine particles, adhering/binding the surface particles together, or increasing the density of the surface material.	All areas associated with Red Bluff substation construction.	Dust suppressants shall be submitted to BLM for review and approval. Use of dust suppressants shall be monitored during construction.	BLM, CPUC	Prior to and during construction
—[AM-GEO-4] Implement erosion control measures during construction, such as stabilization of the heavily used construction entrance areas, employing a concrete wash out area, as needed, and tire washes near the entrance to existing roadways.	All areas associated with Red Bluff substation construction.	Monitor implementation of erosion controls during construction.	BLM, CPUC	During construction
NOISE				
MM-NOI-1 SCE shall limit construction activity within a quarter mile of an inhabited dwelling to 6:00 AM to 6:00 PM during June through September and 7:00 AM to 6:00 PM during October through May. Certain electrical connection activities at the solar farm site would occur at night for safety reasons, but would not require any heavy equipment operations.	All areas associated with Red Bluff substation construction within a quarter mile of an inhabited dwelling.	Monitor construction activity in regard to work hours.	BLM, CPUC	During construction
AM-NZ-1 SCE would limit most construction activity to daytime hours consistent with Riverside County noise ordinance limitations (beginning about 7:00 AM during most of the year, and perhaps starting as early as 6:00 AM during the summer months). Certain electrical connection activities at the solar farm site would occur at night for safety reasons, but would not require any heavy equipment operations.	All areas associated with Red Bluff substation construction.	Monitor construction activity in regard to work hours.	BLM, CPUC	During construction
AM-NZ-2 SCE would construct a masonry security wall around the perimeter of the Red Bluff Substation. This wall would also provide localized noise shielding for adjacent areas.	Red Bluff substation construction.	Monitor construction activities.	BLM, CPUC	During construction
HAZARDS AND HAZARDOUS MATERIALS				
—[AM-HAZ-2] Finally, all construction workers will receive appropriate MEC health and safety awareness training to ensure that they know what actions to take if unanticipated MEC or other suspicious articles are encountered during construction.	All areas associated with Red Bluff substation construction.	Verify workers receive appropriate MEC health and safety awareness training.	BLM, CPUC	Prior to and during construction
AM-HAZ-6b As applicable, SCE shall follow fire codes per California Department of Forestry and Fire Protection (2008) requirements for vegetation clearance during construction of the Project to reduce the fire hazard potential.	Vegetation clearance areas	Monitor adherence to fire codes.	BLM, County of Riverside, CPUC	During construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>AM-HAZ-6c Hazardous materials and waste handling shall be managed in accordance with the following SCE plans and programs. SCE shall be responsible for implementing the following plans:</p> <ul style="list-style-type: none"> • <i>Spill Prevention, Countermeasure, and Control Plan (SPCC Plan)</i>. In accordance with Title 40 of the CFR, Part 112, SCE shall prepare a SPCC for the proposed substation, as applicable. The plan shall include requirements specified by 40 CFR Part 112 as follows: <ul style="list-style-type: none"> – A description of the facility; – A self-certification statement; – A record of plan review and amendments; and – A list of oil/petroleum product storage containers associated with the facility, identification of the secondary containment systems; identification of spill control measures to be implemented; inspection types and frequency, testing procedures to ensure the integrity of petroleum containers, recordkeeping procedures, personnel training; security; emergency procedures and notifications in case of a spill; a contact list in case of a spill; and SPCC spill reporting requirements. 	Red Bluff substation	Review SPCC Plan, monitor implementation	BLM, CPUC	Prior to and during construction
