5.4 Biological Resources

	DLOGICAL RESOURCES ould the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
а.	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		V		
b.	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		•		
C.	Have a substantial adverse effect on Federally protected wet- lands as defined by Section 404 of the Clean Water Act (includ- ing, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?		•		
d.	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			Y	
e.	Conflict with any local policies or ordinances protecting biolog- ical resources, such as a tree preservation policy or ordinance?				
f.	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan?				

Significance criteria established by CEQA Guidelines, Appendix G.

5.4.1 Setting

This section describes the biological resources that occur in the Proposed Project area. It includes a description of the existing biotic environment, including common plants and wildlife, sensitive habitats, and special-status species and their locations in relation to the Proposed Project. Section 5.4.2 presents an analysis of potential impacts to biological resources and, where necessary, specifies mitigation measures to reduce potential impacts to less-than-significant levels.

The Proposed Project would be located within the Tehachapi, Brite, and Cummings Valleys in eastern Kern County, California. Elevations in the area range from approximately 3,820 to 4,300 feet above mean sea level. The eastern half of the project study area largely is within limits of the City of Tehachapi while the western half mostly is within rural and agricultural areas of unincorporated Kern County. The majority of the Proposed Project would be located adjacent to roads such as Highline Road, Valley Boulevard, Tehachapi Boulevard, and Pelliser Road. Existing and proposed ROWs within the project study area primarily occur within developed, agricultural, or previously disturbed land.

The proposed Banducci Substation would be located on property with a history of agricultural use. The proposed 66 kV subtransmission lines would exit the substation property and enter a public street right-of-way (ROW). The proposed telecommunication routes would pass through rural and urban areas with a mix of residential, commercial, and agricultural land uses.

Reconnaissance-level field surveys of botanical, wetland, and wildlife resources, and focused surveys for burrowing owl (*Athene cunicularia*) and raptors were conducted by Plegadis, LLC (Plegadis) in December

2010 and March through July 2011. Areas included in these surveys are referred to in this analysis as the "project study area." Areas within five miles of the Proposed Project are referred to as the "Project vicinity." Results of the surveys were presented in the Biological Resources Technical Report for the Banducci Substation and Associated Facilities (Plegadis, 2012).Unless otherwise noted, biological resource information presented in this section is summarized from that report.

For the proposed subtransmission and telecommunications alignments, the project study area consisted of a 100-foot wide corridor (50 feet on either side of the centerline). For the proposed substation, the project study area consisted of the substation site and 50 feet beyond the boundaries of the site. The project study area is shown in Figures 5.4-1a through 5.4-1j (Vegetation in the Project Study Area).

In addition to the Biological Resources Technical Report, biological databases and other sources were reviewed for this analysis. Sources included the following:

- Proponent's Environmental Assessment for the Banducci Substation Project (SCE, 2014);
- California Department of Fish and Wildlife (CDFW; formerly known as the California Department of Fish and Game) RareFind 3.1.1 California Natural Diversity Database (CNDDB) (CDFW, 2014);
- California Special Animals List (CDFG, 2011);
- California Native Plant Society (CNPS) online version of the Inventory of Rare and Endangered Plants of California (CNPS, 2014);
- The Jepson eFlora (2014) database of California plants; and
- Aerial and street-level photographs (Google, 2014).

Vegetation community nomenclature follows the Preliminary Description of the Terrestrial Natural Communities of California (Holland, 1986). Taxonomic conventions follow Jepson eFlora (2014) for plants and a Complete List of Amphibian, Reptile, Bird, and Mammal Species in California (CDFG, 2008) for wildlife.

Vegetation Communities

Seven vegetation communities or land cover types are found in the project study area; see Figures 5.4-1a through 5.4-1j (Vegetation in the Project Study Area). The acreage of each vegetation community is provided in Table 5.4-1; anticipated project impacts to each vegetation community are summarized in Table 5.4-2. One additional vegetation community (riparian) is not found in the study area, but is nearby. No impacts to riparian vegetation are anticipated.

Table 5.4-1. Approximate Acreage of Vegetation Communities and Other Land Cover Types Within the Project Study Area.

Vegetation and Land Cover Type	Area (acres) 302	
Non-Native Grassland		
Developed	280	
Rubber Rabbitbrush	275	
Agricultural and Rural Lands	232	
Blue Oak Woodland	54	
Foothill Pine-Oak Woodland	1	
Big Sagebrush Scrub	1	
TOTAL	1,145	

Construction Type (Impact Type)	Agriculture	Blue Oak Woodland	Developed	Grassland	Rubber Rabbitbrush	Rural	TOTAL
Banducci Substation (Permanent)	6.22	0.00	0.00	0.00	0.00	0.00	6.22
General Disturbance (Temporary)	0.05	0.00	0.63	0.79	0.23	0.23	1.92
Structure Work Area (Temporary)	0.29	0.57	1.29	1.72	0.86	1.00	5.74
Telecom Stringing Site (Temporary)	0.48	0.00	0.83	0.41	0.21	0.34	2.27
Telecom Trench Disturbance (Temporary)	2.95	0.00	0.00	0.00	0.00	0.00	2.95
Yard (Temporary)	3.74	0.00	0.50	0.00	1.00	0.00	5.24
TOTAL (Permanent)	6.22	0.00	0.00	0.00	0.00	0.00	6.22
TOTAL (Temporary)	7.51	0.57	3.24	2.93	2.30	1.58	18.12
GRAND TOTAL ¹	13.72	0.57	3.24	2.93	2.30	1.58	24.34

Table 5.4-2. Summary of Estimated Vegetation Community Impacts in Acres.

¹Slight discrepancies in totals are due to rounding error.

Blue Oak Woodland. Blue oak (*Quercus douglasii*) is native and endemic to California and dominates nearly half of all oak woodlands in the state (Pavlik et al., 1991). Blue Oak Woodland is a climax community of variable canopy cover and understory that ranges from open savannahs (often at lower elevations) to fairly dense woodlands with shrubby understories (Holland, 1986). Although blue oak is the dominant species, it often occurs with foothill pine (*Pinus sabiniana*), coast live oak (*Quercus agrifolia*), valley oak (*Quercus lobata*), and interior live oak (*Quercus wislizenii*). This vegetation type occurs in well-drained soils below 3,000 to 4,000 feet (Holland, 1986).

Blue Oak Woodland is listed in the CNDDB as a rare and threatened vegetation community with restricted range (CDFW, 2014). Blue Oak Woodland occurs along Proposed Telecommunications Route 2 from the Tehachapi city limits west to Cummings Valley along Valley Boulevard and Highline Road, and along Proposed Telecommunications Route 1 within the California Correctional Institution property. Native species of oaks within this habitat may be protected under the County's oak tree conservation ordinance.

Foothill Pine-Oak Woodland. Foothill Pine-Oak Woodlands are dominated by foothill pine and blue oak (Holland, 1986). These woodlands have a diverse mix of hardwoods, conifers, and shrubs, and widely variable overstories. Blue oak is usually the more abundant species, although foothill pine is taller. Other plant species that commonly occur within this habitat include California buckeye (*Aesculus californica*), coast live oak, black oak (*Quercus kelloggii*), toyon (*Heteromeles arbutifolia*), and coffeeberry (*Frangula [Rhamnus] californica*). Foothill Pine-Oak Woodlands occur in well-drained, rocky or exposed sites along ridges or canyons with poor or shallow soils usually below 6,000 feet (Holland, 1986). Native species of oaks within this habitat may be protected under the County's oak tree conservation ordinance.

The CNDDB does not specifically list Foothill Pine-Oak Woodland as a sensitive vegetation community (CDFW, 2014). However, it is likely to intergrade with Blue Oak Woodland in the study area, and for the purposes of this analysis also will be considered as a rare and threatened vegetation community with restricted range. The distribution of this community within the project study area is restricted to the south-central portion of the alignment of Proposed Telecommunication Route 1.

Big Sagebrush Scrub. Great Basin sagebrush (*Artemisia tridentata*) is a gray-leaved, soft woody shrub that grows up to 5 feet tall, but is typically closer to 3 feet in height. It can occur in a variety of conditions, but often occurs in fine-textured soils with a high water table (Holland, 1986). Under certain conditions, Great Basin sagebrush grows as a dominant shrub that comprises Big Sagebrush Scrub. Distributed widely along the eastern Sierra Nevada Mountain Range, this vegetation type also occurs in scattered localities along the margins of the Mojave and Sonoran Deserts at elevations between 4,000 and 9,000 feet. Other plant species that commonly occur within this vegetation type include cheatgrass (*Bromus tectorum*), rubber rabbitbrush (*Ericameria nauseosa* [*Chrysothamnus nauseosus*]), California juniper (*Juniperus californicus*), singleleaf pinyon (*Pinus monophylla*), Sandberg's bluegrass (*Poa secunda*), common sandaster (*Lessingia filaginifolia*), and antelope bush (*Purshia tridentata* var. *glandulosa*). The CNDDB lists Big Sagebrush Scrub as apparently secure within California, but factors exist to cause some concern (i.e., some threat or somewhat restricted habitat). This community has a very narrow distribution in the westernmost portion of the project study area between Proposed Telecommunications Routes 1 and 2.

Rubber Rabbitbrush Scrub. Rabbitbrush scrub is a vegetation type that is generally less than 3 feet tall and is dominated by rubber rabbitbrush. It is typically associated with areas subject to frequent disturbance. Rubber rabbitbrush occurs in large relatively open fields with fine-textured soils with a high water table. Within the study area, the Rubber Rabbitbrush community is common in fallow agricultural fields and pasture lands, such as those found near Monolith and Cummings Valley. The CNDDB lists Rabbitbrush Scrub as secure within California (CDFW, 2014). This community occurs in various places within Proposed Telecommunications Routes 1 and 2.

