

Attachment H

Pre-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 H Table 1. Mitigation Measures to be Implemented Prior to 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>	All vegetated areas 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 and during construction
<p>— MM B-2a: Conduct invasive and noxious weed inventory. SCE shall survey the project corridor, including access roads, for populations of invasive and noxious weeds prior to the start of construction. All populations of invasive and noxious weeds within 500 feet of each tower location shall be flagged prior to construction.</p>	All project areas within the Coachella Valley Preserve	Biological monitor to evaluate impacted areas and implement mitigation measures.	BLM, CPUC, CDFG, USFWS	Prior to construction
<p>— (MM B-2a) The Applicant shall submit a Noxious Weed Control Plan to BLM, CPUC, CDFG, and/or USFWS at least 60 days prior to the start of construction. The weed control plan shall specify the location of existing weed populations; measures to control introduction and spread of noxious weeds in the project corridor; worker training, specifications, and inspection procedures for construction materials and equipment used in the project corridor; post-construction monitoring for noxious weeds; and eradication and control methods.</p>	All locations along the proposed route that occur on BLM land will be surveyed.	Review and approval of Noxious Weed Control Plan.	BLM, CPUC, CDFG, USFWS	60 days prior to construction
<p>— (MM B-2a) Known populations of invasive and noxious weeds in the project corridor shall be evaluated by BLM, CPUC, CDFG, and USFWS to identify candidates for eradication. Selected weed populations shall then be eradicated prior to construction.</p>	All locations along the proposed route that occur on BLM land will be surveyed.	BLM, CPUC, CDFG, and USFWS to identify candidates for eradication. Selected weed populations shall then be eradicated prior to construction and verified in the field.	BLM, CPUC, CDFG, USFWS	Prior to construction

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<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
<p>— 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.</p>	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
<p>— (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.</p>	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
<p>— (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.</p>	Entire project area in California	Verify mitigation coordination with USFWS and CDFG.	BLM and CPUC	Prior to and during construction, as appropriate

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<p>— 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.</p>	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
<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-7f: Conduct focused surveys for Stephens' kangaroo rat and San Bernardino kangaroo rat. Prior to the implementation of construction in areas that support suitable habitat for Stephens' kangaroo rat (Potrero ACEC/Conservation Unit along the Devers-Valley No. 2 Alternative) and San Bernardino kangaroo rat. SCE shall conduct focused surveys to determine if sign (burrows, scat, and etc.) of these species is present in all areas within 100 feet that would be permanently or temporarily affected by construction activities. All surveys shall be conducted by a qualified biologist who holds the appropriate Federal FWS permits to conduct trapping surveys for these species. If sign is found to be present, then SCE shall conduct focused trapping surveys according to accepted protocols to determine presence/absence of these species.</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 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

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— MM B-8a: Conduct surveys for listed plant species. SCE shall conduct focused surveys for listed and sensitive plants prior to construction. Surveys shall be conducted during the appropriate floristic period necessary for the identification of sensitive plant species in all suitable habitat located within the Project ROW and within 100' of all surface disturbing activities.	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 construction
— (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-8a) If listed plants cannot be avoided, SCE shall be responsible for the translocation of plants and/or collection of seeds from existing populations that would be impacted and the planting/seeding of these plants in adjacent suitable portions of the ROW that would not be affected by Proposed Project construction or maintenance activities.	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 construction
— MM B-9a: Conduct pre-construction surveys. SCE shall conduct pre-construction surveys for sensitive wildlife in any area subject to project disturbance. Surveys shall be conducted during a time of year when these species are known to be active. The location of sensitive species identified during the pre-construction surveys shall be identified on project maps.	All areas with the potential to be disturbed by construction activities	Biological monitor shall oversee surveys and monitoring and report findings to BLM and CPUC	BLM and CPUC	Prior to 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

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— (MM B-9c) Training materials and a course outline shall be provided to the CPUC and BLM for review and approval at least 30 days prior to the start of construction.	Entire project area	Course outline to be submitted and approved.	BLM and CPUC	Prior to construction
— (MM B-9c) Training materials and updates of training materials shall also be provided to the Forest Service for review and participation in the WEAP.	Entire project area	Submittal to be verified.	BLM and CPUC	Prior to construction
— MM B-9d: Conduct pre-construction reptile surveys. Prior to construction, SCE shall conduct surveys in areas of suitable habitat for Sonoran desert tortoise, common chuckwalla, banded Gila monster, and desert rosy boa within 48 hours prior to the start of construction activities. If 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.	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) 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-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

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<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

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— (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-9h: Conduct pre-construction surveys for roosting bats. SCE shall conduct surveys focused surveys for suitable roosting habitat or nursery sites for sensitive bats at the tower location, access/spur roads, and laydown/staging areas that occur in rocky areas or in areas where caves or old mines are present.	All locations where construction activities would occur near rocky areas, caves or old mines	BLM and CPUC to review survey and avoidance documentation.	CPUC and BLM	Prior to construction
— (MM B-9h) If suitable roosting/nursery sites are found, then focused surveys shall be conducted to determine if the sites support sensitive bat species.	All locations where construction activities would occur near rocky areas, caves or old mines	BLM and CPUC to review survey and avoidance documentation.	See above	Prior to construction
— (MM B-9h) If sensitive bat species occur at these sensitive roosting/nursery sites, then tower-specific adjustments and adjustments of the locations of access/spur roads and laydown/staging areas shall be made to avoid these sites. If towers, access/spur roads, and/or laydown/staging areas cannot avoid these sites, then construction of the towers, roads, and establishment of laydown/staging areas shall be delayed until the breeding cycles for the sensitive bats are completed. SCE shall consult with a bat specialist in order to determine when the breeding cycle for the sensitive bats are completed. SCE shall document the results of the surveys and any avoidance of roosting/nursery sites for sensitive bats.	All locations where construction activities would occur near rocky areas, caves or old mines	BLM and CPUC to review survey and avoidance documentation.	See above	Prior to construction
— MM B-9i: Schedule construction when the Coachella Valley round-tailed squirrel is dormant. SCE shall conduct pre-construction surveys for Coachella Round Tailed Squirrels prior to construction to identify locations of nesting colonies.	All locations where construction activities would occur	BLM and CPUC to verify that construction activities are not scheduled between March 1 and July 31 in areas where Coachella Valley round-tailed squirrel nesting colonies have been identified.	BLM and CPUC	Prior to construction

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— (MM B-9i) Placement of footings, roads, and laydown areas shall avoid nesting colonies of this species. If this species is identified within the ROW, construction activities shall be scheduled only during periods when this species is dormant (between August 1 and February 28).	All locations where construction activities would occur	BLM and CPUC to verify that construction activities are not scheduled between March 1 and July 31 in areas where Coachella Valley round-tailed squirrel nesting colonies have been identified.	BLM and CPUC	Prior to 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-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
— 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

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— (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-1. Vegetation. Avoid direct disturbance of highly sensitive features (as identified in E. Linwood Smith’s (1985) Impact Assessment/Mitigation Planning Chart; see Appendix E) with spanning and careful local adjustment in tower footing placement. (BLM B-5.1 Vegetation) [Note: The reference to Appendix E is unknown. There is no Appendix E as part of the BLM right-of-way grant (provided from PEA Appendix A). However, the Smith report itself is found in FSEIS (1988) as Appendix B, Study of Desert Bighorn Sheep.]	Locations within project disturbance areas that have the potential to support sensitive biological resources.	CPUC to monitor	BLM and CPUC	Prior to construction
— APM B-8. Vegetation. Provide additional detailed surveys and tower-specific adjustments as needed prior to construction for major sensitive feature sites (e.g., concentrations of sensitive plants, individual palm trees, woody dune or wash communities) which cannot be easily avoided by spanning. (See Appendix B of the Devers–Palo Verde No. 2 EIR [1987] and Appendix E of the SEIS [1988].) The methodologies and results of these surveys must be submitted to and approved in writing by the BLM Authorized Officer. (BLM B-5.2 Vegetation)	Locations within project disturbance areas that have the potential to support sensitive vegetation communities.	BLM to review findings and avoidance measures submitted by SCE.	BLM	Prior to 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

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— 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-13. Vegetation. Tower sites will be selected to allow maximum spacing of sensitive features. (BLM B-5.8 Vegetation)	Locations within project disturbance areas that have the potential to support sensitive vegetation communities.	SCE will submit for review and approval a Sensitive Biological Resources Avoidance Plan.	BLM	Prior to construction
— APM B-14. Vegetation. Minimize the area needed for equipment operation and material storage and assembly. (BLM B-5.3 Vegetation)	Locations within project disturbance areas that have the potential to support sensitive vegetation communities.	SCE will submit for review and approval a Sensitive Biological Resources Avoidance Plan.	BLM	Prior to 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
— 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

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— 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
— 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

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— 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-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
— 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

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— 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
— (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-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

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
VISUAL RESOURCES				
— (MM V-1a) SCE shall submit final construction plans demonstrating compliance with this measure to the BLM and CPUC for review and approval at least 60 days prior to the start of construction.	Mitigation Measure V-1a applies to all sites and all routes.	CPUC and BLM to verify plans.	CPUC, BLM on BLM-administered lands	Prior to construction
— (MM V-1b) SCE shall submit a Construction Lighting Mitigation Plan to the BLM and CPUC for review and approval at least 90 days prior to the start of construction or the ordering of any exterior lighting fixtures or components, whichever comes first. SCE shall not order any exterior lighting fixtures or components until the Construction Lighting Mitigation Plan is approved by the BLM and CPUC. The Plan shall include but is not necessarily limited to the following: <ul style="list-style-type: none"> • Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources is shielded to prevent light trespass outside the project boundary • All lighting shall be of minimum necessary brightness consistent with worker safety • High illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied. 	Mitigation Measure V-1b applies to all static sites.	CPUC and BLM to review and approve the Construction Lighting Mitigation Plan prior to construction.	CPUC, BLM on BLM-administered lands	Prior to construction
— 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.	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
— (MM V-2a) SCE shall submit final construction plans demonstrating compliance with this measure to the BLM and CPUC for review and approval at least 60 days prior to the start of construction.	All grading sites for access roads, spur roads, and ancillary facilities	CPUC and BLM to review construction plans prior to start of construction.	CPUC, BLM on BLM-administered lands	Prior to construction
— 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.	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

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— (MM V-2b) SCE shall submit final construction and restoration plans demonstrating compliance with this measure to the BLM and CPUC for review and approval at least 60 days prior to the start of construction.	All grading sites for access roads, spur roads, and ancillary facilities	CPUC and BLM to review construction and restoration plans prior to start of construction.	CPUC, BLM on BLM-administered lands	Prior to construction
— 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.	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
— 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: <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.