<p>—[AM-HAZ-6c] <i>Hazardous Materials Business Plans (HMBPs)</i>. Prior to operation of new or expanded substations, SCE shall prepare or update and submit, in accordance with the Emergency Planning & Community Right to Know Act, an HMBP, as applicable. SCE shall be responsible for implementing the approved plan. The plan shall include:</p> <ul style="list-style-type: none"> • Introduction to the plan that identifies business activities; • Identification of owner/operator with contact information; • A hazardous materials inventory statement listing all hazardous materials used during construction and operation; • A facility map; • An emergency response/contingency plan that includes an evacuation plan, emergency contacts, emergency resources, any special arrangements with emergency responders, emergency procedures, post-incident reporting/recording responsibilities; earthquake vulnerability inspection or isolation; emergency equipment; and an employee training plan that documents training areas and capabilities. 	All areas associated with Red Bluff substation construction.	Review Hazardous Material Business Plans and emergency response/contingency plan. Monitor implementation.	BLM, CPUC	During and post construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>—[AM-HAZ-6c] <i>Storm Water Pollution Prevention Plan (SWPPP)</i>: A Project-specific construction SWPPP shall be prepared and implemented prior to the start of construction of the Red Bluff Substation A. SCE shall be responsible for implementing the approved plan. The plan shall include:</p> <ul style="list-style-type: none"> • Objectives of the SWPPP; • A vicinity map; • Pollutant source identification and BMPs selection; • Water pollution control drawings; • Construction BMP maintenance, inspection and repair; • Post-construction storm water management practices; • Training; • List of subcontractors; • Plans and permits • Site inspections; • Discharge reporting; • Record keeping and reports; • Sampling and analysis plan for sediments; and • Sampling and analysis plan for non-visible pollutants. 	All areas associated with Red Bluff substation construction.	Verify SWPPP, monitor implementation.	BLM, CPUC	Prior to and during construction
<p>—[AM-HAZ-6c] <i>Health and Safety Program</i>: SCE shall prepare and implement a health and safety program to address site-specific health and safety issues. SCE shall be responsible for implementing the approved plan. The plan shall include:</p> <ul style="list-style-type: none"> • An organizational structure; • A description of site characteristics and a job hazard analysis; • A description of site controls that includes a site map; identification of site access restrictions, site security, site work zones, any required exclusion zones, any contaminant reduction zones, relevant support zones, and site communications; • Training requirements and documentation of training; • Medical surveillance; • Personal protective equipment; • Exposure monitoring; • Heat stress; • Spill containment; • Decontamination; • Emergency response; • Relevant standard operating procedures; and • Confined space (if relevant). 	All areas associated with Red Bluff substation construction.	Review Health and Safety Program, monitor during implementation.	BLM, CPUC	Prior to and during construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>—[AM-HAZ-6c] <i>Hazardous Materials and Hazardous Waste Handling</i>: A Project-specific hazardous materials management and hazardous waste management program plan shall be developed prior to initiation of the Project. Material Safety Data Sheets would be made available to all Project workers. SCE shall be responsible for implementing the plan that shall include:</p> <ul style="list-style-type: none"> • Introduction to the plan that identifies business activities; • Identification of owner/operator with contact information; • A hazardous materials inventory statement listing all hazardous materials used during construction and operation; • A facility map; and • An emergency response/contingency plan that includes an evacuation plan, emergency contacts, emergency resources, any special arrangements with emergency responders, emergency procedures, post-incident reporting/recording responsibilities; earthquake vulnerability inspection or isolation; emergency equipment; and an employee training plan that documents training areas and capabilities. • <i>Emergency Release Response Procedures</i>: An Emergency Response Plan as part of the Hazardous Materials Business Plan detailing responses to releases of hazardous materials shall be developed prior to construction activities. All construction personnel, including environmental monitors, shall be aware of state and federal emergency response reporting guidelines. SCE shall be responsible for implementing the plan. 	All areas associated with Red Bluff substation construction.	Review Project-specific hazardous materials management and hazardous waste management program and Emergency Response Plan, monitor during construction.	BLM, CPUC	Prior to and during construction