Non-native Annual Grassland. Non-native grassland, also referred to as California annual grassland, consists of a dense to sparse cover of annual grasses and forbs between 0.5 to 1.5 feet tall. Although it has a strong component of non-native species, this vegetation type can support native species, including special-status species. In years with sufficient rainfall, this habitat often is associated with showy annual wild-flower species. Germination occurs at the start of the late fall rains and growth, flowering, and seed-set occur from winter through spring. Senescence occurs in early summer. This habitat occurs on fine-textured, usually clay, soils that are moist or water-logged in the winter and very dry during the summer. It is usually found below 3,000 feet but reaches 4,000 feet in the Tehachapi Mountains. The dominant species are variable in this community, but it is locally composed of non-native grass and forb species, such as red brome (*Bromus madritensis* ssp. *rubens*), cheatgrass (*Bromus tectorum*), slender wild oats (*Avena barbata*), short-pod mustard (*Hirschfeldia incana*), and yellow starthistle (*Centaurea solstitialis*), and native species such as six weeks fescue (*Vulpia octoflora*), California poppy (*Eschscholtzia californica*), common sandaster, doveweed (*Croton [Eremocarpus*] *setigerus*), and purple needlegrass (*Stipa [Nassella] pulchra*). The CNDDB does not list non-native grassland as a sensitive vegetation community. This community is widely distributed throughout the project study area.

Agricultural and Rural Land. Agricultural and Rural Land is defined here as land used for the production of food and fiber, the feeding and maintenance of livestock, and housing in very low density. The interface between this and other vegetation types may be a transition zone between natural and semi-natural areas and can be characterized as open space. Such areas may support agricultural crops, such as alfalfa (*Medicago sativa*) or barley (*Hordeum vulgare*), non-native grassland, or ornamental trees and plants, but also are often characterized by the presence of ruderal plants, such as telegraph weed (*Heterotheca grandiflora*) or annual sunflower (*Helianthus annuus*). Locally, these areas occasionally support native communities such as oak woodlands or native grasses such as purple needlegrass. Within the project study area, Agricultural and Rural Land is most common near the existing Monolith Substation and in Brite and Cummings Valleys. It is the dominant vegetation found on the proposed Banducci Substation site.

Developed. Developed lands include urban areas that have been largely built up and are generally devoid of native vegetation. Urban areas may include vacant lots with California annual grassland and ruderal vegetation similar to that of Agricultural and Rural Land, but often supporting a greater number of ornamental plants commonly used for landscaping. This land use is prevalent in the City of Tehachapi and immediately surrounding areas in the eastern half of the project study area.

Riparian. Riparian areas include the emergent vegetation found along perennial and ephemeral riverine water courses. Vegetation associated with Riparian areas includes trees such as willows (*Salix* spp.), Fremont cottonwood (*Populus fremontii*), and western sycamore (*Platanus racemosa*). Other emergent species such as Baltic rush (*Juncus balticus*), sedges (*Carex* spp.), and nutgrass (*Cyperus* spp.), common cattail (*Typha latifolia*), and bulrush (*Schoenoplectus* [*Scirpus*] spp.) also may occur.

Riparian vegetation is absent from the project study area, but occurs along watercourses, such as Brite Creek, which cross the Proposed Telecommunication Routes west of Tehachapi. Small patches of willow riparian vegetation near, but downstream of the Proposed Telecommunication Routes, would probably be considered special-status vegetation.

Open Water. Open water refers to all areas that support perennial or near perennial water. Such areas typically lack vegetation due to a lack of light penetration. Floating plants such as duckweed (*Lemna* spp.), water buttercup (*Ranunculus aquatilis*), and mosquito fern (*Azolla filiculoides*) can occur under certain conditions. This mapped type includes inland depressions, ponds, lakes, reservoirs, and stream channels containing standing water, such as the reservoirs along the south- and north-central portions of the Proposed Telecommunications Routes.

Jurisdictional Waters

Proposed Telecommunications Routes 1 and 2 cross several drainage features, including Brite Creek and several unnamed streams. Brite Creek connects to Tehachapi Creek, which is classified as waters of the United States under the Federal Clean Water Act (CWA). The Federal CWA limits federal jurisdiction to "navigable waters," which it defines as "waters of the United States." Waters of the United States are further subdivided into seven categories, two of which are wetlands and adjacent wetlands (33 CFR §§ 328.3[a] and [a][7]). In places, Brite Creek supports facultative hydrophytes (plants that normally grow in water) that may indicate the presence of jurisdictional wetlands subject to the CWA and the specific rules that apply to wetlands. Wetlands are defined under 33 CFR Part 328.3 (b) as "[T]hose areas that are inundated or saturated by surface or groundwater at a frequency or duration sufficient to support, and that under normal circumstances do support, prevalence of vegetation typically adapted for life in saturated soil conditions."

Common Wildlife

During surveys in the project study area, invertebrates observed included several common species of butterflies and ants. No amphibians were observed, but amphibian species likely to occur within the project study area include western toad (*Anaxyrus boreas*) and Pacific tree frog (*Pseudacris regilla*). Three reptile species were observed. The most common of these was side-blotched lizard (*Uta stansburiana*), an abundant species throughout southern California. Western whiptail (*Cnemidophorus tigris*) and gopher snake (*Pituophis melanoleuca*) also were observed, but far less frequently. Other reptiles likely to be found in the project study area include glossy snake (*Arizona elegans*) and California king snake (*Lampropeltis getulus*).

Common birds observed during surveys included resident and wintering species. Among the common resident species in open areas were red-tailed hawk (*Buteo jamaicensis*), American kestrel (*Falco spar-*

verius), common raven (*Corvus corax*), and western meadowlark (*Sturnella neglecta*). Among the common resident scrub and woodland bird species are western scrub jay (*Aphelocoma californica*), oak titmouse (*Baeolophus inornatus*), California towhee (*Melozone crissalis*), California quail (*Callipepla californica*), and northern mockingbird (*Mimos polyglottos*). Wintering bird species included white-crowned sparrow (*Zonotrichia leucophrys*) and yellow-rumped warbler (*Dendroica coronata*). Migratory and nesting species detected included Vaux's swift (*Chaetura vauxi*), Say's phoebe (*Sayornis saya*), and lark sparrow (*Condestes grammacus*).

Signs (burrows, dens, tracks, or scat) of several mammal species were observed. This included natal dens and scat for coyote (*Canis latrans*), scat and tracks for black-tailed jackrabbit (*Lepus californicus*) and Audubon's cottontail (*Sylvilagus auduboni*), and tail drags and burrows for a number of small rodents. Other mammals detected by sign or direct observation included mule deer (*Odocoileus hemionus*), Botta's pocket gopher (*Thomomys bottae*), Beechey ground squirrel (*Spermophilus beecheyi*), striped skunk (*Mephitis mephitis*), American badger (*Taxidea taxus*), and bobcat (*Felis rufus*). Two pronghorn antelope (*Antilocapra americana*), members of a locally reintroduced experimental herd, were observed south of the Monolith Substation near Tehachapi–Willow Springs Road.

Wildlife Movement

The Proposed Project is located within a mix of urban, agricultural, and residential areas. Adjacent open space, agricultural, and low-density development are prevalent on the western half of the project study area. Although no specific wildlife corridors have been mapped in the immediate vicinity of the Proposed Project, natural open space and low-density development in the project study area is contiguous with off-site habitats to the north and south. Open space contiguous with the Proposed Project provides opportunities for movement of mammals with large home ranges, such as mule deer, bobcat, mountain lion and pronghorn antelope. Moreover, the Tehachapi Mountains are recognized as an important wild-life connectivity area that links the Sierra Nevada to the north and the Sierra Madre to the west (Beier et al., 2006; Penrod et al., 2006; Block et al., 1992).

Special-status Plants and Animals

Special-status species are those listed as threatened or endangered under the federal or state endangered species acts, species proposed for listing, California species of special concern, and other species that have been identified by the USFWS, CDFW, or another agency as unique or rare. Table 5.4-3 identifies the special-status species that were reported to occur or potentially occur in the vicinity of the Proposed Project, based on field surveys and searches of the CNDDB, CNPS's Inventory of Rare and Endangered Plants, and other resources.

No special-status plants were detected during the biological surveys of the project study area conducted in 2010 and 2011. Of the 26 special-status plants documented in the region by the CNDDB, 13 have potentially suitable habitat within the project study area, ranges that overlap the project study area, or documented occurrences within five miles. Twelve of these species are CRPR List 1B or 2B; one is a rare plant listed under the California Native Plant Protection Act. Based on more detailed analysis, seven of these species may occur and six are unlikely to occur in the project study area (see Table 5.4-3).

Four special-status wildlife species, Cooper's hawk (*Accipiter cooperii*), ferruginous hawk (*Buteo regalis*), prairie falcon (*Falco mexicanus*), and American badger were detected during biological surveys. Other special-status wildlife species may occur in the Project vicinity or the project study area, including the state-listed threatened Tehachapi slender salamander (*Batrachoseps stebbinsi*).

Critical habitat. The USFWS may designate critical habitat for a species listed as threatened or endangered under the Endangered Species Act (ESA). Critical habitat is a designation that indicates areas that have the physical and biological features believed to be essential to the conservation of the species and may require special management considerations or protection (USFWS, 2013). No designated critical habitat overlaps the project study area. There is designated critical habitat for California condor located approximately 3 miles southwest of the project study area. There is no other designated critical habitat within 10 miles of the project study area; see Figure 5.4-2 (Critical Habitat and Other Special Management Areas).

Conservation planning. The eastern portion of the Proposed Project is located within the area covered by the Desert Renewable Energy Conservation Plan (DRECP); see Figure 5.4-2. The DRECP is a proposed State Natural Community Conservation Plan (NCCP) and federal Habitat Conservation Plan (HCP) intended to protect and conserve desert ecosystems while allowing for appropriate development of renewable energy projects. The DRECP has not yet been approved and no estimated date of approval is available (DRECP, 2012).