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM V-6a. Reduce Visual Contrast Associated with Ancillary Facilities. SCE shall submit to BLM and CPUC a Surface Treatment Plan describing the application of colors and textures to all facility structures, buildings, walls, fences, and components comprising all ancillary facilities including substations/switchyards, series capacitor banks, and optical repeater stations. The Surface Treatment Plan must reduce glare and minimize visual intrusion and contrast by blending the facilities with the landscape. The Treatment Plan shall be submitted to BLM and CPUC for approval at least 90 days prior to (a) ordering the first structures that are to be color treated during manufacture, or (b) construction of any of the ancillary facility component, whichever comes first. If the BLM or CPUC notifies SCE that revisions to the Plan are needed before the Plan can be approved, within 30 days of receiving that notification, SCE shall prepare and submit for review and approval a revised Plan. The Surface Treatment Plan shall include:</p> <ul style="list-style-type: none"> • specification, and 11"x17" color simulations at life size scale, of the treatment proposed for use on project structures, including structures treated during manufacture • a list of each major project structure, building, tower and/or pole, and fencing specifying the color(s) and finish proposed for each (colors must be identified by name and by vendor brand or a universal designation) • two sets of brochures and/or color chips for each proposed color • a detailed schedule for completion of the treatment • a procedure to ensure proper treatment maintenance for the life of the project. • SCE shall not specify to the vendors the treatment of any buildings or structures treated during manufacture, or perform the final treatment on any buildings or structures treated on site, until SCE receives notification of approval of the Treatment Plan by the BLM and CPUC. Within 30 days following the start of commercial operation, SCE shall notify the BLM and CPUC that all buildings and structures are ready for inspection. 	<p>Applies to all permanent ancillary facilities including substations, switchyards, series capacitor banks, and optical repeater stations.</p>	<p>CPUC and BLM to review Surface Treatment Plan prior to start of construction and verify implementation following construction.</p>	<p>CPUC, BLM on BLM-administered lands</p>	<p>Prior to construction</p>
<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>	<p>Applies to all permanent ancillary facilities including substations, switchyards, series capacitor banks, and optical repeater stations.</p>	<p>Verify implementation following construction.</p>	<p>CPUC, BLM on BLM-administered lands</p>	<p>Prior to and during construction</p>

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— (MM V-6c)</p> <p>SCE shall submit a Lighting Mitigation Plan to the BLM and CPUC for review and approval at least 90 days prior to ordering any permanent exterior lighting fixtures or components. SCE shall not order any exterior lighting fixtures or components until the Lighting Mitigation Plan is approved by the BLM and CPUC. The Plan shall include but is not necessarily limited to the following:</p> <ul style="list-style-type: none"> • lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources is shielded to prevent light trespass outside the project boundary • all lighting shall be of minimum necessary brightness consistent with worker safety • high illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied. 	<p>Applies to all permanent ancillary facilities including substations, switchyards, series capacitor banks, and optical repeater stations.</p>	<p>CPUC and BLM to review Lighting Mitigation Plan prior to start of construction</p>	<p>CPUC, BLM on BLM-administered lands</p>	<p>Prior to construction</p>
<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</p> <p>[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>

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— (MM V-40a) SCE shall provide to the CPUC, BLM, and Forest Service a Project Design Plan demonstrating implementation of this measure at least 90 days prior to the start of construction, and shall not commence construction until the Project Design Plan has been approved by the CPUC, BLM, and Forest Service.</p>	Applies to all tower locations and route segments.	CPUC, BLM, and Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.	CPUC, BLM on BLM-administered lands, USFS on USFS lands.	Prior to construction
<p>— V-40b: Reduce visual contrast of towers and conductors on San Bernardino National Forest land. The following design measures are to be applied to all new structures and conductors on SBNF land based on SCE's consultation with SBNF staff prior to completion of final design. The details of these measures shall be developed:</p> <p>In all areas:</p> <ul style="list-style-type: none"> • Transmission lines should have a permanent coloring of dark gray. • All towers not back-dropped on mid-slope should have permanent coloring of cool mid-gray (battleship gray). <p>In mid-slope areas (as defined by SBNF):</p> <ul style="list-style-type: none"> • All towers and concrete bases on slopes which could serve as backdrops (mid-slope) should be painted olive drab. • Tower pads should be left uneven without leveling. • No construction roads shall be built. • Towers shall be constructed by air support. <p>At ridge crossing and mid-slope (as defined by SBNF):</p> <ul style="list-style-type: none"> • Towers should be constructed of lower profile to closer "hug" the top of the ridge to avoid tower silhouetting. • Graphic studies from dominant view sites should be used to best place towers where they would be best back-dropped from expected viewing points. • All towers and concrete bases on slopes which could serve as backdrops (mid-slope) should be painted olive drab. • Tower pads should be left uneven without leveling. • No construction roads shall be built. • Towers should be constructed by air support. 	All new structures and conductors on SBNF land	CPUC, BLM, and Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.	CPUC, BLM on BLM-administered lands, Forest Service on National Forest Lands	Prior to construction

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<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) 	Towers located south of I-10 and outside of the SBNF	CPUC, BLM, and Forest Service to review Project Design Plan prior to start of construction and verify implementation following construction.	CPUC, BLM on BLM-administered lands, Forest Service on National Forest Lands	Prior to and during construction
<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>	500 kV transmission lines	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-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-3. At all highway and recreation routes-of-travel crossings, towers will be placed at the maximum feasible distance, and when feasible, [except in locations where matching existing tower spacing is deemed appropriate]. (BLM B-6.3) [From "and where feasible," the BLM text reads "...at right angles, from the crossing." SCE has replaced this phrase in the bracketed text.].</p>	At all highway and recreation routes-of-travel crossings	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.

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— 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).	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.
— 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).	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.
— 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).	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.
— 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).	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-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.

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
LAND USE				
— MM L-1a: Prepare Construction Notification Plan. Forty-five days prior to construction, SCE shall prepare and submit a Construction Notification Plan to the CPUC and the BLM for approval. The Plan shall identify the procedures to ensure that SCE will inform property and business owners of the location and duration of construction, identify approvals that are needed prior to posting or publication of construction notices, and include template copies of public notices and advertisements (i.e., formatted text). To ensure effective notification of construction activities, the plan shall address at a minimum the following components:	Construction activity in all segments.	CPUC/BLM monitor verifies that SCE submits Construction Notification Plan, which identifies complete notification and public inquiry process.	CPUC; BLM Palm Springs field office	45 days prior to construction
— (MM L-1a) Public notice mailer. Fifteen days prior to construction, a public notice mailer shall be prepared. The notice shall identify construction activities that would restrict, block, or require a detour to access existing residential properties, retail and commercial businesses, wilderness and Recreation facilities, and public facilities (e.g., schools and memorial parks). The notice shall state the type of construction activities that will be conducted, and the location and duration of construction. SCE shall mail the notice to all residents or property owners within 300 feet of the right-of-way and to specific public agencies with facilities that could be impacted by construction. If construction delays of more than seven days occur, an additional notice shall be prepared and distributed.	Construction activity in all segments.	CPUC/BLM monitor verifies that SCE submits public notice mailer.	CPUC; BLM Palm Springs field office	15 days prior to construction
— (MM L-1a) Newspaper advertisements. Fifteen days prior to construction, newspaper advertisements shall be placed in local newspapers and bulletins. The advertisement shall state when and where construction will occur and provide information on the public liaison person and hotline identified below. If construction is delayed as noted above, an additional round of newspaper ads shall be placed to discuss the status and schedule of construction.	Construction activity in all segments.	CPUC/BLM monitor verifies that SCE submits newspaper ads in local papers.	CPUC; BLM Palm Springs field office	15 days prior to construction

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— (MM L-1a) Public venue notices. Thirty days prior to construction, notice of construction shall be posted at public venues such as trail crossings, rest stops, desert centers, resource management offices (e.g., Bureau of Land Management field office, San Bernardino National Forest Ranger Station), and other public venues to inform residents and visitors to the purpose and schedule of construction activities. For public trail closures, SCE shall post information on the trail detour at applicable resource management offices and post the notice within two miles north and south of the detour. For Recreation facilities, the notice shall be posted along the access routes to known Recreational destinations that would be restricted, blocked, or detoured and shall provide information on alternative Recreation areas that may be used during the closure of these facilities.</p>	Construction activity in all segments.	CPUC/BLM monitor verifies that SCE posts notices	CPUC; BLM Palm Springs field office	30 days prior to construction
<p>— (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.</p>	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
<p>— MM L-1c: Provide proof of resolution of land acquisition issues for crossing of Agua Caliente Band of Cahuilla Indians tribal lands. SCE shall negotiate in good faith to reach a mutually acceptable agreement with the allottee. If an agreement is reached, SCE shall consult and coordinate with the Planning Department of the Agua Caliente to provide the information and/or fees requested by the Planning Department regarding land use matters. If SCE and the allottee reach an agreement then SCE shall notify the Planning Department of the Agua Caliente, and if SCE and the Planning Department agree on the legal requirements, including appropriate waivers, SCE shall notify the BLM and the CPUC of the agreement; however if SCE and the Planning department are unable to reach an agreement, SCE shall notify the CPUC of the inability to reach agreement and the CPUC may hold a hearing within thirty days of notification. SCE reserves the right to institute eminent domain proceedings. SCE believes that a conditional use permit is not required.</p>	Construction activity within the Cactus City Rest Area to Devers segment.	CPUC/BLM monitor verifies that SCE coordinates with Tribe. SCE submits documentation of its coordination with the Tribe and the resolution of land acquisition issues to CPUC and BLM.	CPUC; BLM Palm Springs office	30 days prior to construction