AM-HAZ-6d Hazardous materials shall be used or stored and disposed of in accordance with federal, state, and local regulations.	All areas associated with Red Bluff substation construction.	Monitor storage and disposal of hazardous materials.	BLM, CPUC	During construction
AM-HAZ-6e The Substation shall be grounded to limit electric shock and surges that could ignite fires.	All areas associated with Red Bluff substation construction.	Verify grounding plans and monitor installations.	BLM, CPUC	During construction
AM-HAZ-6f All construction and demolition waste shall be removed and transported to an appropriately permitted disposal facility.	All areas associated with Red Bluff substation construction.	Monitor disposal manifests.	BLM, CPUC	During construction
AM-HAZ-7 SCE shall submit FAA Form 7460-1 and receive a Determination of No Hazard to Navigable Airspace and comply with any AC/7460-1K (Obstruction Marking and Lighting) requirements from the FAA for construction of the 185-foot microwave tower associated with the Desert Center Communications Center.	185-foot microwave tower associated with the Desert Center Communications Center.	Verify FAA Determination of No Hazard.	BLM, CPUC, FAA	Prior to and during construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>AM-HAZ-8 SCE shall provide the BLM and the County of Riverside with a Project-specific Emergency Response and Inventory Plan prior to initiating construction. SCE shall be responsible for implementing the approved plan. The plan shall include the following.</p> <ul style="list-style-type: none"> • An evacuation plan; • A list of emergency contacts; • A list of emergency resources; • Any special arrangements with emergency responders; • Relevant emergency procedures; • Post-incident reporting/recording responsibilities; • Identification of site components that may be vulnerable to earthquakes with procedures for inspection or isolation after a seismic event; • A list of on-site emergency equipment; and • An employee training plan that documents training areas and capabilities. 	All areas associated with Red Bluff substation construction.	Verify submittal of Emergency Response and Inventory Plan	BLM, CPUC, County of Riverside	Prior to and during construction
<p>AM-HAZ-9 Project facilities shall be designed, constructed, and operated in accordance with applicable fire protection and other environmental, health and safety requirements. In compliance with County of Riverside requirements, a Project-specific fire prevention plan for both construction and operation of the substation shall be completed by SCE prior to initiation of construction. The plan shall include the following:</p> <ul style="list-style-type: none"> • The purpose and applicability of the plan; and • Procedures for fire prevention and response that include identification of site-specific and operational risks, tools and equipment needed, and fire prevention and safety considerations; red-flag warning system, activity levels, fire-related training, and coordination with BLM and County of Riverside. 	Project facilities associated with Red Bluff substation construction.	Verify submittal of Project-specific Fire Prevention Plan. Monitor implementation during construction.	BLM, CPUC, County of Riverside	Prior to and during construction
TRAFFIC AND TRANSPORTATION				
<p>AM-TRANS-2 Sunlight shall document road conditions at the beginning and end of Project construction and decommissioning and contribute fair share cost for pavement maintenance and other needed repairs.</p>	All areas associated with Red Bluff substation construction.	Verify road documentation prior to construction	BLM, CPUC	Prior to, during, and post construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
VISUAL RESOURCES				
<p>MM-VR-1 <i>Revegetation.</i> The Applicant and SCE shall minimize the amount of ground surface to be disturbed and revegetate disturbed soil areas, as described below:</p> <p>Limit Disturbance Areas. The boundaries of all areas to be disturbed (including staging areas, access roads, and sites for temporary placement of spoils) shall be delineated with stakes and flagging before construction, in consultation with the Designated Biologist and VRM specialist. Spoils and topsoil shall be stockpiled in disturbed areas approved by the Designated Biologist. Parking areas, staging and disposal site locations similarly shall be located in areas approved by the Designated Biologist and VRM specialists. All disturbances, Project vehicles and equipment shall be confined to the flagged areas. Vegetation along roadways and boundaries of other disturbed areas shall be scalloped and feathered to reduce the hard line visual impact, especially as seen from Kaiser Road and SR-177.</p>	All areas associated with Red Bluff substation construction.	Verify VRM specialist and disturbance boundary delineation prior to construction. Monitor during construction.	BLM, CPUC	Prior to and during construction