Species	Status	Habitat	Occurrence in Project Vicinity
Plants			
Baja navarretia Navarretia peninsularis	1B.2	Lower montane coniferous forest, chaparral; open areas; 5000–8000 feet elevation.	May occur. Study area is at the lower end of elevation range, habitat is marginally suitable along Proposed Telecommunications Routes 1 and 2, west of the City of Tehachapi and east of Cummings Valley.
Big Bear Valley woollypod Astragalus leucolobus	1B.2	Montane coniferous forests, pebble plains, pinyon-juniper woodlands; often associated with dry pine woods, gravelly knolls among sagebrush, or stony lake shores in the pine belt; 5500–8250 feet elevation.	May occur. Study area is mostly below the lower elevation limits of this species' range and habitat is marginally suitable along Proposed Telecommunications Routes 1 and 2, west of the City of Tehachapi and east of Cummings Valley.
Calico monkeyflower <i>Mimulus pictus</i>	1B.2	Broad-leafed upland forest, cismontane woodland; bare ground around gooseberry bushes or granite rock outcrops; 1000-4200 feet elevation.	Unlikely to occur. No suitable habitat in study area, but somewhat suitable habitat between Tehachapi City limits and Cummings Valley.
Coulter's goldfields Lasthenia glabrata ssp. coulteri	1B.1	Coastal salt marshes, playas, vernal pools; alkaline soils in playas, sinks, and grasslands; up to 3900 feet elevation.	Unlikely to occur. Suitable habitat probably lacking. Documented occurrence from this area in 1905 likely extirpated.
Delicate bluecup Githopsis tenella	1B.3	Mesic sites in chaparral, cismontane woodlands; 3600–6200 feet elevation.	May occur. Marginally suitable habitat present along Proposed Telecommunications Routes 1 and 2, west of the City of Tehachapi and east of Cummings Valley.
Golden violet Viola purpurea ssp. aurea	2B.2	Dry, sandy slopes in Great Basin scrub, pinyon-juniper woodland; 2700– 5900 feet elevation.	Unlikely to occur. Suitable habitat probably lacking. Documented occurrences near the study area referenced on Figure 4.4-5 of the Biological Technical Report no longer appear in the CNDDB and may have been in error.

Table 5.4-3. Special-status Species that Occur or Po	otentially Occur in the Project Vicinity
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Species	Status	Habitat	Occurrence in Project Vicinity
Madera leptosiphon Leptosiphon serrulatus	1B.2	Cismontane woodlands, lower montane coniferous forests; dry slopes, often on decomposed granite; 260–5200 feet elevation.	May occur. No suitable habitat in study area, but somewhat suitable habitat between Tehachapi City limits and Cummings Valley.
Pale yellow heterotricha Layia heterotricha	1B.1	Cismontane woodland, pinyon-juniper woodland, valley and foothill grassland; alkaline or clay soils in open areas; 900–5000 feet elevation.	May occur. Marginally suitable habitat present on the easternmost undeveloped portions of Proposed Telecommunications Routes 1 and 2.
Palmer's mariposa lily Calochortus palmeri var. palmeri	1B.2	Meadows and seeps in chaparral and lower montane coniferous forest; requires vernally moist places; 2000– 7400 feet elevation.	Unlikely to occur. No suitable habitat in the study area, but somewhat suitable habitat occurs nearby between Tehachapi City limits and Cummings Valley.
Round-leaved filaree California macrophylla	1B.1	Cismontane woodlands, valley and foothill grasslands; often associated with clay soils; below 4000 feet elevation.	May occur. Suitable habitat occurs along much of the study area.
Spanish needle onion Allium shevockii	1B.3	Pinyon-juniper woodland, upper montane coniferous forest; grows in soil pockets on rock outcrops and talus slopes; 6600–7500 feet elevation.	Unlikely to occur. No suitable habitat in study area, but somewhat suitable habitat occurs nearby between Tehachapi City limits and Cummings Valley.
Tehachapi monardella Monardella linoides ssp. oblonga	1B.3	Montane coniferous forests, pinyon- juniper woodland; dry slopes, disturbed roadsides in decomposed granitic soils; 5600–8100 feet elevation.	May occur. Marginally suitable habitat along Proposed Telecommunications Routes 1 and 2, west of the City of Tehachapi and east of Cummings Valley.
Tracy's eriastrum Eriastrum tracyi	SR, 3.2	Chaparral, cismontane woodlands; gravelly shale or clay; often in open areas; 1000–2500 feet elevation.	Unlikely to occur. The study area is above known elevation range. Marginally suitable habitat present along Proposed Telecommunications Routes 1 and 2, west of the City of Tehachapi and east of Cummings Valley. Documented occurrence is from 1910, exact location unknown.
Amphibians			
Tehachapi slender salamander Batrachoseps stebbinsi	ST	Valley-foothill hardwood-conifer, valley- foothill riparian; wet talus slopes, log- strewn hillsides; steep, north-facing slopes.	May occur. Potential habitat occurs along Proposed Telecommunications Routes 1 and 2, west of the City of Tehachapi and east of Cummings Valley.
Yellow-blotched salamander Ensatina eschscholtzii croceator	SSC	Forest, shady canyons, oak woodlands, old chaparral; requires surface detritus (logs, rocks) for cover and old rodent burrows or other underground retreats.	May occur. Documented occurrences within 5 miles. Suitable habitat probably lacking.
Reptiles			
Coast horned lizard Phrynosoma coronatum blainvillii	SSC	Scrubby, open habitats. Requires native ants as food source.	May Occur. Suitable habitat occurs throughout Proposed Telecommunications Routes 1 and 2, with the best habitat occurring west of the City of Tehachapi and east of Cummings Valley.

Table 5.4-3. Special-status	Species that Occur o	r Potentially Occur i	n the Project Vicinity

Species	Status	Habitat	Occurrence in Project Vicinity
Birds			
Burrowing owl Athene cunicularia	SSC	Grassland, shrub steppe, savannah, agricultural, old fields, clearings.	May occur. Suitable habitat occurs within proposed subtransmission and telecommunications routes and at the substation site.
California condor <i>Gymnogyps californianus</i>	FE, SE	Rocky scrubland, oak savannah, coniferous forest; cliffs, large trees used for nesting.	May occur. The study area is within the species range. Condors may forage in the study area, but are not expected to nest there.
California horned lark Eremophila alpestris actia	WL	Variety of open, sparse, and low- growing habitats; normally on flat ground.	May occur. Suitable foraging and nesting habitat occurs in the flat and undeveloped portions of the Subtransmission and Telecommunications alignments. Suitable foraging habitat occurs on the substation site, although farming activity likely precludes nesting there. Horned larks (<i>E. alpestris</i>) observed during biological surveys.
Cooper's hawk Accipiter cooperii	WL (nesting)	Nests and forages in woodlands and semi-open habitats; preys mainly on small birds.	Occurs. One Cooper's hawk observed on Valley Boulevard north of the Proposed Telecommunications route and just west of the Tehachapi City limits in April 2011.
Ferruginous hawk Buteo regalis	WL (wintering)	Forages over grasslands, agricultural areas, and scrublands; winters in southern California, does not breed in this region.	Occurs. Occurs in grasslands, scrublands, and agricultural areas near Tehachapi and in the Antelope Valley. Foraging habitat occurs throughout most of the undeveloped portions of the study area. One ferruginous hawk observed flying over the Monolith Substation in March 2011, likely a migrating or wintering bird and not a nesting individual.
Golden eagle Aquila chrysaetos	BGEPA, FP, WL	Nests on cliff faces or in large trees or tall artificial structures such as transmission towers; feeds on small mammals, birds, and reptiles.	May occur. Suitable foraging habitat exists throughout the undeveloped portions of the study area. No nesting habitat occurs within the study area.
Merlin Falco columbarius	WL (wintering)	Winter visitor; open country, from coasts to prairies to desert scrub.	May occur. suitable foraging habitat occurs in the undeveloped portions of the study area.
Mountain plover Charadrius montanus	FPT, SSC (wintering)	Winters locally in small flocks on dry, barren ground, smooth dirt fields, and shortgrass prairies.	May occur. No breeding occurrences have been documented in or near the study area. Wintering birds may use the flat and undeveloped portions of the Subtransmission and Telecommunications alignments as foraging habitat.