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM L-1e: Coordinate construction schedule with public and community facilities. SCE shall coordinate with the public and community facilities and services listed below regarding the construction schedule and duration in order to minimize impacts to these land uses. The purpose of this measure is to work with sensitive land uses that would be impacted by construction and to identify construction times/periods that would have the least impact to peak use of these public and community facilities. This coordination could result in limiting or avoiding construction during school sessions, identifying hauling routes that do not conflict with school commute routes, or working with the memorial parks to address funeral procession routes and noise sensitivities. Thirty days prior to construction, SCE shall document its coordination efforts including contact persons, information provided, and comments received, and submit this documentation to the CPUC and the BLM.</p> <p>Schools near the project route:</p> <ul style="list-style-type: none"> • Banning High School, Valley View Elementary School, Romoland Elementary School 	Construction activities for the Devers-Valley No. 2 line	CPUC/BLM monitor verifies that coordination with the public facilities and services listed in Mitigation Measure L-1e is conducted, and that documentation is submitted to the CPUC and the BLM.	CPUC; BLM Palm Springs field office	30 days prior to 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

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
WILDERNESS AND RECREATION				
<p>— MM WR-1a: Coordinate construction schedule and activities with the authorized officer for the recreation area. No less than 40 days prior to construction, SCE shall coordinate construction activities and the project construction schedule with the authorized officer of the recreation areas listed below.</p> <ul style="list-style-type: none"> • San Jacinto Wilderness Area • Santa Rosa and San Jacinto Mountains National Monument • San Bernardino National Forest • Pacific Crest National Scenic Trail • Chuckwalla Valley Dune Thicket Area of Critical Environmental Concern • Alligator Rock Area of Critical Environmental Concern • Coachella Valley Preserve and Coachella Valley Fringe-Toed Lizard Area of Critical Environmental Concern • Potrero Area of Critical Environmental Concern • Indio Hills Palms State Park • BLM off-highway vehicle trails in Shavers Valley 	At construction sites that occur within, and along primary access roads that serve, the following recreation areas: San Jacinto Wilderness Area, Santa Rosa and San Jacinto Mountains National Monument, San Bernardino National Forest, Pacific Crest National Scenic Trail, Chuckwalla Valley Dune Thicket ACEC, Alligator Rock ACEC, Coachella Valley Preserve and Coachella Valley Fringe-Toed Lizard ACEC, Potrero ACEC, Indio Hills Palms State Park, and BLM off-highway vehicle trails in Shavers Valley.	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	Minimum 40 days prior to construction
— (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 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.

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM WR-1b: Provide a temporary detour for Pacific Crest National Scenic Trail users. No less than 40 days prior to construction, SCE shall coordinate with USDA Forest Service to establish a temporary detour of the trail to avoid hazardous construction areas.</p>	<p>Along the Pacific Crest National Scenic Trail for two miles north and south of MP 7.6 for the Devers-Valley No. 2 Alternative route. Notices shall also be posted in San Bernardino National Forest ranger stations and the Bureau of Land Management Palm Springs Field Office.</p>	<p>CPUC/BLM monitor verifies that SCE establishes detour route for users of the Pacific Crest National Scenic Trail.</p>	<p>CPUC; BLM Palm Springs field office; USDA Forest Service.</p>	<p>Minimum 40 days prior to construction</p>
<p>— (MM WR-1b) SCE shall prepare a public notice of the temporary trail closure and information on the trail detour consistent with Mitigation Measure L-1a (Prepare Construction Notification). SCE shall document its coordination efforts with the USDA Forest Service and submit this documentation to the CPUC/BLM 30 days prior to construction.</p>	<p>See above</p>	<p>Monitor also ensures that SCE posts notices identifying detour route and its location at San Bernardino National Forest ranger stations, and north and south of the construction site along the trail.</p>	<p>CPUC; BLM Palm Springs field office; USDA Forest Service.</p>	<p>Minimum 30 days prior to construction</p>
<p>— MM WR-3a: Coordinate tower and road locations with the authorized officer for the recreation area. Where the proposed route crosses the recreation areas listed below, SCE shall coordinate with the authorized officer to determine specific tower site and spur road locations in order to minimize impacts to recreational resources. This coordination shall occur no less than 30 days prior to the start of construction. SCE shall document its coordination with the authorized officer and shall submit this documentation to the CPUC and BLM prior to initiating project construction</p> <ul style="list-style-type: none"> • Santa Rosa and San Jacinto Mountains National Monument • San Bernardino National Forest • Pacific Crest National Scenic Trail • San Jacinto Wilderness Area • Chuckwalla Valley Dune Thicket ACEC • Alligator Rock ACEC • Coachella Valley Preserve and Coachella Valley Fringe-Toed Lizard ACEC • Potrero ACEC 	<p>At construction sites that occur within the following recreation areas: Santa Rosa and San Jacinto Mountains National Monument, San Bernardino National Forest, Pacific Crest National Scenic Trail, Chuckwalla Valley Dune Thicket Area of Critical Environmental Concern, Alligator Rock Area of Critical Environmental Concern, Coachella Valley Preserve and Coachella Valley Fringe-Toed Lizard Area of Critical Environmental Concern, Potrero Area of Critical Environmental Concern, San Jacinto Wilderness Area.</p>	<p>CPUC/BLM monitor verifies that SCE provides authorized officer for the recreation area with proposed tower locations across the resource. Monitor also ensures that SCE receives approval of tower locations or recommended relocation of tower site from authorized officer, and submits this approval to the CPUC and BLM.</p>	<p>CPUC; BLM, Palm Springs field office</p>	<p>Minimum 30 days prior to construction</p>

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
AGRICULTURE				
— MM AG-1a: Establish agreement and coordinate construction activities with agricultural landowners. Sixty (60) days prior to the start of project construction, SCE shall secure a signed agreement with property owners of Farmland (Prime Farmland, Farmland of Statewide Importance, Unique Farmland) and Williamson Act lands that will be used for construction and operation of the project, access and spur roads, staging areas, and other project-related activities.	Locations where 10 acres or more of Farmland and/or Williamson Act land are temporarily disturbed.	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.	CPUC, BLM Palm Springs field office	60 days prior to construction
— (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) 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.	Locations where 10 acres or more of Farmland and/or Williamson Act land are temporarily disturbed.	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.	CPUC, BLM Palm Springs field office	Prior to, during, and post construction.

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM AG-4a: Locate transmission towers and pulling/splicing stations to avoid agricultural operations. SCE shall site transmission towers and pulling/splicing stations in locations that minimize impacts to active agricultural operations. Specifically, SCE shall comply with the following measures when siting transmission towers and splicing/pulling stations within areas where active cultivated farmland would be removed through the presence of structures:</p> <ul style="list-style-type: none"> • SCE shall avoid orchards, vineyards, row crops, and furrow-irrigated crops where towers would interfere with irrigation and harvest activities. • SCE shall avoid irrigation canals and ditches. • SCE shall align towers adjacent to field boundaries and parallel to rows (if located in row crops), and shall avoid diagonal orientations and angular alignments within agricultural land. • SCE shall match tower spans with existing DPV1 towers within agricultural land. • SCE shall construct towers with heights and spacing to minimize safety hazards to aerial applicators flying in the Palo Verde Valley (CA); • SCE shall consult with the Palo Verde Irrigation District (PVID) regarding tower placement to minimize disruption to PVID facilities; • SCE shall document and provide proof of compliance with the above listed items 90 days prior to the start of Proposed Project construction. This documentation shall be submitted to the CPUC and the BLM for review and approval prior to the start of construction, and reviewed with affected landowners during coordination presented in Mitigation Measure AG-1a (Establish agreement and coordinate construction activities with agricultural landowners). 	<p>Locations where 10 acres or more of Farmland is permanently removed.</p>	<p>CPUC/BLM monitors review submitted compliance documents</p>	<p>CPUC, BLM Palm Springs field office</p>	<p>90 days prior to construction</p>

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
CULTURAL & PALEONTOLOGICAL RESOURCES				
<p>— MM C-1a: Inventory and evaluate cultural resources in Final APE. Prior to construction and all other surface disturbing activities, the Applicant shall have conducted and submitted for approval by the BLM (and the USFS, on San Bernardino National Forest land and the THPO on Agua Caliente land) an inventory of cultural resources within the project's final Area of Potential Effect. The nature and extent of this inventory shall be determined by the BLM in consultation with the appropriate State Historic Preservation Officer (SHPO) and shall be based upon project engineering specifications (BLM B-9.1). Results of this inventory shall also be filed with appropriate State repositories and local governments. As part of the inventory, the Applicant shall conduct field surveys of sufficient nature and extent to identify cultural resources that would be affected by tower pad construction, reconductoring activities, access road installation, and transmission line construction and operation. At a minimum, field surveys shall be conducted along newly proposed access roads, new construction yards, new tower sites, and any other projected areas of potential ground disturbance outside of the previously surveyed potential impact areas. Site-specific field surveys also shall be undertaken at all projected areas of impact within the previously surveyed corridor that coincide with previously recorded resource locations. The selected right-of-way shall be staked prior to the cultural resource field surveys (based on BLM B-9.2). As part of the inventory report, the Applicant shall evaluate the significance of all affected cultural resources on the basis of surface observations and provide recommendations with regard to their eligibility for the National Register of Historic Places (NRHP) or local registers. Preliminary determinations of NRHP eligibility will be made by the BLM, in consultation with the appropriate local governments, the USFS (on USFS land), and the appropriate SHPO or THPO (based on BLM B-9.3).</p>	All locations within potential ground-disturbing activities.	BLM, CPUC, and USFS, where applicable, to review inventory findings and eligibility evaluation.	BLM and CPUC	Prior to construction.
<p>— MM C-1b: Avoid and protect potentially significant resources. On the basis of preliminary National Register of Historic Places (NRHP) eligibility assessments (Mitigation Measure C-1a) the BLM and CPUC may require the relocation of the line, ancillary facilities, or temporary facilities or work areas, if any, where relocation would 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.</p>	All locations within ground-disturbing activities within potentially NRHP-eligible resources	BLM, CPUC, and USFS, where applicable, to review inventory findings and eligibility evaluation.	BLM and CPUC	Prior to construction.