<p>MM-VR-2 <i>Litter and Trash Control.</i> During construction, all trash and food-related waste shall be placed in self-closing containers and removed weekly as needed from the site.</p>	All areas associated with Red Bluff substation construction.	Monitor during construction.	BLM, CPUC	During construction
<p>MM-VR-3 <i>Fugitive Dust Control.</i> To minimize fugitive dust on the Project site, a dust control plan shall be developed that will impose limits on the speed of travel for construction vehicles, and will require that dust palliatives be applied to the site, as described in AM-AIR-1 and AM-AIR6, and in compliance with SCAQMD Rule 403.</p>	All areas associated with Red Bluff substation construction.	Verify dust control plan submittal. Monitor during construction.	BLM, CPUC	Prior to and during construction
<p>• MM-VR-4 <i>Lighting Control.</i> Consistent with safety and security considerations, the Applicant and SCE shall design and install all permanent exterior lighting and all temporary construction lighting such that (a) lamps and reflectors are not visible from beyond the Solar Farm site, including any off-site security buffer areas; (b) lighting shall not cause excessive reflected glare; (c) direct lighting shall not illuminate the nighttime sky, except for required FAA aircraft safety lighting; (d) illumination of the Project and its immediate vicinity shall be minimized; (e) skyglow caused by Project lighting will be avoided, and (f) the plan shall comply with local policies and ordinances. All permanent light sources shall be below 2,500 Kelvin color temperature (warm white) and shall have cutoff angles not to exceed 45 degrees of nadir. The Applicant and SCE shall submit to the BLM and CPUC for review and approval a Lighting Mitigation Plan that includes the following:</p>	All areas associated with Red Bluff substation construction.	Review and approve Lighting Mitigation Plan. Monitor plan and mitigation measure requirements during construction.	BLM, CPUC	Prior to and during construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<ul style="list-style-type: none"> • Specification that LPS or amber LED lighting will be emphasized, and that white lighting (metal halide) would (a) only be used when necessitated by specific work tasks, (b) not be used for dusk-to-dawn lighting, and (c) would be less than 2500 Kelvin color temperature; • Specification and map of all lamp locations, orientations, and intensities, including security, roadway, and task lighting; • Specification of each light fixture and each light shield; • Total estimated outdoor lighting footprint, expressed as lumens or lumens per acre; • Definition of the threshold for substantial contribution to light pollution in Joshua Tree National Park, in coordination with the Night Sky Program Manager (see below); • Specifications on the use of portable truck-mounted lighting; • Lighting design shall consider setbacks of Project features from the site boundary to help satisfy the lighting mitigation requirements; • Light fixtures that are visible from beyond the Project boundary shall have cutoff angles sufficient to prevent lamps and reflectors from being visible beyond the Project boundary; • Specification of motion sensors and other controls to be used, especially for security lighting; • Surface treatment specification that will be employed to minimize glare and skyglow; • Results of a Lumen Analysis (based on final lighting plans), in consultation with the National Park Service (NPS) Night Sky Program Manager (Chad Moore – (970) 491-3700), in order to determine the extent of night lighting exposures in the surrounding NPS lands. If the lighting exposure on NPS lands exceeds the allowable threshold (which is to be determined in consultation with the NPS Night Sky Program Manager and BLM), additional control measures will be instituted to reduce the lighting exposures to levels below the threshold; and • Documentation that coordination with the NPS Night Sky Program Manager and the BLM has occurred. 				