Species	Status	Habitat	Occurrence in Project Vicinity
Prairie falcon Falco mexicanus	WL (nesting)	Grasslands, desert, scrub, agricultural lands, dry, open areas with cliffs and bluffs for nesting; feeds on birds, mammals, and reptiles.	Occurs. Documented occurrences at several locations near the study area. Observed east of Tehachapi Willow Springs Road, south of the Monolith Substation. No nesting habitat, but suitable foraging habitat throughout the undeveloped portions of the study area.
Swainson's hawk Buteo swainsoni	ST	Grassland, agricultural lands; nests in the nearby San Joaquin and Antelope Valleys. No record of nesting in Tehachapi.	May occur. Suitable foraging habitat occurs throughout the study area, but this species is unlikely to nest here.
Tricolored blackbird Agelaius tricolor	SSC (nesting colony)	Feeds in a variety of habitats; breeds near freshwater, preferably in emergent marsh areas with tall, dense cattails or willow thickets.	May occur. Suitable foraging habitat throughout the undeveloped portions of the study area, but no nesting habitat present.
White-tailed kite Elanus leucurus	FP	Low elevation grassland, agricultural land, wetland, oak-woodland, and oak- savannah, riparian areas adjacent to open areas; nest in the upper portions of trees and large shrubs.	May occur. Suitable foraging habitat occurs throughout the study area. Suitable nesting habitat occurs near undeveloped and rural portions of Proposed Telecommunications Routes 1 and 2.
Yellow warbler Dendroica petechia brewsteri	SSC (nesting)	Low, open-canopy riparian, wetlands, prefers willows, cottonwoods, aspens, sycamores, and alders for nesting and foraging, also nests in suitable montane canyon habitats, including those in desert mountains.	May occur. Foraging habitat present, but no suitable nesting habitat within the study area. Suitable nesting habitat may occur near the study area along Proposed Telecommunications Routes 1 and 2 between the Tehachapi City Limits and Cummings Valley.
Mammals			
American badger Taxidea taxus	SSC	Grassland, shrubland, mountain meadow, and open stages of most habitats with dry soil.	Occurs. This species may forage within undeveloped portions of the study area.
Hoary bat Lasiurus cinereus	SSC	Generally roosts in woodlands with dense foliage.	May occur. Suitable foraging habitat throughout the study area; suitable roosting habitat along the Proposed Telecommunications Routes 1 and 2, west of the City of Tehachapi and east of Cummings Valley.
San Joaquin pocket mouse Perognathus inornatus inornatus	SA	Grasslands, blue oak savanna with friable soils.	May occur. Documented occurrences within 5 miles. Suitable habitat probably lacking in study area.
Tehachapi pocket mouse Perognathus alticolis inexpectatus	SSC	Native and non-native grasslands, Joshua tree woodland, pinyon-juniper woodland, yellow pine woodland, oak savannah.	May occur. Suitable habitat on undeveloped portions of Proposed Telecommunications Routes 1 and 2 west of the Tehachapi City limits and south of the Monolith Substation.
Townsend's big-eared bat Corynorhinus townsendii	SSC	Desert scrub, mixed conifer forest, pinyon-juniper woodland, pine forest.	May occur. Suitable foraging habitat throughout the study area; suitable roosting habitat adjacent to the study area.
Tulare grasshopper mouse Onychomys torridus tularensis	SSC	Hot, arid valleys, desert scrub in southern San Joaquin Valley.	May occur. Documented occurrences within 5 miles. Suitable habitat probably lacking in study area.

Table 5.4-3. Specia	-status Species that Occu	r or Potentially Occur i	in the Project Vicinity

Definitions Regarding Potential Occurrence:

Occurs:	Species or sign of its presence observed on the site				
May occur:	Species or sign not observed on the site, but conditions suitable for occurrence				
Unlikely to occur:	Species or sign not observed on the site, conditions marginal or unsuitable for occurrence				
STATUS CODES:					

- FT Federally Threatened
- FC Federal Candidate
- FPT Federal Proposed for listing as threatened
- BGEPA Bald and Golden Eagle Protection Act
- SE State Endangered
- ST State Threatened
- SC State Candidate
- SSC California Species of Special Concern
- SR California Rare Plant
- FP Fully Protected
- WL Watch List
- SA Special Animal
- CNPS California Native Plant Society Listing
- 1B Plants Rare, Threatened, or Endangered in California and elsewhere
- 2 Plants Rare, Threatened, or Endangered in California, but more common elsewhere
- 3 Plants about which we need more information a review list
- 4 Plants of limited distribution a watch list
- .1 Seriously threatened in California (high degree/immediacy of threat)
- .2 Fairly threatened in California (moderate degree/immediacy of threat)
- .3 Not very threatened in California (low degree/immediacy of threats or no current threats known)

Regulatory Background

Federal Regulatory Background

Federal Endangered Species Act (ESA). The federal ESA protects plants and wildlife that are listed as endangered or threatened by USFWS and the National Marine Fisheries Service. Section 9 of the ESA prohibits the take of listed fish and wildlife, where "take" is defined as "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct" (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any listed plant on federal land and removing, cutting, digging-up, damaging, or destroying any listed plant on non-federal land in knowing violation of state law (16 United States Code [USC] 1538). Section 10 of the ESA allows for issuance of incidental take permits to private parties provided a Habitat Conservation Plan (HCP) is developed. The private party initiates consultation with USFWS or NOAA Fisheries through consultation to discuss target species in the project area. The private party then prepares an HCP assessing the potential for the project to adversely affect federally listed species and presenting the measures that will be undertaken to avoid and minimize such impacts.

Migratory Bird Treaty Act (16 USC Sections 703–711). The Migratory Bird Treaty Act (MBTA) of 1918 protects all migratory birds, including active nests and eggs. Birds protected under the MBTA include all native waterfowl, shorebirds, hawks, eagles, owls, doves, and other common birds such as ravens, crows, sparrows, finches, swallows, and others, including their body parts (for example feathers and plumes), active nests, and eggs. A complete list of protected species is found at 50 CFR 10.13. Enforcement of the provisions of the MBTA is the responsibility of USFWS.

Bald and Golden Eagle Protection Act (16 USC 668-668c). The Bald and Golden Eagle Protection Act (BGEPA), enacted in 1940, and amended several times since then, prohibits anyone without a permit issued by the Secretary of the Interior from "taking" bald eagles (*Haliaeetus leucocephalus*), including their parts, nests, or eggs. In 1962, Congress amended the act to also cover golden eagles (*Aquila chrysaetos*).

Clean Water Act (CWA) Sections 401 and 404. The purpose of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." The definition of "waters of the United States" includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b).

The U.S. Army Corps of Engineers (USACE) issues permits based on guidelines established under Section 404 of the CWA. Section 404 of the CWA prohibits the discharge of dredged or fill material into "waters of the United States," including wetlands, without a permit from USACE. The U.S. Environmental Protection Agency (EPA) also has authority over wetlands and may under Section 404(c) veto a USACE permit.

Section 404 of the CWA imposes restrictions on and requires permits for any action that places fill material in, dredges material from, or results in flooding of wetlands or other waters of the United States. In accordance with EPA regulations issued under Section 404(b)(1), the permitting of fill will not be approved unless the following conditions are met: no practicable, less environmentally damaging alternative to the action exists; the activity does not cause or contribute to violations of state water quality standards (as described under Section 401 of the CWA); the activity does not jeopardize federally listed threatened or endangered species or sensitive cultural resources (as required by 33 CFR Part 320.3e and g); the activity does not contribute to significant degradation of waters of the United States; and all practicable and appropriate steps have been taken to minimize potential adverse impacts to the aquatic ecosystem (40 CFR Part 230.10).

The Federal CWA and California's Porter-Cologne Water Quality Control Act (Porter-Cologne Act) regulate discharge of surface water by the Proposed Project. These laws establish the Regional Water Quality Control Board (RWQCB) as the responsible agency for protecting water quality within California. The RWQCB's jurisdiction extends to all "Waters of the State" and to all "Waters of the U.S.," including wetlands (isolated and non-isolated). Section 401 of the CWA provides the RWQCB with the authority to regulate, through a Water Quality Certification, any proposed federally permitted activity that may affect water quality. Section 401 permitting from the RWQCB is required to obtain Section 404 permits under the CWA from the USACE.

Desert Renewable Energy Conservation Plan (DRECP)

Executive Order S-14-08 established a target of obtaining 33 percent of the State's electricity from renewable resources by 2020. In response to this Order, the California Energy Commission (CEC), CDFW, Bureau of Land Management (BLM), and the USFWS have begun preparing the Desert Renewable Energy Conservation Plan (DRECP). The plan area encompasses the Mojave and Colorado Desert regions in California, including a portion of Kern County.

The DRECP is a proposed State Natural Community Conservation Plan (NCCP) intended to provide for effective protection and conservation of desert ecosystems while allowing for appropriate development of renewable energy projects. The plan proponents anticipate that it will provide long-term endangered species permit assurances to renewable energy developers and provide a process for conservation funding to implement the DRECP. It also will serve as the basis for one or more of the HCPs under the ESA. The DRECP has not yet been approved and no estimated date of approval is available (DRECP, 2012).

State Regulatory Background

California Endangered Species Act (CESA). Sections 2050-2098 of the California Fish and Game Code (CFGC) prohibit the take of state-listed endangered and threatened species unless specifically authorized by CDFW. The state definition of "take" is to hunt, pursue, catch, capture, or kill a member of a listed species or attempt to do so. CDFW administers CESA and authorizes take through permits or memorandums of understanding issued under Section 2081 of CFGC, or through a consistency determination issued under section 2080.1. Section 2090 of CFGC requires state agencies to comply with threatened and endangered species protection and recovery and to promote conservation of these species.

Fully Protected Species CFGC Sections 3511, 4700, 5050, and 5515. CFGC designates certain animal species as "fully protected" under Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish). Incidental take permits are available for such species only if they are covered under a Natural Community Conservation Plan (CFGC Sec. 2835.).

Native Plant Protection Act of 1973 (CFGC Sections 1900-1913). The Native Plant Protection Act of 1973 includes provisions that prohibit the taking of endangered or rare native plants from the wild and a salvage requirement for landowners. CDFW administers the Native Plant Protection Act of 1973 and generally regards as rare many plant species included on Ranks 1A, 1B, and 2, and sometimes Ranks 3 and 4, of the CNPS *Inventory of Rare and Endangered Vascular Plants of California*.

California Protection for Birds (CFGC Section 3503 et seq.). CFGC Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3513 makes it unlawful to take, possess, or destroy any birds of prey or to take, possess, or destroy the nest or eggs of birds protected under the Migratory Bird Treaty Act. Section 3503.5 makes in unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey), or to take, possess or destroy the nest or eggs of such birds.

California Species of Special Concern. "Species of Special Concern" is a designation assigned by the CDFW to species it considers at risk, but the designation has no formal legal status. Species of Special Concern meet one or more of the following criteria: (1) is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role; (2) is listed as federally, but not State, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed; (3) is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; (4) has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status. "Species of Special Concern" is an administrative designation intended to focus attention on at-risk species during environmental review and conservation planning. CDFW maintains lists of Species of Special Concern, including a list of California Bird Species of Special Concern.