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— (MM C-1b) Where the BLM and CPUC decide that potentially NRHP-eligible cultural resources cannot be protected from direct impacts by project redesign, the Applicant shall undertake additional studies to evaluate the resources' NRHP-eligibility and to recommend further mitigative treatment. The nature and extent of this evaluation shall be determined by the BLM in consultation with the CPUC and the appropriate State Historic Preservation Officer (SHPO) and shall be based upon final project engineering specifications. Evaluations will be based on surface remains, subsurface testing, archival and ethnographic resources, and in the framework of the historic context and important research questions of the project area. Results of those evaluation studies and recommendations for mitigation of project effects shall be incorporated into a Historic Properties Treatment Plan consistent with Mitigation Measure C-1c (Develop and implement Historic Properties Treatment Plan).</p>	All locations within ground-disturbing activities within potentially NRHP-eligible resources	BLM, CPUC, and USFS, where applicable, to review inventory findings and eligibility evaluation.	BLM and CPUC	Prior to construction.
<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>	All locations within ground-disturbing activities within potentially NRHP-eligible resources	BLM, CPUC, and USFS, where applicable, to review inventory findings and eligibility evaluation. CPUC EM to verify fencing.	BLM and CPUC	Prior to and during construction
<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>	All locations within ground-disturbing activities within potentially NRHP-eligible resources	BLM, CPUC, and USFS, where applicable, to review inventory findings and eligibility evaluation. CPUC EM to verify ESA avoidance instruction.	BLM and CPUC	Prior to and during construction

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM C-1c: Develop and implement Historic Properties Treatment Plan. Upon approval of the inventory report and the National Register of Historic Places (NRHP)-eligibility evaluations by the BLM and CPUC, consistent with Mitigation Measures C-1a (Inventory and evaluate cultural resources in Final APE) and C-1b (Avoid and protect potentially significant resources), the Applicant shall prepare and submit for approval a Historic Properties Treatment Plan (HPTP) for NRHP-eligible cultural resources to mitigate or avoid identified impacts. Treatment of cultural resources shall follow the procedures established by the Advisory Council on Historic Preservation for compliance with Section 106 of the National Historic Preservation Act and other appropriate State and local regulations. Avoidance, recordation, and data recovery will be used as mitigation alternatives. The HPTP shall be submitted to the BLM and CPUC for review and approval.</p> <p>As part of the HPTP, 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-eligible sites that cannot be avoided. Data recovery on 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.</p> <p>The HPTP shall define and map all known NRHP-eligible properties in or within 50 feet of all project APEs and shall identify the cultural values that contribute to their NRHP-eligibility. A cultural resources protection plan shall be included that details how NRHP-eligible properties will be avoided and protected during construction. Measures shall include, at a minimum, designation and marking of Environmentally Sensitive Areas (ESAs), archaeological monitoring, personnel training, and effectiveness reporting. The plan shall detail: what measures will be used; how, when, and where they will be implemented; and how protective measures and enforcement will be coordinated with construction personnel.</p> <p>The HPTP shall also define any additional areas that are considered to be of high-sensitivity for discovery of buried NRHP-eligible cultural resources, including burials, cremations, or sacred features. The HPTP shall detail provisions for monitoring construction in these high-sensitivity areas. It shall also detail procedures for halting construction, making appropriate notifications to agencies, officials, and Native Americans, and assessing NRHP-eligibility in the event that unknown cultural resources are discovered during construction. For all unanticipated cultural resource discoveries, the HPTP shall detail the methods, the consultation procedures, and the timelines for assessing NRHP-eligibility, formulating a mitigation plan, and implementing treatment. Mitigation and treatment plans for unanticipated discoveries shall be approved by the BLM and CPUC, appropriate local October 26, 2014 appropriate Native Americans, and the appropriate State Historic Preservation Officer prior to implementation.</p>	<p>All locations within ground-disturbing activities with potentially NRHP-eligible resources.</p>	<p>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).</p>	<p>BLM and CPUC</p>	<p>Prior to construction.</p>

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— (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.</p>	<p>All locations within ground-disturbing activities with potentially NRHP-eligible resources.</p>	<p>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).</p>	<p>BLM and CPUC.</p>	<p>Prior to and during construction</p>
<p>— (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).</p>	<p>All locations within ground-disturbing activities with potentially NRHP-eligible resources.</p>	<p>BLM and CPUC to review and approve HPTP.</p>	<p>BLM and CPUC</p>	<p>Prior to and during construction</p>
<p>— 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.</p>	<p>Within 100 ft of resources identified in HPTP that require data-recovery mitigation.</p>	<p>BLM and CPUC review and approve field closure report of data-recovery fieldwork.</p>	<p>BLM and CPUC</p>	<p>Prior to, during, and post construction</p>
<p>— (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.</p>	<p>Within 100 ft of resources identified in HPTP that require data-recovery mitigation.</p>	<p>BLM and CPUC review and approve final report of data recovery, curation of artifacts and data, and dissemination of final report.</p>	<p>BLM and CPUC</p>	<p>Prior to, during, and post construction</p>

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— (MM C-1d) Construction work within 100 feet of cultural resources that require data-recovery fieldwork shall not begin until authorized by the BLM or CPUC, as appropriate.	Within 100 ft of resources identified in HPTP that require data-recovery mitigation.	BLM and CPUC to review and authorize where appropriate	BLM and CPUC	Prior to 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
— MM C-1f: Train construction personnel. All construction personnel shall be trained regarding the recognition of possible buried cultural remains and protection of all cultural resources, including prehistoric and historic 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 archaeological materials, including Native American burials. 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 artifacts or other cultural materials 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 violations will be grounds for removal from the project. Unauthorized resource collection or disturbance may constitute grounds for the issuance of a stop work order.	Entire project	BLM and CPUC review verification of required training.	BLM and CPUC	Prior to construction.

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<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	<p>BLM and CPUC review and approve contract specifications.</p> <p>BLM and CPUC receive prompt notification of new resource discoveries and violations.</p>	BLM and CPUC	Prior to and during construction
<p>— MM C-3a: Complete consultation with Native American and other Traditional Groups. The Applicant shall provide assistance to the BLM, as requested by the BLM, to complete required government-to-government consultation with interested Native American tribes and individuals (Executive Memorandum of April 29, 1994 and Section 106 of the National Historic Preservation Act) and other Traditional Groups to assess the impact of the Proposed Project on Traditional Cultural Properties or other resources of Native American concern. As directed by the BLM, the Applicant shall undertake required treatments, studies, or other actions that result from such consultation. Written documentation of the completion of all pre-construction actions shall be submitted by the Applicant and approved by the BLM at least 30 days before commencement of construction activities.</p>	Entire project	<p>Signature of agreement documents for treatment of TCPs.</p> <p>Written documentation and approval by BLM and CPUC of completion of required treatment.</p>	BLM and CPUC	Prior to construction

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— MM C-4a: Inventory paleontological resources in Final APE. Prior to construction and all other surface-disturbing activities, the Applicant shall have conducted and submitted for approval an inventory of potentially significant paleontological resources, based on field inspection of areas of high or undetermined paleontological sensitivity that will be affected by the project as determined by the BLM and CPUC. As part of the inventory report, the Applicant shall evaluate and refine the paleontological sensitivity modeling of sediments that will be affected.</p>	All locations of high or undetermined paleontological sensitivity within potential ground-disturbing activities.	BLM and CPUC to review inventory and sensitivity findings.	BLM and CPUC	Prior to construction
<p>— MM C-4b: Develop Paleontological Monitoring and Treatment Plan. The Applicant shall, upon approval of the paleontological inventory report by the BLM and CPUC, prepare and submit for approval a plan to mitigate identified impacts. The Paleontological Monitoring and Treatment Plan shall identify construction impact areas of high sensitivity for encountering significant resources and the depths at which those resources are likely to be discovered. The Plan shall outline a coordination strategy to ensure that all construction disturbance in high sensitivity sediments will be monitored full-time by qualified professionals. Sediments of undetermined sensitivity will be spot-checked. The Plan shall detail the significance criteria to be used to determine which resources will be avoided or recovered for their data potential. The Plan shall also detail methods of recovery, post-excavation preparation and analysis of specimens, final curation of specimens at a federally recognized, accredited facility, data analysis, and reporting. The Plan shall specify that all paleontological work undertaken by the Applicant on public land shall be carried out by qualified professionals on a currently valid Paleontological Collecting Permit for the appropriate State. Notices to proceed will be issued by the BLM and CPUC following approval of the Paleontological Monitoring and Treatment Plan.</p>	Entire Project.	BLM and CPUC review and approve treatment plan.	BLM and CPUC	Prior to construction

Attachment H Table 1. Mitigation Measures to be Implemented Prior to 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>— APM C-7: When necessary to relocate the proposed line, ancillary facilities, temporary facilities, or work areas as a result of inventory, onsite avoidance decisions, or the Holder's approved request for relocation, the Holder shall inventory the proposed new locations for cultural resources and provide inventory results to the Authorized Officer prior to construction. Any mitigation deemed necessary by the Authorized Officer shall be completed prior to undertaking any surface disturbing activities. (BLM B-9.7)</p>	Entire project	CPUC and BLM to review SCE's cultural resources inventory, as applicable.	BLM and CPUC	Prior to construction
<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

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— APM C-9: Notices to proceed will be issued following completion, and approval by the Authorized Officer, of any fieldwork determined necessary through the inventory, evaluation, and consultation process described above. (BLM B-9.9)	Entire project	Coordination between BLM and SCE	BLM	Prior to construction
— APM C-10: Vehicles and equipment shall be confined and operated only within areas specified by the Authorized Officer. (BLM B-9.10)	Entire project	BLM/CPUC/SCE to monitor compliance	BLM and CPUC	Prior to and during construction
NOISE				
— 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)	Entire project	Provide copies of noise-related variances	BLM and CPUC	Prior to and during construction
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 construction

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— (MM P-1d) Detailed information for responding to accidental spills and for handling any resulting hazardous materials shall be provided in the project's Hazardous Substances Control and Emergency Response Plan.	All locations along the proposed and alternative routes.	Review HSCERP	BLM and CPUC	Prior to construction
— MM P-2a: Identify pesticide/herbicide contamination. Soil samples shall be collected in construction areas where the land has historically or is currently being farmed to identify the possibility of and to delineate the extent of pesticide and/or herbicide contamination.	All proposed and alternative route segments that are within or immediately adjacent to agricultural uses.	CPUC Monitor to review sample results	CPUC, BLM, and appropriate local and State regulatory agencies	Prior to construction
MM PS-1a: Limit the conductor surface electric gradient. As part of the design and construction process for the Proposed Project, the Applicant shall limit the conductor surface electric gradient in accordance with the IEEE Radio Noise Design Guide.	Along the overhead route segment	Review construction design plans to ensure consistency with IEEE Radio Noise Design Guide.	CPUC	Prior to construction.
MM PS-2a: Implement Grounding Measures. As part of the siting and construction process for the Proposed Project, SCE shall identify objects (such as fences, metal buildings, and pipelines) within and near the right-of-way that have the potential for induced voltages and shall implement electrical grounding of metallic objects in accordance with SCE's standards. The identification of objects shall document the threshold electric field strength and metallic object size at which grounding becomes necessary.	Along the entire transmission line route	Review documentation provided; verify that necessary grounding measures are installed.	CPUC	Prior to energizing the transmission line.