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>MM-VR-5 <i>Surface Treatment of Project Structures/Buildings.</i> The Applicant and SCE shall treat the surfaces of all Project structures and buildings visible to the public such that (a) their colors minimize visual contrast by blending with the characteristic landscape colors; (b) their colors and finishes do not create excessive glare; and (c) their colors and finishes are consistent with local policies and ordinances. The transmission line conductors shall be non-specular and nonreflective, and the insulators shall be nonreflective and nonrefractive. The Applicant and SCE shall comply with BLM requirements regarding appropriate surface treatments for Project elements.</p>	<p>All areas associated with Red Bluff substation construction.</p>	<p>Verify that Project plans follow surface treatment requirements. Monitor during construction.</p>	<p>BLM, CPUC</p>	<p>Prior to and during construction</p>

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>MM-VR-6 <i>Project Design.</i> The Applicant and SCE shall use proper design fundamentals to reduce the visual contrast to the characteristic landscape. These include proper siting and location; reduction of visibility; repetition of form, line, color (see Mitigation MM-VR-5) and texture of the landscape; and reduction of unnecessary disturbance. Design strategies to address these fundamentals shall be based on the following factors:</p> <ul style="list-style-type: none"> • Earthwork: Select locations and alignments that fit into the landforms to minimize the size of cuts and fills. • Vegetation Manipulation: Retain as much of the existing vegetation as possible. Use existing vegetation to screen the development from public viewing. Use scalloped, irregular cleared edges to reduce line contrast. Use irregular clearing shapes to reduce form contrast. Feather and thin the edges of cleared areas and retain a representative mix of plant species and sizes. • Structures: Minimize the number of structures and combine different activities in one structure. Use natural, self-weathering materials and chemical treatments on surfaces to reduce color contrast. Bury all or part of the structure. Use natural appearing forms to complement the characteristic landscape. Screen the structure from view by using natural land forms and vegetation. Reduce the line contrast created by straight edges. Use road aggregate and concrete colors that match the color of the characteristic landscape surface. Co-locate facilities within the same disturbed corridor. • Reclamation and Restoration: Reduce the amount of disturbed area and blend the disturbed areas into the characteristic landscape. Replace soil, brush, rocks, and natural debris over disturbed area. Newly introduced plant species shall be of a form, color, and texture that blends with the landscape. • The Applicant and SCE and BLM shall develop a set of visual resources BMPs to serve as a running list of proven practices to reduce the overall visual contrast of the proposed Project. 	<p>All areas associated with Red Bluff substation construction.</p>	<p>SCE and BLM shall develop a set of visual resources BMPs to serve as a running list of proven practices to reduce the overall visual contrast of the proposed Project. Monitor during construction.</p>	<p>BLM, CPUC</p>	<p>Prior to and during construction</p>

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
WATER RESOURCES				
<p>MM-WAT-1 Groundwater Wells, Installation. The Applicant proposes to construct new groundwater wells in support of the Project that would produce water from the Chuckwalla Valley Groundwater Basin (CVGB). The Project owner shall ensure that the wells are completed in accordance with all applicable state and local water well construction permits and requirements. Prior to initiation of well construction activities, the Project owner shall submit for review and comment a well construction packet to the County of Riverside and fees normally required for the County's well permit, with copies to the Compliance Project Manager (CPM). The Project shall not construct a well or extract and use groundwater until approval has been issued by the county and the CPM to construct and operate the well. Wells permitted and installed as part of pre-construction field investigations that subsequently are planned for use as Project water supply wells require CPM approval prior to their use to supply water to the Project.</p>	All ground water well locations	Verify County of Riverside CMP approval.	BLM, CPUC, County of Riverside CPM	Prior to and during construction
<p>—[MM-WAT-1] Post-Well Installation. The Project owner shall provide documentation as required under County permit conditions to the CPM that the well has been properly completed. In accordance with California's Water Code Section 13754, the driller of the well shall submit to the Department of Water Resources (DWR) a Well Completion Report for each well installed. The Project owner shall ensure the Well Completion reports are submitted. The Project owner shall ensure compliance with all County water well standards and the County requirements for the life of the wells, and shall provide the CPM with two copies each of all monitoring or other reports required for compliance with the County of Riverside water well standards and operation requirements, as well as any changes made to the operation of the well.</p>	All groundwater well locations	Verify that Well Completion Report for each well installed has been submitted to DWR. Verify monitoring or other reports required for compliance with the County of Riverside water well standards and operation requirements have been submitted to CPM.	BLM, CPUC, County of Riverside CPM, DWR	During and post construction