Lake or Streambed Alteration Agreements – California Fish and Game Code Sections 1600-1616. Under these sections of the Fish and Game Code, an applicant is required to notify CDFW prior to constructing a project that would divert, obstruct, or change the natural flow, bed, channel, or bank of a river, stream, or lake. Preliminary notification and project review generally occur during the environmental review process. When a fish or wildlife resource may be substantially adversely affected, CDFW is required to propose reasonable project changes to protect the resource. These modifications are formalized in a Lake or Streambed Alteration Agreement that becomes part of the plans, specifications, and bid documents for the project. CDFW jurisdiction is determined to occur within the waterbody of any natural river, stream, or lake. The term "stream," which includes creeks and rivers, is defined in Title 14, CCR, Section 1.72.

Local Regulatory Background

The Kern County General Plan (Kern County, 2009a) identifies the federal, State, and local statutes, ordinances, or policies that govern the conservation of biological resources that must be considered by Kern County during the decision-making process for any project that could affect biological resources.

The Land Use, Open Space, and Conservation Element of the Kern County General Plan provides for a variety of land uses to ensure future economic growth while also ensuring the conservation of the county's agricultural and natural resources. Section 1.10 (General Provisions) provides goals, policies, and implementation measures that typically apply to discretionary projects.

Section 1.10.10 Oak Tree Conservation

- Policy 65. Oak woodlands and large oak trees shall be protected where possible and incorporated into project developments.
- Policy 66. Promote the conservation of oak tree woodlands for their environmental value and scenic beauty.

Implementation Measure KK. The following applies to discretionary development projects (General Plan Amendment, zone change, conditional use permit, tract maps, parcel maps, precise development plan) that contains oak woodlands, which are defined as development parcels having canopy cover by oak trees of at least ten percent (10%), as determined from base line aerial photography or by site survey performed by a licensed or certified arborist or botanist. If this study is used in an Environmental Impact Report, then a Registered Professional Forester (RPF) shall perform the necessary analysis.

a. Development parcels containing oak woodlands are subject to a minimum canopy coverage retention standard of thirty percent (30%). The consultant shall include recommendations regarding thinning and diseased tree removal in conjunction with the discretionary project.

b. Use of aerial photography and a dot grid system shall be considered adequate in determining the required canopy coverage standard.

c. Adjustments below thirty percent (30%) minimum 272 canopy standard may be made based on a report to assess the management of oak woodlands.

d. Discretionary development, within areas designated as meeting the minimum canopy standard, shall avoid the area beneath and within the trees unaltered drip line unless approved by a licensed or certified arborist or botanist.

Implementation Measure LL. The following applies to development of parcels having oak tree canopy cover of less than ten percent (10%), but containing individual oak trees equal to or greater than a 12-inch diameter trunk at 4.5 feet breast height.

a. Such trees shall be identified on plot plans.

b. Discretionary development shall avoid the area beneath and within the trees unaltered drip line unless approved by a licensed or certified arborist or botanist.

c. Specified tree removal related to the discretionary action may be granted by the decision making body upon showing that a hardship exists based on substantial evidence in the record.

Kern County Energy Element of the General Plan. The Kern County General Plan provides the policy under the Energy Element of the General Plan (Chapter 5) that encourages new transmission lines to be sited or configured to avoid or minimize collision and electrocution hazards to raptors.

Applicant Proposed Measures

As part of the Proposed Project, SCE has identified Applicant Proposed Measures (APMs) that it would implement during construction and/or operation of the Proposed Project to reduce or avoid impacts to biological resources. SCE would conduct the design, construction, operation, and maintenance of the Proposed Project in accordance with its APMs. The APMs for biological resources are listed in Table 5.4-4.

APM	Description
APM BIO-1	Pre-construction Surveys and Construction Monitoring. To the extent feasible, biological monitors would monitor construction activities in areas with special-status species, native vegetation, wildlife habitat, or unique resources to ensure such resources are avoided.
APM BIO-2	Pre-Construction Surveys for Nesting Birds/Raptors. SCE would conduct project-wide nesting birds surveys and remove trees and other vegetation if feasible outside of the nesting season. If a tree or pole containing a raptor nest must be removed during nesting season, or if work is scheduled to take place in close proximity to an active nest on an existing transmission tower or pole, SCE biologists would determine appropriate nesting buffers based on a project specific nesting bird management plan or consultation with the appropriate agencies.
APM BIO-3	Burrowing Owl. Biologists would conduct a preconstruction burrowing owl survey of the Proposed Project Study Area no more than 30 days prior to construction. Construction activities will be scheduled and planned to avoid burrowing owls and their burrows. A 250-foot buffer will be placed around active nest and the site would be avoided, where feasible. If occupied burrows cannot be avoided, an appropriate relocation strategy would be developed in conjunction with the CDFW and may include collapsing burrows outside of nesting season and using exclusionary devices to reduce impacts to the burrowing owl. Bio- logical monitors would monitor all construction activities that have the potential to impact active burrows.
APM BIO-4	Tehachapi Slender Salamander. If project activities would be located within oak woodlands and ravines, construction activities would avoid displacement of rocks, logs, bark, and other debris in thick leaf litter, near talus slopes. For these areas, a biologist would be present to ensure that construction activities do no impact this species, particularly during periods of peak activity, such as rainy or wet nights with moderate temperatures.
APM BIO-5	Avoidance of Sensitive Habitats. SCE would minimize impacts and permanent loss of Big Sagebrush Scrub, oak woodlands, and aquatic features at construction sites by flagging native vegetation to be avoided If unable to avoid impacts to native vegetation, a project revegetation plan would be prepared in coordination with the appropriate agencies for areas of native habitat temporarily impacted during construction.

Table 5.4-4. Applicant Proposed Measures – Biological Resources.

5.4.2 Environmental Impacts and Mitigation Measures

a. Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Special-Status Plants

Less THAN SIGNIFICANT WITH MITIGATION INCORPORATED. If special-status plants are present within the project corridor they could be directly impacted by removal of vegetation or by trampling or crushing during construction activities. Indirect impacts to special-status plants could result from alterations in existing topography and hydrology, sedimentation and erosion, soil compaction, fugitive dust (which could affect plant photosynthesis and respiration), exposure to hazardous substances accidentally released by vehi-

cles or other equipment, disruptions to seed banks from ground disturbance, or the colonization of nonnative, invasive plant species. Ongoing operational impacts could include trampling or crushing of special-status plants by vehicular or foot traffic and the introduction of non-native, invasive plants.

Construction of the proposed Banducci Substation would not have substantial adverse effects on special-status plant species and would not result in loss of native habitat. The proposed Banducci Substation site is on agricultural land that is unlikely to support suitable habitat for any such species. Operation of the Proposed Project would consist of minor maintenance and emergency repairs and would result in less than significant impacts to biological resources. Therefore, construction and operation of the proposed Banducci Substation site would have a less than significant impact on special-status plant species.

The proposed new 66 kV subtransmission line poles on Pelliser Road south of Dale Road and pole replacements on Highline Road would be constructed on agricultural land and non-native grassland. Agricultural land is unlikely to support suitable habitat for special-status plant species. Non-native grassland may support native plant species, including special-status species. Construction activities along the proposed 66 kV subtransmission line would have the potential for temporary impacts to special-status plants and their habitats.

Suitable habitat for special-status plants is present along Proposed Telecommunication Route 2 where extant native vegetation exists on West Valley Boulevard west of the Tehachapi city limits to Cummings Valley. Suitable habitat for special-status plants is present along Proposed Telecommunications Route 1 on patches of extant native vegetation along Highline Road and the easternmost segment of this route within the California Correctional Institution. Construction activities along the Proposed Telecommunications Routes would have the potential for temporary impacts to special-status plants and their habitats.

In APM BIO-1 (Pre-construction Surveys and Construction Monitoring), SCE commits to biological monitoring of construction activities in areas with special-status species, native vegetation, wildlife habitat, or unique resources to ensure such resources are avoided. APM BIO-5 (Avoidance of Sensitive Habitats) specifies that SCE would minimize impacts and permanent loss of Big Sagebrush Scrub, oak woodlands, and aquatic features at construction sites by flagging native vegetation to be avoided. APM BIO-5 also states that if native vegetation cannot be avoided, SCE will prepare a revegetation plan for areas of native habitat affected during construction.

APMs alone would not reduce potential impacts to special-status plants to a less-than-significant level because they do not address a number of concerns. These include training workers to understand and abide by environmental restrictions, taking precautions to minimize the introduction of invasive weeds, conducting pre-construction special-status species surveys, or specific actions to be taken if special-status plant species are found. In addition to APM BIO-1 and APM BIO-5, Mitigation Measure B-1 (Perform Biological Resource Surveys), Mitigation Measure B-2 (Establish Special-status Plants Buffers), Mitigation Measure B-3 (Minimize Noxious Weeds), Mitigation Measure AQ-1 (Implement EKAPCD Dust Control Measures), Mitigation Measure H-1 (Prepare and Implement Worker Environmental Awareness Program [WEAP]), Mitigation Measure H-2 (Identify Pesticide/Herbicide Contamination), and Mitigation Measure HYD-1 (Develop a Stormwater Pollution Prevention Plan and Implement BMPs) are required. With implementation of these measures, impacts to special-status plant species from construction and operation of the Proposed Project would be less than significant.

Mitigation Measures for Impacts to Special-Status Plants

MM B-1 Perform Biological Resource Surveys and Construction Monitoring. After project approval, but within 30 days prior to the start of construction, updated biological resource surveys shall be conducted confirming special-status or listed biological resources, if any, in the vicinity of the Proposed Project, including the 66 kV subtransmission line route, tele-communication line route, wire stringing locations, access roads, and staging yards. Updated survey results, including a map of biological resources identified, shall be provided to the CPUC for review and verification prior to construction. Prior to submitting the first survey report, SCE shall consult with the CPUC regarding the preferred format.

During construction, any special-status or listed species identified shall be reported to the CPUC within 24 hours. SCE shall provide a report documenting biological surveys conducted, construction activities observed, biological resources identified, and compliance with APMs and MMs to the CPUC on a weekly basis. Maps of special-status or listed biological resources identified during project surveys and monitoring activities shall be provided to the CPUC on a weekly basis.