AIR QUALITY

— MM AQ-1a: Develop and Implement a Fugitive Dust Emission Control Plan. SCE shall develop and implement a Fugitive Dust Emission Control Plan (FDECP) for construction work. Measures to be incorporated into the plan include, but are not limited to the APMs (A-1 and A-5 through A-7) and the following, which also incorporate and revise the requirements of APMs A-2 through A-4 to make them definitive and enforceable.	Riverside County (MDAQMD and SCAQMD jurisdiction)	Review Fugitive Dust Emission Control Plan.	BLM, USFWS, CPUC, MDAQMD, and SCAQMD. May also involve local city jurisdictions within the Coachella Valley that have received delegation of Rule 403.1 compliance from SCAQMD.	Prior to construction
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Attachment H Table 1. Mitigation Measures to be Implemented Prior to Construction – Devers–Palo Verde No. 2 Transmission Line Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— MM AQ-1i: Obtain NOx emission offsets. SCE shall obtain NOx emission reduction credits or offsets in sufficient quantities to offset construction emissions of NOx that exceed the South Coast Air Basin ozone nonattainment area federal General Conformity Rule applicability threshold as determined in the General Conformity analysis for the project. The emission offset method shall comply with SCAQMD rules and regulations, and offsets shall be obtained by SCE prior to construction.	South Coast Air Basin (SCAQMD jurisdiction)	As required in future General Conformity Final Analysis as Approved by BLM.	BLM	Prior to project approval and 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
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
— H-6a: Design diversion dikes or other site remediations to avoid damage to adjacent property. Where diversion dikes are required to protect towers or other project structures from flooding or erosion, these dikes shall be so designed as to avoid increasing the risk of erosion or flooding onto adjacent areas where life or property could be threatened. Diversion dike designs shall be submitted to the CPUC and BLM for review and approval at least 60 days prior to construction.	Any tower in or adjacent to a watercourse and requiring diversion dikes to protect the tower from the watercourse.	Dike designs shall be submitted to the CPUC/BLM for review and approval. CPUC/BLM to take steps to ensure compliance. Steps may include requesting modifications to the plans, seeking approval from appropriate local, State or federal agencies, or consulting with adjacent landowners	BLM and CPUC	Plans to be approved by BLM and CPUC 60 days prior to 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

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— 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
— 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 H Table 1. Mitigation Measures to be Implemented Prior to 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>	<p>All Project locations where permanent Project structures will be installed.</p>	<p>Review study results and proposed solutions. 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-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>	<p>Devers-Valley Alternative MPs DV7.5–DV12.0, DV16–DV18, DV23–DV30, and DV32.5–DV35.0.</p>	<p>CPUC and BLM to review study results and proposed solutions. Ensure that study recommendations are implemented during construction.</p>	<p>BLM and CPUC</p>	<p>60 days prior to construction and during construction</p>

Attachment H Table 1. Mitigation Measures to be Implemented Prior to 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>
<p>— APM G-1 The line will be located to minimize the disruption of any active mining operations. (BLM B-2.1)</p>	<p>500 kV transmission line</p>	<p>SCE shall submit final design plans</p>	<p>BLM and CPUC</p>	<p>Prior to construction</p>

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— APM G-2: Individual transmission towers will not be sited on nor straddle the mapped traces of any known fault that has been designated active or potentially active.	500 kV transmission line	SCE shall submit final design plans for CPUC and BLM review, indicating locations of towers near active fault traces and plans or documents regarding tower location modifications based on fault locations.	BLM and CPUC	Prior to construction
— (APM G-2) In areas where known faults are present, the Holder will visually check the tower site area before clearing, and will check the tower footing holes for any trace of a previously unmapped fault. If manifestations of a fault are found, construction will immediately stop at that site and the Holder will consult with the Holder's Geologist and the BLM Authorized Officer. The Holder's Geologist and the BLM Authorized Officer will determine if it is a fault trace and if so, will ascertain if it is active, potentially active, or inactive. (BLM B-2.2)	500 kV transmission line	SCE shall submit final design plans for CPUC and BLM review, indicating locations of towers near active fault traces and plans or documents regarding tower location modifications based on fault locations.	BLM and CPUC	Prior to construction
— APM G-3: Towers will be located so that the line will span the surface traces of active and potentially active faults such that a relative lateral surface displacement would shorten the span between towers, and thus avoid potential line breaks. Where this is not feasible, the Holder will incorporate slack spans to bridge the fault(s) such that the projected lateral surface displacement, as forecast by the Holder's Geologist and accepted by the BLM Authorized Officer, will not structurally affect the associated towers. (BLM B-2.3)	500 kV transmission line	SCE shall submit final design plans for CPUC and BLM review, indicating locations of towers near active fault traces and plans or documents regarding tower location modifications based on fault locations.	BLM and CPUC	Prior to construction
— APM G-4: In general, an appropriate tower design which accounts for lateral wind loads and conductor loads exceeds any credible seismic loading (groundshaking). (BLM B-2.4)	500 kV transmission line	SCE shall submit final design plans for CPUC and BLM review	BLM and CPUC	Prior to construction
— APM G-5: Towers will be located to avoid areas of highly sensitive dune sand areas. Where these areas cannot be avoided, towers will be located to minimize disturbance to the deposits at a site approved by the BLM Authorized Officer. (BLM B-2.5. Note: Text here omits references to specific figures and maps in the original [1987-88] DEIR and DEIS.)	500 kV transmission line	SCE shall submit final design plans indicating towers near or within sensitive dune sand areas and any plans or documents regarding tower location modifications based on the sensitive dune sand locations.	BLM and CPUC	Prior to construction

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— APM G-6: Wherever feasible to minimize the potential for slope instability, towers will be located to avoid gullies or active drainages, and over-steepened slopes. (BLM B-2.6)	500 kV transmission line	SCE shall submit final design plans indicating towers near or within areas of unstable slopes and any plans or documents regarding tower location modifications based on slope instability locations.	BLM and CPUC	Prior to construction
— APM G-7: SCE will provide a list of sites where helicopter construction is recommended.	Entire project	SCE shall submit a list of helicopter sites to the CPUC and BLM for review and approval	BLM and CPUC	Prior to construction
— (APM G-7) The Authorized Officer may require, on a site-specific basis, helicopter-assisted construction in sensitive areas. Sensitive areas are those that exhibit both (1) high erosion potential and/or slope instability; and (2) a lack of existing stub roads within a reasonable distance of the tower site, or existing access that is not suitable for upgrading to accommodate conventional tower construction or line stringing equipment, and where it is determined that, after field review, the issues of erosion and/or slope instability cannot be successfully mitigated through implementation of accepted engineering practices. (BLM B-2.7)	500 kV transmission line	SCE shall submit a list of helicopter sites to the BLM for review and approval, updated as necessary for newly selected sites	BLM and CPUC	Prior to construction
— 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: a. Individual towers will be sited so as not to straddle active fault traces. 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. c. Standard foundation and structural design measures will be utilized to minimize the impact from severe seismic shaking. (BLM B-2.8)	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
— APM G-9: Appropriate design of tower foundations will be used to reduce the potential for settlement and compaction. (BLM B-2.9)	Entire project	SCE shall submit final design plans for review and approval by CPUC and BLM	BLM and CPUC	Prior to construction

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— APM G-10: New access roads and soil disturbance will be avoided or minimized in all areas designated as having high erosion hazards or potential slope instability. If the Authorized Officer, after consultation and review of alternatives (including helicopter or helicopter assisted construction), deems the proposed new access road feasible, design plans must be submitted for approval, in writing, prior to construction. (BLM B-3.1. Note: Text here omits references to specific figures and maps in the original [1987-88] DEIR and DEIS.)	Entire project	SCE shall submit final design plans for review and approval by CPUC and BLM	BLM and CPUC	Prior to construction
— 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)	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
— 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)	Entire project	SCE to monitor compliance	BLM and CPUC	Prior to and during construction
— APM G-16: The line would be located to minimize the disruption of any active mining operations. (SCE)	Devers-Valley No. 2 Alternative	CPUC and BLM to monitor compliance	BLM and CPUC	Prior to construction
— APM G-17: Appropriate tower design would be used to mitigate the potential for impacts from very strong seismic groundshaking. In general, an appropriate tower design which accounts for lateral wind loads and conductor loads during line stringing exceeds any credible seismic loading (groundshaking). (SCE)	Proposed Route between approximately MP E195 and the Devers Substation, at towers near the Dillon Substation along the DSW Alternative, and along the Devers-Valley No. 2 Alternative	SCE shall submit final design plans	BLM and CPUC	Prior to construction
— 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