<p>MM-WAT-2 Construction Water Use. The proposed Project's use of groundwater during construction shall not exceed a total of 1,400 AF during the 26-month construction period for the solar farm, 360 AF for the Red Bluff Substation, and 7 AF for the Gen-Tie Line. Before groundwater can be used for construction, the Project owner shall install and maintain metering devices as part of the water supply and distribution system to document Project water use and to monitor and record in gallons per day the total volume of water supplied to the Project from this water source. The metering devices shall be operational for the life of the Project.</p>	All areas associated with Red Bluff substation construction.	Verify installation of metering devices.	BLM, CPUC	Prior to and during construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
—[MM-WAT-4] During construction the desert tortoise exclusion fence will be inspected on a daily basis to ensure the integrity of the fence is maintained. During operation of the Project, fence inspections shall occur at least once per month throughout the life of the Project, and within 24 hours after storms or other events that might affect the integrity and function of desert tortoise exclusion fences. Fence repairs shall be completed within two days (48 hours) of detecting problems that affect the functioning of the desert tortoise exclusion fencing. If fence damage occurs during any time of year when tortoises may be active, the Project owner shall be responsible for monitoring the site of the damaged fence until it is fully repaired, to prevent a desert tortoise from entering the Project area. All incidents of damaged tortoise exclusion fence, including dates of damage and repair; extent of damage, and monitoring summaries (methods and results), shall be reported to the BLM, CPM, CDFG, and USFWS. All wildlife found entrapped or dead in the fence shall be reported to the BLM, CPM, CDFG, and USFWS. Fencing shall be installed with breakaway design features so as not to interfere with or impede storm water or flood flows, or associated sediment loads.	Perimeter of Project sites associated with Red Bluff substation construction.	Monitor fencing installations and inspections.	BLM, CPUC, USFWS, CDFG, CPM	Prior to and during construction
AM-WAT-1 Training construction staff in the management of hazardous materials and use of spill control and cleanup equipment;	All areas associated with Red Bluff substation construction.	Verify training construction staff in the management of hazardous materials and use of spill control and cleanup equipment.	BLM, CPUC	Prior to and during construction
AM-WAT-2 Having a clear chain of command within the organizational structure with responsibility for implementing, monitoring, and correcting BMPs;	All areas associated with Red Bluff substation construction.	Verify chain of command regarding BMPs.	BLM, CPUC	Prior to and during construction
AM-WAT-3 Covering and containing hazardous materials so that they are not in contact with precipitation or runoff	All areas associated with Red Bluff substation construction.	Monitor containment of hazardous materials	BLM, CPUC	Prior to and during construction
AM-WAT-4 Storing hazardous materials in one or more central areas, and instituting rules requiring all hazardous materials to be secured at the end of the day;	All areas associated with Red Bluff substation construction.	Monitor containment of hazardous materials	BLM, CPUC	During construction
AM-WAT-5 Maintaining good inventory records; storing hazardous liquids and dispensing equipment in secondary containment;	All areas associated with Red Bluff substation construction.	Monitor and review inventory materials upon request	BLM, CPUC	During construction
AM-WAT-6 Maintaining adequate quantities of spill containment and response equipment at readily accessible points throughout the site;	All areas associated with Red Bluff substation construction.	Monitor and review inventory materials upon request	BLM, CPUC	During construction

Attachment I Table 3. Mitigation Measures to be Implemented During Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
AM-WAT-7 Identifying the worst case and most likely spill scenarios, and providing spill response equipment adequate to respond to these scenarios;	All areas associated with Red Bluff substation construction.	Review worst case spill scenarios and monitor spill response equipment.	BLM, CPUC	Prior to and during construction
AM-WAT-8 Using chemicals presenting the least environmental hazard wherever possible;	All areas associated with Red Bluff substation construction.	Monitor during construction.	BLM, CPUC	Prior to and during construction
AM-WAT-9 Storing the smallest quantities of hazardous materials possible on the site;	All areas associated with Red Bluff substation construction.	Monitor during construction.	BLM, CPUC	Prior to and during construction
AM-WAT-10 Maintaining site security to reduce vandalism;	All areas associated with Red Bluff substation construction.	Monitor during construction.	BLM, CPUC	During construction
AM-WAT-11 Requiring all contractors to abide by the program BMPs and to identify any hazardous materials and specific BMPs pertaining to their trade or activity.	All areas associated with Red Bluff substation construction.	Verify contract agreements, verify contractor training, monitor during construction.	BLM, CPUC	Prior to and during construction