- Sensitive plant surveys shall be conducted by a qualified botanist, approved by the CPUC, familiar with plants in the Cummings Valley. Field surveys will be conducted at the appropriate time of year to locate and identify the target species. Surveys will focus on identifying whether state and federally listed species as well as California Native Plant Society special-status plants are present. In addition, potential habitat to support special-status plant species and sensitive vegetation communities will be identified.
- Clearance surveys shall be conducted no more than 7 days prior to the start of construction in a particular area to identify potential plant and animal species that may be affected by construction activities. Clearance surveys will include a field survey by a qualified botanist and wildlife biologist and will include 500-feet beyond the border of any proposed project disturbance areas (where these areas are legally accessible). Clearance surveys will be submitted to the CPUC for review and verification prior to construction.

Biological monitors shall monitor construction activities in areas with special-status species, native vegetation, wildlife habitat, or unique biological resources to ensure such resources are avoided to the extent feasible.

MM B-2 Establish Special-status Plants Buffers. If special-status plants are found during field surveys, a buffer shall be established around the plants or plant populations within which no construction work is permitted unless the CPUC determines that such work may proceed without significantly impacting the special-status and listed species. The size of the buffer shall be adequate to ensure that plants are not significantly disturbed and shall be determined by a qualified biologist. Construction monitors shall ensure that work crews are aware of the buffer and related work restrictions.

If special-status plants cannot be avoided, SCE shall coordinate with the CPUC, CDFW, and USFWS to determine whether construction and operation impacts of the Proposed Project would be significant. Impacts to special-status plants will be considered significant if listed threatened or endangered species would be directly or indirectly affected; or plants presumed extinct in California (California Rare Plant Rank [CRPR] 1A) would be

directly or indirectly affected; or ten (10) percent or more of a local occurrence of CRPR 1B or CRPR 2 species would be directly or indirectly affected.

In the event any of the above are triggered, SCE shall coordinate with the CPUC, CDFW, and USFWS to design and implement appropriate mitigation measures. These measures may include, but would not be limited to:

- Avoidance. Project construction would be adjusted as necessary to avoid or minimize impacts to special-status plants and provide a minimum 25-foot buffer area surrounding each avoided occurrence, where no project activities will take place.
- Off-site Compensation. SCE would provide compensation lands to protect off-site special-status plant occurrence(s). Compensation lands would protect acreage, habitat suitability, and overall numbers of each special-status plant at no less than a 1:1 ratio or levels comparable to the project's impacts. In addition, the applicant will provide funding for long-term conservation management of the compensation land. The applicant will prepare a Compensation Plan, identifying the proposed compensation lands, proposed habitat improvements and long-term management, and specific legal mechanism for long-term preservation (e.g., holder of conservation easement or fee title). The Conservation Plan will be subject to review and approval by the CPUC in consultation with the CDFW and, upon approval, will be implemented in full. In cases where a federally or state-listed threatened or endangered species may be affected, the Conservation Plan will conform to applicable conditions under any CESA or federal ESA Incidental Take Permit, Biological Opinion, or other consultation documents. Where a Habitat Conservation Plan or similar conservation instrument is applicable, then participation in that plan may constitute compliance with this habitat compensation requirement.
- Salvage. In instances where salvage and relocation for special-status or listed species is feasible, SCE will consult with a qualified conservation and horticulture institute (such as Rancho Santa Ana Botanic Garden in Claremont, California) to design a Salvage and Relocation Plan, to be reviewed and approved by the CPUC in consultation with CDFW prior to disturbance of any occupied special-status plant habitat. The Plan will include at minimum: (a) collection/salvage measures for plants or seed banks, to retain intact soil conditions and maximize success likelihood; (b) details regarding storage of plants or seed banks; (c) location of the proposed recipient site, and detailed site preparation and plant introduction technique; (d) details for topsoil storage, as applicable; (e) time of year that the salvage and replanting or seeding will occur and the methodology of the replanting; (f) a description of the irrigation method(s), if used; (g) success criteria; and (h) a detailed monitoring program, commensurate with the Plan's goals.
- Horticultural propagation and off-site introduction. If salvage and relocation is not believed to be feasible for special-status plants, then the applicant will develop and implement an appropriate propagation and relocation strategy, based on the life history of the species affected. The strategy will include at minimum: (a) collection/salvage measures for plant materials or seed banks, to retain intact soil conditions and maximize success likelihood; (b) details regarding storage of plant, plant materials, or seed banks; (c) location of the proposed propagation facility, and proposed methods; (d); time of year that the salvage and other practices will occur; (e) success criteria; and (f) a detailed monitoring program, commensurate with the strategy's goals.

MM B-3 Minimize Noxious Weeds. Precautions shall be taken to minimize the introduction of any invasive weeds. Construction vehicles and equipment shall be clean before they arrive at work areas in the project corridor. Any landscaping involving vegetation other than trees and shrubs shall consist of native seed mix or other ecologically appropriate, non-invasive plants. Only weed-free straw or mulch shall be used.

Special-Status Wildlife

Less THAN SIGNIFICANT WITH MITIGATION INCORPORATED. The proposed Banducci Substation site and 66 kV Subtransmission line include agricultural land that contains suitable foraging habitat (but not suitable nesting habitat) for ferruginous hawk, prairie falcon, golden eagle, Swainson's hawk, mountain plover, northern harrier, white-tailed kite, merlin, California condor, and American badger.

Construction of the substation is expected to result in the permanent loss of up to 6.3 acres of foraging habitat. This habitat loss is relatively minor, 0.05 percent of the over 13,000 acres of potential habitat for these species in the region. In addition, no impacts to nesting habitat would be expected to occur. Therefore, the impacts of habitat loss to these species would be considered adverse, but less than significant.

Construction of the subtransmission line segments is expected to result in the temporary loss of up to 6.5 acres of foraging habitat.¹ Along the subtransmission line route, the expected 6.5-acre habitat impact area is only approximately 0.05 percent of the 13,000-acre area of potential habitat for these species in the region, and there would be no impacts to nesting habitat. Therefore, impacts of habitat loss to these species would be considered adverse but less than significant.

The Proposed Telecommunications Routes 1 and 2 provide suitable habitat and/or foraging habitat for Cooper's hawk, ferruginous hawk, prairie falcon, coast horned lizard, tricolored blackbird, golden eagle, Swainson's hawk, mountain plover, northern harrier, yellow warbler, white-tailed kite, merlin, California condor, Townsend's big-eared bat, hoary bat, and American badger. Construction activities along the proposed telecommunications routes would have the potential to impact these species and their habitat. Without mitigation these impacts could be significant.

Operation of the Proposed Project would consist of minor maintenance and emergency repairs and would result in less than significant impacts to biological resources.

Trash left in the work areas may affect special-status wildlife by attracting potential predators, such as common ravens and domestic dogs. Microtrash, particularly small metal items, represents a potential threat to California condors. Condors may take small items back to their nest where the chick(s) can ingest them, potentially causing mortality. Project-related activities, excavations, or materials may pose a hazard to wildlife. Wildlife, including special-status species, may be trapped in excavations or materials, or injured by project-related activities. Without mitigation these impacts could be significant.

In APM BIO-1 (Pre-construction Surveys and Construction Monitoring), SCE commits to biological monitoring of construction activities in areas with special-status species, native vegetation, wildlife habitat, or unique resources to ensure such resources are avoided. APM BIO-2 (Pre-construction Surveys for Nesting

¹ The 6.5 acres of temporary impacts anticipated for subtransmission line segments construction is a conservative estimate that does not take into account the fact that some temporary impacts associated with this component of the project would also occur on the same disturbed area already accounted for at the proposed substation site.

Birds/Raptors) specifies that SCE will conduct nesting bird surveys and remove trees and other vegetation outside the nesting season if feasible. The measure also states that if a tree or pole containing a raptor nest must be removed during nesting season or work will take place in proximity to an active nest on an existing transmission tower or pole, a biologist will determine appropriate buffers based on a project-specific nesting bird management plan or consultation with the appropriate agencies.

APMs alone would not reduce potential impacts to special-status wildlife to a less-than-significant level because they do not address training workers to understand and abide by environmental restrictions, conducting pre-construction special-status species surveys, specific actions to be taken if special-status wildlife species are found, removal of trash and microtrash, securing excavations to prevent wildlife entrapment or injury, or reducing the likelihood of electrocution of large birds. In addition to APM BIO-1 and APM BIO-2, Mitigation Measure B-1 (Perform Biological Resource Surveys), Mitigation Measure B-4 (Manage Trash and Microtrash), Mitigation Measure B-5 (Prevent Wildlife Entrapment), Mitigation Measure B-6 (Survey for and Avoid Burrowing Owl), Mitigation Measure B-7 (Survey for and Avoid or Relocate Tehachapi Slender Salamander), Mitigation Measure B-8 (Halt Construction when California Condor Present), Mitigation Measure B-9 (Prepare Nesting Birds Management Plan and Conduct Surveys), and Mitigation Measure B-10 (Follow APLIC Guidelines) are required. In addition, Mitigation Measure AQ-1 (Implement EKAPCD Dust Control Measures), Mitigation Measure H-1 (Prepare and Implement Worker Environmental Awareness Program [WEAP]), Mitigation Measure H-2 (Identify Pesticide/Herbicide Contamination), Mitigation Measure HYD-1 (Develop a Stormwater Pollution Prevention Plan and Implement BMPs) would reduce potential impacts to wildlife. With implementation of these measures, impacts to specialstatus wildlife species from construction and operation of the Proposed Project would be less than significant.