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— APM G-19: New access roads, where required, would be designed to minimize ground disturbance from grading. They would 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.	Devers-Valley No. 2 Alternative	SCE shall submit final design plans and CPUC/BLM will review	BLM and CPUC	Prior to construction

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
BIOLOGICAL RESOURCES				
<p>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.</p>	<p>All vegetated areas disturbed by construction activities, including temporary disturbances, at the Colorado River Substation and associated facilities</p>	<p>BLM and CPUC/CDFG to review findings and restoration success submitted by the approved Habitat Restoration Specialist with respect to the performance standards</p>	<p>BLM and CPUC</p>	<p>Prior to and during construction</p>
<p>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.</p>	<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>Prior to and during construction</p>

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>B-8b: Minimize off-site impacts to Harwood’s eriastrum, Harwood’s milk-vetch, and flat-seeded spurge habitat. SCE and their contractors or affiliates shall avoid adverse impacts to Harwood’s eriastrum, Harwood’s milk-vetch, and flat-seeded spurge habitat (i.e., sandfields and dunes) adjacent to the project site that may result from project construction or operation, such as equipment staging, spoils transport or storage, weed control, soil tackifiers or stabilization agents, collection and disposal of accumulating aeolian sand, or erosion. SCE shall prepare and implement a focused Special-Status Plant Impact Avoidance and Minimization Plan to describe specific measures to be taken during substation construction and operation to minimize impacts to Harwood’s eriastrum, Harwood’s milk-vetch, and flat-seeded spurge habitat. The Plan shall include consideration of the following components:</p> <ol style="list-style-type: none"> 1. Delineation of the limits of construction disturbance area on-site prior to beginning of construction (the construction disturbance area includes equipment staging areas, spoils transport or storage areas, access routes and all other areas that may be temporarily disturbed by construction); 2. Preconstruction surveys to identify and designate suitable habitat (whether occupied or not) for any of these species throughout the construction disturbance area and a 250-foot buffer area surrounding it 	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 construction
<p>— [MM B-8b]</p> <ol style="list-style-type: none"> 3. Specific measures to be implemented and monitored throughout substation construction and operation, including but not limited to <ol 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; 4. Schedule and format for reporting to CPUC on implementation and progress of the components listed above. <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

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
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> , <u>Sonoran desert tortoise</u> , 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.	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)] Following the clearance surveys, exclusion fencing will be erected or a biological monitor will be onsite during construction activities.	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)] 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
B-9g(rev): Conduct pre-construction surveys and passive relocation for American badger and desert kit fox. 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 <u>project area</u> 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 H Table 2. Mitigation Measures to be Implemented Prior to 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>B-9j: Provide compensatory mitigation and restoration/enhancement of protected land for impacts to sand dune habitat. To mitigate for habitat loss and direct impacts to Mojave fringe-toed lizards, SCE shall acquire compensatory habitat. If sufficient acreage (in accordance with the ratios below) is not available, SCE shall enhance or restore marginal MFTL habitat. Requirements and performance standards of each of these options is described below.</p> <p>Acquisition of Compensatory Habitat</p> <p>Compensation lands shall be purchased in fee or in easement in whole or in part, at the following ratios:</p> <ul style="list-style-type: none"> • 3:1 mitigation for direct impacts to stabilized and partially stabilized sand dunes (approximately 98 acres or final acreage permanently impacted by the project footprint plus any permanent disturbance areas required for moving accumulated sand); and • 0.5:1 mitigation for indirect impacts to stabilized and partially stabilized sand dunes (1,365 acres indirectly impacted by the project, including indirect impacts of moving accumulated sand). <p>If compensation lands are acquired, SCE shall provide funding for the acquisition in fee title or in easement, initial habitat improvements, and long-term maintenance and management of the compensation lands. The compensation lands for direct impacts (at a 3:1 ratio) must be stabilized and partially stabilized sand dune habitat.</p> <p>1. <i>Criteria for Compensation Lands:</i> The compensation lands selected for acquisition shall:</p> <ol style="list-style-type: none"> a. Provide suitable habitat for Mojave fringe-toed lizards, and, aside from the minimum amount of stabilized and partially stabilized sand dunes described above, may also include sand drifts over playas or sandy Sonoran creosote bush scrub; 	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities	Review documentation of acquisition of compensatory habitat	BLM, CPUC and CDFG	Prior to construction

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
b. Be within the Chuckwalla Valley with potential to contribute to Mojave fringe-toed lizard habitat connectivity and build linkages between known populations of Mojave fringe-toed lizards and preserve lands with suitable habitat;				
c. Contain at least one occurrence of Harwood’s milk-vetch, Harwood’s eriastrum, or flat-seeded spurge if these species are identified in pre-construction surveys required per Mitigation Measure B-8b(2).				
d. 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;				
e. Provide quality habitat for Mojave fringe-toed lizard that has the capacity to regenerate naturally when disturbances are removed;				
f. Not have a history of intensive recreational use or other disturbance that might make habitat recovery and restoration infeasible;				
g. Not be characterized by high densities of invasive species, either on or immediately adjacent to the parcels under consideration, that might jeopardize habitat recovery and restoration;				
h. Not contain hazardous wastes that cannot be removed to the extent the site is suitable for habitat;				
i. Not be subject to property constraints (i.e. mineral leases, cultural resources); and				
j. Be on land for which long-term management is feasible.				

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— [MM B-9j]</p> <p>2. <i>Security for Implementation of Mitigation.</i> SCE shall provide financial assurances to the CPUC, BLM, and CDFG to guarantee that an adequate level of funding is available to implement the acquisitions and enhancement of Mojave fringe-toed lizard habitat as described in this condition. Financial assurance can be provided to the CPUC and CDFG in the form of an irrevocable letter of credit, a pledged savings account or another form of security (“Security”). Prior to submitting the Security to the CPUC, the project owner shall obtain the CPUC’s approval in consultation with CDFG and BLM, of the form of the Security. These funds shall be used solely for implementation of the measures associated with the project. The final amount due will be determined by an updated appraisal and a PAR analysis. The preliminary estimate of the required Security is presented in Table D.2-1.</p> <p>SCE may elect to fund the acquisition and initial improvement of compensation lands through the National Fish and Wildlife Foundation (NFWF) by depositing funds for that purpose into NFWF’s Renewable Agency Action Team (REAT) Account. Initial deposits for this purpose must be made in the same amounts as the Security (refer to Table D.2-1) and may be provided in lieu of Security. If this option is used for the acquisition and initial improvement and the actual land cost is higher than the estimated Security amount, SCE shall make an additional deposit into the REAT Account if necessary to cover the actual acquisition costs and administrative costs and fees of the compensation land purchase once land is identified and the actual costs are known. If the actual costs for acquisition and administrative costs and fees are less than that estimated by CDFG, the excess money deposited in the REAT Account shall be returned to SCE. Money deposited for the initial protection and improvement of the compensation lands shall not be returned to SCE.</p> <p>The responsibility for acquisition of compensation lands may be delegated to a third party other than NFWF, such as a nongovernmental organization supportive of desert habitat conservation, by written agreement of CPUC, BLM, and CDFG. Such delegation shall be subject to approval by CPUC, in consultation with BLM and CDFG, prior to land acquisition, initial protection or maintenance and management activities.</p>	Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities	Review Security	BLM, CPUC and CDFG	Prior to construction

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>— [MM B-9j] Restoration/Enhancement of Protected Land</p> <p>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 $((1000-800) \times 2 = 400)$.</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>	<p>Mojave fringe-toed lizard habitat at Colorado River Substation and associated facilities (if sufficient compensatory mitigation land is unavailable for acquisition)</p>	<p>Review restoration/enhancement area compensation fund usage; review and observe habitat restoration/enhancement measures</p>	<p>BLM, CPUC and CDFG</p>	<p>Prior to, during and post construction</p>

Attachment H Table 2. Mitigation Measures to be Implemented Prior to 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>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 H Table 2. Mitigation Measures to be Implemented Prior to Construction – Colorado River Substation Expansion Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
HEALTH AND SAFETY				
<p>P-1a (rev): Develop Hazardous Substance Control and Emergency Response Plan. A Hazardous Substance Control and Emergency Response Plan (Plan) shall be prepared by SCE for the project, and a copy shall be kept on-site and 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
<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>	Colorado River Substation and associated facilities	Review list of waste management providers and facilities; observe construction activities for compliance and review manifest for hazardous waste disposal.	BLM and CPUC	Prior to and during construction

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>P-4a(rev): Prepare Provide Proof of Approved Spill Prevention, Countermeasure, and Control Plans. 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 pPlans 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.</p>	Colorado River Substation and associated facilities	Review and approve plans or documentation; observe construction sites and activities for compliance	BLM, CPUC, and USFWS	Prior to, during and post construction (60 days before operation)
HYDROLOGY AND WATER QUALITY				
<p>H-7a: Groundwater Well Contingency Plan. Prior to issuance of construction permits, the Applicant shall prepare a Groundwater Well Contingency Plan (Plan) to drill and construct a secondary supply well that would supplement groundwater production rates from the primary supply well, should the pumping capacity (daily yields) of the primary well become inadequate to meet the project requirements. The Plan shall identify the following features of the secondary supply well, should it be needed:</p> <ul style="list-style-type: none"> • location within the Colorado River Substation (CRS) site; • proximity to existing wells (private and/or municipal); • estimated total depth, well screen depth, diameter, and estimated yield; and • time required to have the well drilled, constructed, developed and fully operational. <p>The secondary supply well may be installed at any time prior to or during construction, as long as it is consistent with features identified in the Plan, as described above. In addition to the above, the Plan shall also specify what conditions would trigger use of the second supply well, as well as the person responsible for determining when to utilize the second supply well.</p>	Colorado River Substation	Review Groundwater Well Contingency Plan	BLM and CPUC	Prior to construction (30 days)

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
— [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)
H-7b: Groundwater Monitoring and Reporting. Prior to issuance of construction permits and prior to any groundwater pumping activities, a Groundwater Monitoring and Reporting Plan (Plan) shall be prepared by a Certified Hydrogeologist (CHG) and submitted by the Applicant (SCE) to the California Public Utilities Commission (CPUC) for review and approval. The Plan shall provide detailed methodology for monitoring background and site groundwater levels, water quality, and flow.	Colorado River Substation	Review Groundwater Monitoring and Reporting Plan	BLM and CPUC	Prior to construction
— [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. 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.	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