Mitigation Measures for Impacts to Special-Status Wildlife

- MM B-4 Manage Trash and Microtrash. Trash and microtrash shall be removed from work areas daily. Construction monitors shall conduct daily sweeps of work areas to ensure all trash and microtrash has been collected and removed. Microtrash in the form of construction materials such as nuts and bolts or other small materials must be secured at the end of each work day in secured, closed containers.
- **MM B-5 Prevent Wildlife Entrapment.** SCE shall ensure that all potential wildlife pitfalls (trenches, bores, portable water tanks, and other excavations) have been backfilled or securely covered at the end of each workday. If backfilling or covering is not feasible, these potential pitfalls will be sloped at a 3:1 ratio at the ends as wildlife escape ramps. The biological monitor shall inspect all potential pitfalls no fewer than three times daily throughout and at the end of each workday.

All pipes or other construction materials or supplies shall be covered or capped in storage or laydown areas. No pipes or tubing is to be left open either temporarily or permanently, except during use or installation. Any construction pipe, culvert, or other hollow materials shall be inspected for wildlife before it is moved, buried, or capped.

Should native wildlife become trapped in excavations, materials, or other project-related situation, the biological monitor shall remove it (if feasible and safe) or immediately contact CDFW and the CPUC. Any native wildlife encountered shall be allowed to leave the area unharmed.

If injured native wildlife is found on or near Project access roads, work areas, or the ROW, whether or not the injuries are obviously project-related, SCE shall contact and work

with a local wildlife rehabilitator, animal control, CDFW, or other qualified party to obtain assistance for the animal as soon as possible. SCE shall bear the costs of veterinary treatment and rehabilitation for any native injured wildlife found on or near Project access roads, work areas, or the ROW and any native wildlife injured by Project-related activities.

Dead animals of non-special-status species found on Project access roads, work areas, or the ROW shall be reported to the appropriate local animal control agency within 24 hours or a biological monitor shall safely move the carcass out of the road or work area as needed. Dead animals of special-status species found on Project roads, work areas, or the ROW shall be reported to the appropriate agency within 24 hours, and if required, the carcass handled according to agency guidelines.

Burrowing owl

The burrowing owl is a California Species of Special Concern and is protected under the MBTA and CFGC. Due to its behavior, often taking cover within a burrow to escape threats (rather than fleeing), special measures to prevent burrowing owl take are needed on any project site where it may occur.

Surveys for burrowing owl conducted in 2010 and 2011 did not detect evidence of burrowing owl on or near the proposed Banducci Substation site, proposed 66 kV subtransmission line route, or proposed telecommunication routes. Although some suitable habitat for this species occurs on the Proposed Project site, and this species may occur occasionally as a migrant or winter visitor, the Proposed Project site is subject to frequent farming activities that preclude the presence of the species at some locations. Post-construction operation of the Proposed Project would consist of minor maintenance and emergency repairs. These would result in less than significant impacts to biological resources.

During construction, a number of protective measures would apply. In APM BIO-1 (Pre-construction Surveys and Construction Monitoring), SCE commits to biological monitoring of construction activities in areas with special-status species, native vegetation, wildlife habitat, or unique resources to ensure such resources are avoided. APM BIO-3 (Burrowing Owl) specifies that SCE will conduct pre-construction burrowing owl surveys, monitor construction activities that may affect active burrows, and avoid burrowing owl burrows if feasible. If avoidance is not feasible, a relocation strategy will be developed in conjunction with CDFW.

APMs alone would not reduce potential construction impacts to burrowing owls to a less-than-significant level because they do not address training workers to understand and abide by environmental restrictions or provide sufficient detail regarding the specific actions to be taken if burrowing owls are found. In addition to the APMs, Mitigation Measure H-1 (Prepare and Implement Worker Environmental Awareness Program [WEAP]) in Section 5.8 (Hazards and Hazardous Materials) and Mitigation Measure B-6 (Survey for and Avoid Burrowing Owl) are required. With implementation of APM BIO-1, APM BIO-3, and these mitigation measures, impacts to burrowing owl from construction of the Proposed Project would be less than significant.

Mitigation Measure for Impacts to Burrowing Owl

MM B-6 Survey for and Avoid Burrowing Owl. This mitigation measures supersedes APM BIO 3 (Burrowing Owl). Preconstruction surveys for burrowing owl shall be conducted in project areas within 30 days of construction. If any ground disturbing activities are planned during the burrowing owl nesting season (approximately February 1 through August 31), avoidance measures shall include a no construction buffer zone of a minimum distance of 250 feet, consistent with the Staff Report on Burrowing Owl Mitigation (CDFG, 1995). SCE shall

comply with CDFW burrowing owl mitigation guidelines as detailed in the Staff Report on Burrowing Owl Mitigation (CDFG, 2012) or more recent updates, if available.

Construction activities shall be scheduled and planned to avoid burrowing owls and their burrows. If occupied burrows cannot be avoided, an appropriate relocation strategy shall be developed in conjunction with CDFW. Biological monitors shall monitor all construction activities that have the potential to impact active burrows.

Tehachapi slender salamander

The Tehachapi slender salamander is a state-listed threatened species. In 2001, the USFWS reviewed available information on the Tehachapi slender salamander and determined that it did not warrant federal listing. This species is a completely terrestrial amphibian. Preferred habitat is talus (rock debris) slopes in moist canyons and ravines in oak and mixed woodlands. This species forages in leaf litter under surface debris such rocks, logs, or bark. It is nocturnal and active during moist periods (November to May), retreating to underground niches or moist seeps during drier periods. The small and localized nature of Tehachapi slender salamander populations makes them highly susceptible to habitat disturbance (CDFG, 2005; Dudek and ICF, 2012; USFWS, 2011).

Limited habitat for the state-listed Tehachapi slender salamander occurs along the Proposed Telecommunication Route 1 between the Tehachapi city limits and Cummings Valley and on Proposed Telecommunications Route 2 within the California Correctional Institution. Construction activities along the proposed telecommunications routes would have the potential to impact the Tehachapi slender salamander. Operation of the Proposed Project would consist of minor maintenance and emergency repairs and would result in less than significant impacts to biological resources.

In APM BIO-1 (Pre-construction Surveys and Construction Monitoring), SCE commits to biological monitoring of construction activities in areas with special-status species, native vegetation, wildlife habitat, or unique resources to ensure such resources are avoided. APM BIO-4 (Tehachapi Slender Salamander) specifies that project activities in oak woodlands and ravines would avoid displacement of rocks, logs, bark, and other debris in thick leaf litter near talus slopes, and a biologist would monitor construction in these areas.

APMs alone would not reduce potential impacts to Tehachapi slender salamander to a less-than-significant level because they do not address training workers to understand and abide by environmental restrictions, specify pre-construction surveys, or ensure compliance with CESA requirements. In addition to APMs, Mitigation Measure H-1 (Prepare and Implement Worker Environmental Awareness Program [WEAP]) in Section 5.8 (Hazards and Hazardous Materials), Mitigation Measure B-1 (Perform Biological Resource Surveys), and Mitigation Measure B-7 (Survey for and Avoid or Relocate Tehachapi Slender Salamander) are required. With implementation of these measures, impacts to Tehachapi slender salamander from construction and operation of the Proposed Project would be less than significant.

Mitigation Measure for Impacts to Tehachapi Slender Salamander

MM B-7 Survey Requirements and Avoidance Relocation Measures for Tehachapi Slender Salamander. This mitigation measure supersedes APM BIO 4 (Tehachapi Slender Salamander).

Pre-construction surveys and avoidance measures shall be implemented for Tehachapi slender salamander subject to applicable permit requirements. For construction activities involving ground disturbance in or directly adjacent to occupied or suitable habitat for the Tehachapi slender salamander, preconstruction surveys shall be conducted by a quali-

fied biologist, approved by the CPUC, prior to disturbance to determine if Tehachapi slender salamander individuals are present in the disturbance zone. If visual searches are used for pre-construction surveys, they shall be conducted no earlier than 72 hours prior to disturbance, and if pitfall trapping is used, it shall be conducted no earlier than 5 days prior to disturbance.

If Tehachapi slender salamanders are located, individuals within the disturbance zone shall be captured and relocated to the closest suitable habitat area containing talus, as and to the extent required by USFWS and/or CDFW in applicable permits or habitat conservation plans. If project activities are located within oak woodlands and ravines, construction activities shall avoid displacement of rocks, logs, bark, and other debris in thick leaf litter, near talus slopes. Biological monitors shall monitor all construction activities in occupied or suitable Tehachapi slender salamander habitat to ensure that construction activities do not impact this species.

When occupied habitat for Tehachapi slender salamander is directly impacted by construction activities involving ground disturbance, a habitat restoration plan shall be developed for the Tehachapi slender salamander that specifies, at a minimum, the following: (1) the location of creation, enhancement, or restoration planting sites; (2) a complete description of the hardscape (e.g., talus, rocks, and logs) to be installed and where hardscape materials will be deposited, along with desired leaf and litter cover; (3) a description of how the existing typical hydrologic regime will support Tehachapi slender salamander habitat; (4) the quantity and species of plants to be planted; (5) planting procedures, including the use of soil preparation and irrigation; (6) methods for the removal of non-native plants; (7) a schedule and action plan to maintain and monitor the creation/enhancement/ restoration area; (8) a list of criteria (e.g., growth, percent plant cover, plant diversity, debris, and hardscape) and performance standards by which to measure success of the creation/enhancement/restoration; and (9) contingency measures in the event that creation/enhancement/restoration efforts are not successful. Performance standards shall be defined by a site-specific pre-construction study of known locations occupied by Tehachapi slender salamander, including evaluation of specific cover; distance to water; water inundation levels; percent canopy cover; percent shrub and grass cover; presence of talus, boulder, log, or other refugia; and other factors. The restoration plan performance standard under this mitigation measure is to create, restore, or enhance areas so that Tehachapi slender salamanders can naturally colonize these areas or Tehachapi slender salamanders within the disturbance zone can be successfully relocated to these areas. The plan shall be prepared by SCE and submitted to the CPUC and the resource agencies for approval prior to ground disturbance activities that would have an impact on occupied habitat for the Tehachapi slender salamander.