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

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>H-7c: Water Supply Plan for Use of Colorado River Water. If pre-construction groundwater monitoring conducted in compliance with Mitigation Measure H-7b (Groundwater Monitoring and Reporting Plan) indicates that groundwater pumping for the Proposed Project would draw water from below the Colorado River accounting surface of 234 feet above mean sea level (amsl), the Applicant (SCE) shall undertake one or more of the activities identified below to mitigate project impacts to flows in the Colorado River. These activities shall result in replacement of water used by the project over the life of the project. Measures of water conservation should be considered in the following order of priority:</p> <ul style="list-style-type: none"> • Payment for irrigation improvements in Palo Verde Irrigation District (PVID); • Purchase of water allotments within the Colorado River Basin that will be held in reserve; • Use of tertiary treated water; • Implementation of water conservation programs in the floodplain communities of the Chuckwalla Valley Groundwater Basin, the Palo Verde Mesa Groundwater Basin, and/or Colorado River; and/or • Participation in the U.S. Bureau of Land Management's (BLM) Tamarisk Removal Program. <p>If the Applicant has filed an application to the U.S. Bureau of Reclamation (USBR) to obtain an allocation of water from the Colorado River, these allocations can be used to satisfy some or all of the water offsets needed to comply with this condition on an acre-foot per acre-foot basis. Use of any other options for water offsets will require the Applicant to demonstrate to the satisfaction of CPUC that the appropriate amounts of water will be conserved.</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>Ensure implementation of water conservation measures</p>	<p>BLM and CPUC</p>	<p>Prior to construction</p>

Attachment H Table 2. Mitigation Measures to be Implemented Prior to 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 H Table 2. Mitigation Measures to be Implemented Prior to 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 H Table 3. Mitigation Measures to be Implemented Prior to 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 H Table 3. Mitigation Measures to be Implemented Prior to 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

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>—[MM-BIO-2]</p> <p>g. Mitigation Security. No fewer than 30 days prior to ground disturbance, the Project owner shall provide financial assurances to the BLM and CPUC to guarantee that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing Project activities. Financial assurances shall be provided to the BLM, USFWS, CDFG, and CPUC in the form of an irrevocable letter of credit, a pledged savings account or another form of security (“Security”) approved by the BLM, USFWS, CDFG, and CPUC. The actual costs to comply with this condition will vary depending on the actual costs of acquiring compensation habitat, the costs of initially improving the habitat, and the actual costs of long-term management as determined by a PAR report. Prior to submitting the Security to the BLM, USFWS, CDFG, and CPUC, the Project owner shall obtain the BLM, USFWS, CDFG, and CPUC’s approval of the form of the Security. The BLM, USFWS, CDFG, and CPUC may draw on the Security if the BLM, USFWS, CDFG, and CPUC determine the Project owner has failed to comply with the requirements specified in this condition. The BLM, USFWS, CDFG, and CPUC may use money from the Security solely for implementation of the requirements of this condition. The BLM, USFWS, CDFG, and CPUC’s use of the Security to implement measures in this condition may not fully satisfy the Project owner’s obligations under this condition, and the Project owner remains responsible for satisfying the obligations under this condition if the Security is insufficient. The unused Security shall be returned to the Project owner in whole or in part upon successful completion of the associated requirements in this condition.</p> <p>Security for the requirements of this condition shall be calculated as shown in Table 4.3-11. However, regardless of the amount of the security or actual cost of implementation, the project owner shall be responsible for implementing all aspects of this condition, including acquisition and protection of additional habitat acreage if necessary to compensate for all impacts listed in Section 1 of this Mitigation Measure.</p>	All habitat disturbance areas associated with Red Bluff substation construction	No fewer than 30 days prior to ground disturbance, the Project owner shall provide financial assurances to the BLM and CPUC to guarantee that an adequate level of funding is available to implement any of the mitigation measures required by this condition that are not completed prior to the start of ground-disturbing Project activities.	BLM and CPUC	Prior to construction

Table 4.3-11. Biological Resource Compensation/Mitigation Cost Estimate¹ of Estimated Costs²

Task	Cost
1. Land Acquisition (6,707 acres)	\$1000 per acre ³
2. Level 1 Environmental Site Assessment (42 parcels at estimated 160-acre average parcel size)	\$3000 per parcel ⁴
3. Appraisal	\$5000 per parcel
October 26, 2011	
4. Initial site work - clean-up, enhancement, restoration	\$330 per acre ⁵
5. Closing and Escrow Costs – 1 transaction includes landowner to 3 rd party and 3 rd party to agency	\$5000 per transaction

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
MM-BIO-3 Implement transplantation and WEAP training. Cacti flagged for transplantation per AM-BIO-3 shall be transplanted per the Vegetation Salvage Plan described in AM-BIO-5 and special status plant species shall be salvaged per the Vegetation Salvage Plan described in AM-BIO-5.	All areas associated with Red Bluff substation construction	Verify worker environmental training and that cacti flagged for transplantation shall be and special status plant species shall be salvaged.	BLM,CPUC	Prior to construction
—[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 Salvage and Restoration Plan Performance Standards. Salvage will occur prior to construction in any area of the proposed Project as described in the approved Vegetation Salvage Plan (described in AM-BIO-5).	All areas associated with Red Bluff substation construction	Verification of salvage	BLM, CPUC	Prior to construction

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<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, 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. 	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 H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>AM-BIO-2 An Integrated Weed Management Plan (IWMP) (Ironwood Consulting 2010b) has been prepared pursuant to BLM's Vegetation Treatments Using Herbicides on BLM Lands in 17 Western States (BLM 2007) and the National Invasive Species Management Plan (The National Invasive Species Council 2008), and will be implemented by the Applicant to reduce the potential for the introduction of invasive species during construction, operation and maintenance, and decommissioning of the Project. The draft plan is provided in Appendix H of this document and will be reviewed and approved by the BLM.</p>	All areas associated with Red Bluff substation construction	Review and approve Integrated Weed Management Plan	BLM, CPUC	Prior to 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"> – Equipment Cleaning: 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 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. 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. – Site Soil Management: 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. – Weed-free Products: Any use of hay or straw bales on the Project site will 	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 H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>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.</p> <ul style="list-style-type: none"> - <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. • <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 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. 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. 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. • <u>Monitoring</u> Baseline weed conditions will be assessed during the pre-construction phase of the Project, during pre-construction surveys and staking and 				

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>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> <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 <p>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.</p> • Success Criteria <p>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> 				

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>AM-BIO-3 Pre-Construction Surveys for Special Status Plant Species and Cacti. Prior to construction, the Applicant will stake and flag the construction area boundaries, including the construction areas for the Solar Farm site, Gen-Tie Lines, and Red Bluff Substation; construction laydown, parking, and work areas; and the boundaries of all and permanent access roads. A BLM-approved biologist will then survey all areas of proposed ground disturbance for special status plant species and cacti during the appropriate blooming period for those species having the potential to occur in the construction areas. All cacti observed will be flagged for transplantation and special status plant species observed will be flagged for salvage.</p>	<p>Red Bluff Substation; construction laydown, parking, and work areas; and the boundaries of all and permanent access roads.</p>	<p>Verify flagging and review pre-construction surveys.</p>	<p>BLM, CPUC</p>	<p>Prior to construction</p>

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<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; • 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>	All areas associated with Red Bluff substation construction	Review training materials and verify training of all workers on the Project through review of training logs.	BLM, CPUC	Prior to, during, and post construction
<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 	All areas associated with Red Bluff substation construction	Review Vegetation Resources Management Plan that contains a Vegetation Salvage Plan and A Restoration Plan. Verify implementation.	BLM, CPUC	Prior to, during, and post construction

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>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:</p> <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, including removal of invasive species and irrigation (if necessary); – 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. <p>• 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:</p> <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; 				

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<ul style="list-style-type: none"> – 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>				
WILDLIFE				
<p>MM-WIL-1 American Badger and Desert Kit Fox Protection Plan. To avoid direct impacts to American badgers or desert kit foxes, pre-construction surveys shall be conducted for these species concurrent with the desert tortoise surveys. Surveys shall be conducted as described below:</p> <p>Biological Monitors shall perform pre-construction surveys for badger and kit fox dens in the Project area, including areas within 90 feet of all Project facilities, utility corridors, and access roads. Surveys may be concurrent with desert tortoise surveys. If dens are detected, each den shall be classified as inactive, potentially active, or definitely active.</p>	All areas associated with Red Bluff substation construction and areas within 90 feet of all Project facilities	Review pre-construction biological surveys for American badger and desert kit fox.	BLM, CPUC, CDFG	Prior to construction

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>—[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.</p>	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
<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

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<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
<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 H Table 3. Mitigation Measures to be Implemented Prior to 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 H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
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.	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
MM-WIL-8 Plans required under Applicant Measures AM WIL-1, AM WIL-2, and AM WIL-3 shall be submitted for review and approval by USFWS, CDFG, BLM and CPUC.	All areas associated with Red Bluff substation construction	Review Desert Tortoise Translocation Plan, Raven Management Plan and Avian and Bat Protection Plan.	BLM, CPUC, USFWS, CDFG	Prior to construction
AM-WIL-1 A <i>Desert Tortoise Translocation Plan</i> (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 <i>Translocation of Desert Tortoises (Mojave Population) from Project Sites: Plan Development Guidance</i> . Unpublished Report dated August 2010. 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.	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
—[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	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	BLM, CPUC, USFWS, CDFG	Prior to and during construction

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>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 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. <p>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.</p> 		<p>exclusion fencing. All fencing activities will be monitored. Clearance surveys will then be reviewed. Health assessments and long term monitoring shall 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 H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<ul style="list-style-type: none"> – 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 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. 				
<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 				

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>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.</p> <p>– During long-term monitoring, all activities will be recorded on standardized data sheets and/or digital data recorders. The Lead Biologist will send brief 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-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 H Table 3. Mitigation Measures to be Implemented Prior to 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-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 H Table 3. Mitigation Measures to be Implemented Prior to 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 H Table 3. Mitigation Measures to be Implemented Prior to 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> <ul style="list-style-type: none"> • 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. 	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 H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
CULTURAL AND PALEONTOLOGICAL RESOURCES				
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.	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
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.	All areas associated with Red Bluff substation construction.	Verify project re-design if applicable.	BLM, CPUC	Prior to and during construction
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.	All areas associated with Red Bluff substation construction.	Review cultural resources mitigation and monitoring plan. Monitor compliance with Memorandum of Agreement and cultural resources mitigation and monitoring plan during construction.	BLM, CPUC	Prior to and during construction
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.	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.	Review qualifications of archaeologists, protective markers and monitoring.	BLM, CPUC	Prior to and during construction

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
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.	All areas associated with Red Bluff substation construction.	Memorandum of Agreement including a Historic Properties Treatment Plan (HPTP) shall be reviewed and approved by BLM and CPUC. Monitor implementation during construction.	BLM, CPUC	Prior to and during construction
MM-CUL-6 Construction work within 100 feet of cultural resources that require data-recovery fieldwork shall not begin until authorized by the BLM.	Construction work within 100 feet of cultural resources that require data-recovery.	BLM to authorize construction work within 100 feet of cultural resources that require data-recovery.	BLM, CPUC	Prior to and during construction
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.	All areas associated with Red Bluff substation construction.	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.	BLM, CPUC	Prior to and during construction
MM-CUL-9 The BLM will continue to consult with Indian tribes to identify sacred sites, TCPs and traditional use areas that might be affected by the Project. If such places are identified, the BLM will consult further with tribes to resolve access impediments or other identified impacts. This may include redesign of the Project	All areas associated with Red Bluff substation construction.	The BLM will continue to consult with Indian tribes to identify sacred sites, TCPs and traditional use areas that might be affected by the Project.	BLM, CPUC	Prior to construction

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p><i>AM-PR-1</i> The Applicant shall be responsible for the following measures. A qualified paleontologist will conduct a study to further characterize the paleontological sensitivity of the Project Study Area. The study will result in a map of the Project sites that would identify areas of high paleontological sensitivity and areas of lesser sensitivity. The study may also include a paleontology reconnaissance of the sites by professional paleontologists, if deemed necessary by the BLM after review of the initial site characterization. Should the site characterization or the site reconnaissance identify areas of high potential for paleontological resources, additional measures could be implemented, as determined by the BLM.</p>	All areas associated with Red Bluff substation construction.	The BLM will review paleontological site characterization.	BLM, CPUC	Prior to construction
<p>—[<i>AM-PR-1</i>] 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

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
GEOLOGIC RESOURCES				
AM-GEO-3 SCE shall undertake the following mitigation measures as part of the Substation Project: Prior to final design of the Substation, a combined geotechnical engineering and engineering geology study shall be conducted by SCE to identify site-specific geologic conditions and potential geologic hazards in sufficient detail to support sound engineering. Appropriate mitigations for identified geological hazards will be identified in the geotechnical study.	All areas associated with Red Bluff substation construction.	Geotechnical engineering and engineering geology study shall be reviewed and approved by the BLM and CPUC.	BLM, CPUC	Prior to construction
—[AM-GEO-3] For new substation construction, specific requirements for seismic design will be followed based on the Institute of Electrical and Electronic Engineers' 693 "Recommended Practices for Seismic Design of Substations".	All areas associated with Red Bluff substation construction.	Verification that Electronic Engineers' 693 "Recommended Practices for Seismic Design of Substations shall be reviewed by the BLM and CPUC	BLM, CPUC	Prior to construction
—[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-4 SCE shall implement the following mitigation measures to reduce impacts from wind and water erosion to soils: Obtain coverage under the National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges Associated with Construction Activity (General Permit) 2009-0009 Division of Water Quality (DWQ). As part of expected obligations under the General Permit, the Project proponent will prepare and implement a construction Storm Water Pollution Prevention Plan (SWPPP) prior to the commencement of soil disturbance activities associated with Project construction.	All areas associated with Red Bluff substation construction.	Verify SWPPP and NPDES coverage.	BLM, CPUC	Prior to construction
—[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

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
LAND USE				
AM-LAND-1 Property owners within 300 feet of the Project shall be notified of all major Project construction milestones, such as start of Project construction. Said property owners shall be provided with a detailed construction schedule at least 30 days before construction so that they are informed as to the time and location of disturbance. Updates shall be provided as necessary.	All areas associated with Red Bluff substation construction.	Verify noticing materials and distribution.	BLM, CPUC	Prior to construction
AM-LAND-2 The Project shall be designed to minimize disturbance or modification of existing uses such as transmission lines, pipelines, and underground cables. If disturbance or modification of existing uses were necessary, Sunlight shall coordinate with the owners to determine an acceptable solution. Sunlight shall fund any necessary avoidance measures or modifications.	All areas associated with Red Bluff substation construction.	Verify project design and coordination efforts.	BLM, CPUC	Prior to construction
HAZARDS AND HAZARDOUS MATERIALS				
AM-HAZ-2 Based on the preliminary information provided in the Phase I ESA and the Class I cultural inventory of the Project site, the Applicant proposes to take the following steps to better determine the nature and extent of potential MEC issues and then take appropriate corrective action measures. The first step is to better understand the history of military activities within the proposed Project footprint. This would include further research regarding prior MEC removals that may have been issued in the past for certain areas by military or other investigating entities, and may include consultations with Department of Defense personnel and archival research. As a result of the historical occurrence of military training activities throughout the DTC-C-AMA, potentially including the Project area, this MEC consultation and archival research will address the entire Project footprint, including the specific areas of concern identified by the Phase I ESA and cultural resource surveys. With that more comprehensive understanding, the Applicant will propose, as necessary, further appropriate above and below-ground assessments, under the direction of an expert consultant team, to delineate areas for further investigation and then removal. The Applicant, under direction from the BLM, will determine which site-specific in-field investigative techniques and methodologies will be utilized to investigate and resolve potential MEC issues prior to Project construction.	All areas associated with Red Bluff substation construction.	MEC consultation and archival research shall be verified. The Applicant, under direction from the BLM, will determine which site-specific in-field investigative techniques and methodologies will be utilized to investigate and resolve potential MEC issues prior to Project construction.	BLM, CPUC	Prior to construction

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
—[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
<p>AM-HAZ-6a SCE shall implement standard fire prevention and response practices for the construction activities where hazardous materials are in use. SCE shall be responsible for implementing the approved plan. 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; a red-flag warning system, activity levels, fire-related training, and coordination with BLM and County of Riverside. 	All areas associated with Red Bluff substation construction.	Review Fire Prevention and Response Plan.	BLM, County of Riverside, CPUC	Prior to construction
<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

Attachment H Table 3. Mitigation Measures to be Implemented Prior to 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 H Table 3. Mitigation Measures to be Implemented Prior to 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: 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:</i></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: 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.</i> 	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
<p>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.</p>	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 H Table 3. Mitigation Measures to be Implemented Prior to 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
SOCIOECONOMICS AND SPECIAL DESIGNATIONS				
<p>AM-SOCIO-1 The public shall be notified of Project activities and scheduling to inform the public of projected impacts on the surrounding area. This notification shall provide the public with the opportunity to plan their personal and business activities appropriately.</p>	All areas associated with Red Bluff substation construction.	Verify noticing materials prior to construction.	BLM, CPUC	Prior to 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 H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
AM-TRANS-4 Sunlight shall coordinate with the Department of Defense (DOD) R-2508 Complex Sustainability Office, Region IX, based in San Diego, California, as well as with local regional military installations regarding low-level flight operations relative to the Project to assure that no special precautions are needed.	185-foot microwave tower associated with the Desert Center Communications Center.	Verify coordination with DOD and regional military installations.	BLM, CPUC, DOD	Prior to construction
VISUAL RESOURCES				
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: <ul style="list-style-type: none"> 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. 	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
— [MM-VR-1] Minimize Road Impacts. New and existing roads that are planned for construction, widening, or other improvements shall not extend beyond the minimum necessary and flagged as described above. All vehicles passing or turning around shall do so within the planned impact area or in previously disturbed areas. Where new access is required outside of existing roads or the construction zone, the route shall be clearly marked (i.e., flagged or staked) before the onset of construction.	All areas associated with Red Bluff substation construction.	Verify disturbance boundary delineation prior to construction.	BLM, CPUC	Prior to construction

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>—[MM-VR-1] Revegetation of Temporarily Disturbed Areas. The Applicant and SCE shall prepare and implement a revegetation plan to restore all areas subject to temporary disturbance to pre-Project grade and conditions. Temporarily disturbed areas within the Project area include all proposed locations for linear facilities, temporary access roads, construction work temporary lay-down areas, and construction equipment staging areas.</p> <p>No less than 30 days following the publication of the BLM's Record of Decision/ROW Issuance, whichever comes first, the Applicant and SCE shall submit to the BLM a final agency-approved revegetation plan that has been reviewed and approved by the BLM.</p>	All areas associated with Red Bluff substation construction.	Review and approve revegetation plan prior to construction.	BLM, CPUC	Prior to 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> <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; 	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 H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<ul style="list-style-type: none"> • 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. 				
<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>	All areas associated with Red Bluff substation construction.	Verify that Project plans follow surface treatment requirements. Monitor during construction.	BLM, CPUC	Prior to and during construction

Attachment H Table 3. Mitigation Measures to be Implemented Prior to Construction – Red Bluff Substation Project

Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
<p>MM-VR-6 Project Design. 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. <p>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.	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.	BLM, CPUC	Prior to and during construction

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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-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
<p>MM-WAT-4 Mitigation for the Use of Fencing. Desert tortoise exclusion fencing and security fencing shall be installed around the entire perimeter of the Project site as described in AM-WIL-1.</p>	Parameter of Project sites associated with Red Bluff substation construction.	Monitor fencing installations and inspections.	BLM, CPUC, USFWS, CDFG, CPM	Prior to construction

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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-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

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Mitigation Measure	Location	Monitoring/Reporting Action	Responsible Agency	Timing
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