Pre-construction survey methods, avoidance measures, and final mitigation requirements for this species shall be established by USFWS and CDFW. Permit applications submitted to CDFW shall include, at a minimum, the applicable mitigation measures from this document.

California condor

Designated critical habitat for California condor is located approximately 3 miles southwest of the Project study area. According to the PEA (SCE, 2014), SCE engaged in informal discussions with the USFWS regarding the potential for impacts to California condors from the Proposed Project. On June 22, 2011,

SCE met with the USFWS and discussed the low likelihood of the Proposed Project causing take of condors. USFWS stated condors occur in the mountains close to the Proposed Project, but are not likely to use the Proposed Project area due to a lack of suitable habitat. Therefore, USFWS determined that the Proposed Project construction activities would not be likely to result in a "take," and additional actions to avoid impacts to condors (such as line marking or undergrounding of facilities) would not be necessary.

In APM BIO-1 (Pre-construction Surveys and Construction Monitoring), SCE commits to biological monitoring of construction activities in areas with special-status species, native vegetation, wildlife habitat, or unique resources to ensure such resources are avoided. With implementation of APM BIO-1 (Pre-construction Surveys and Construction Monitoring), Mitigation Measure H-1 (Prepare and Implement Worker Environmental Awareness Program [WEAP]) in Section 5.8 (Hazards and Hazardous Materials), Mitigation Measure B-1 (Perform Biological Resource Surveys), Mitigation Measure B-4 (Manage Trash and Microtrash), Mitigation Measure B-5 (Prevent Wildlife Entrapment), and Mitigation Measure B-8 (Halt Construction when California Condor Present), impacts to California condor from construction and operation of the Proposed Project would be less than significant.

Mitigation Measure for Impacts to California Condor

MM B-8 Halt Construction when California Condor Present. SCE shall retain a qualified biologist with demonstrated knowledge of California condor identification to monitor all construction activities within the project area. If a California condor is present in any project work area (except flying over), construction activities shall be halted in that area (and within 500 feet of the condor) and the animal shall be allowed to leave the area on its own. All condor sightings in the project area will be immediately reported to the USFWS, CDFW, and the CPUC. Construction may resume upon the departure of the California condor and verification by a qualified biologist.

Nesting birds

Birds, nests, and nestlings are generally protected under the MBTA and CFGC, regardless of other conservation designations. Thus, mortality of nesting birds (including eggs or nestlings), regardless of other conservation status, may violate state and federal regulations.

In APM BIO-1 (Pre-construction Surveys and Construction Monitoring), SCE commits to biological monitoring of construction activities in areas with special-status species, native vegetation, wildlife habitat, or unique resources to ensure such resources are avoided. APM BIO-2 (Pre-construction Surveys for Nesting Birds/Raptors) specifies that SCE will conduct nesting bird surveys and remove trees and other vegetation outside the nesting season if feasible. The measure also states that if a tree or pole containing a raptor nest must be removed during nesting season or work will take place in proximity to an active nest on an existing transmission tower or pole, a biologist will determine appropriate buffers based on a project-specific nesting bird management plan or consultation with the appropriate agencies.

APMs alone would not reduce potential impacts to nesting birds to a less-than-significant level because they do not address training workers to understand and abide by environmental restrictions or provide sufficient detail regarding nesting bird surveys or the specific actions to be taken if active nests are found. In addition, Mitigation Measure H-1 (Prepare and Implement Worker Environmental Awareness Program [WEAP]), Mitigation Measure B-1 (Perform Biological Resource Surveys), and Mitigation Measure B-9 (Prepare Nesting Birds Management Plan and Conduct Surveys) are required.

Mitigation Measure for Impacts to Nesting Birds

MM B-9 Prepare Nesting Birds Management Plan and Conduct Surveys. This mitigation measure supersedes APM BIO 2 (Pre-construction Surveys for Nesting Birds/Raptors).

Clearing of any vegetation (including agricultural fields and grasslands), site preparation in open or barren areas, or other project-related activities that may adversely affect breeding birds shall be scheduled outside the nesting season as feasible. Nesting season is generally February 1 to August 31, but varies with region, environmental factors, and species.

Within one week (7 days) prior to the start of construction in a particular area during nesting season, a nesting survey shall be conducted within project disturbance areas and a 500-foot buffer surrounding all project disturbance areas (wherever legal access is available). At a minimum, nesting surveys shall be conducted from February 1 to August 31. A qualified biologist will determine if nesting activity is occurring either prior to or after this February-August period and nesting surveys will be performed accordingly.

If an active nest is found, a buffer shall be established around the nest in which no construction work is permitted. The size of the buffer will be adequate to ensure that the nest, nesting birds, and chicks (including fledglings and precocial chicks) are not disturbed. For nests of raptors and special-status bird species, the size of the buffer will be determined based on a project-specific nesting bird management plan approved by the appropriate resource agencies or consultation with the appropriate resource agencies. For all other nests, the size of the buffer will be determined by a qualified biologist. Construction monitors will ensure that work crews are aware of the buffer and related work restrictions. The buffer zone will remain in place until the young have fledged and are no longer dependent on the nest or the nest is no longer active, as determined by a qualified biologist.

An active nest is defined as a nest with eggs or chicks, or as otherwise defined by CDFW

If an active nest must be moved during the nesting season, SCE shall coordinate with the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service to obtain approval prior to moving the nest.

Prior to the start of construction, SCE shall prepare a draft Nesting Bird Management Plan, in consultation with the CPUC, describing measures to detect birds that may nest on and adjacent to the project site or facilities and to avoid impacts to or take of those birds or their nests during project construction. The draft Nesting Bird Management Plan shall be submitted to the CPUC for review and approval in consultation with USFWS and CDFW. The Nesting Bird Management Plan will be finalized by SCE prior to issuance of CPUC's Notification to Proceed.

The Nesting Bird Management Plan will describe avoidance measures, such as buffer distances from active nests, based on the specific nature of project activities, noise, or other disturbance of those activities, the bird species and conservation status, and other pertinent factors. The Plan will specify species' (or groups of species) appropriate buffer distances based on tolerance of human activities. Standard nest buffers shall be 300 feet, and 500 feet for raptor species, or as specified in the CPUC-approved Nesting Bird Management Plan.

Other Protected Species

Raptors and other large aerial perching birds, including those afforded state and/or federal protection, are susceptible to distribution line electrocution. Because raptors and other large perching birds often perch on tall structures that offer views of potential prey, the design characteristics of towers and poles are a major factor in raptor electrocutions (APLIC, 1996). Electrocution occurs when a bird simultaneously contacts two energized phase conductors or an energized conductor and grounded hardware. This happens most frequently when a bird attempts to perch on a tower or pole with insufficient distance between these elements.

The majority of raptor electrocutions are caused by lines that are energized at voltage levels between 1 kV and 60 kV. The electrocution of state and/or federally protected bird species would constitute a significant impact. Potential impacts to birds resulting from electrocution by distribution lines may be mitigated by incorporating the construction design recommendations provided in *Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006* (APLIC, 2006). Mitigation Measure B-10 (Follow APLIC Guidelines) requires that overhead portions of the proposed distribution lines be constructed according to the Avian Powerline Interaction Committee's (APLIC) "raptor-friendly" guidelines, which would prevent bird mortality from electrocution, thereby reducing impacts to less than significant.

Mitigation Measure for Impacts to Other Protected Species

MM B-10 Follow APLIC Guidelines. Design, install, and maintain distribution lines and all electrical components in accordance with the Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006 to reduce the likelihood of electrocutions of large birds. Specifically, the phase conductors should be separated by a minimum of 60 inches. Where adequate separation is not feasible, avian protection materials should be used to cover electrical equipment (APLIC, 2006). Before construction begins, SCE shall submit a plan to the CPUC documenting that project design is consistent with APLIC guidelines.

b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less THAN SIGNIFICANT WITH MITIGATION INCORPORATED. The proposed Banducci Substation site contains an agricultural drainage ditch, potentially under the jurisdiction of the CDFW pursuant to the California Fish and Game Code. No other riparian habitat or sensitive natural community identified in local or regional plans, policies, or regulations, or by the CDFW or USFWS occurs on or within the proposed Banducci Substation site.

The proposed 66 kV subtransmission line routes would be located on road shoulders in non-native grassland, disturbed, and agricultural areas. The Proposed Telecommunications Routes would be located on road shoulders in non-native grassland, disturbed, and agricultural areas with limited native vegetation. Riparian vegetation is absent from the study area, but occurs along watercourses, such as Brite Creek, which cross the Proposed Telecommunication Routes west of Tehachapi. Sensitive natural communities that are present and may be affected by the proposed 66 kV subtransmission line or Telecommunications Routes are Big Sagebrush Scrub, Blue Oak Woodland, and Foothill Pine-Oak Woodland.

In APM BIO-1 (Pre-construction Surveys and Construction Monitoring), the applicant commits to biological monitoring of construction activities in areas with special-status species, native vegetation, wildlife habitat, or unique resources to ensure such resources are avoided. APM BIO-5 specifies that SCE would minimize impacts and permanent loss of Big Sagebrush Scrub, oak woodlands, and aquatic features at construction sites by flagging native vegetation to be avoided.

APMs alone would not reduce potential impacts to sensitive natural communities to a less-than-significant level because they do not address training workers to understand and abide by environmental restrictions, taking precautions to minimize the introduction of invasive weeds, or compensation for loss of habitat. In addition, Mitigation Measure B-1 (Perform Biological Resource Surveys), Mitigation Measure B-2 (Establish Special-status Plants Buffers), Mitigation Measure B-3 (Minimize Noxious Weeds), and Mitigation Measure B-11 (Replace or Offset Sensitive Habitat Loss) are required. Mitigation Measure AQ-1 (Implement EKAPCD Dust Control Measures), Mitigation Measure H-1 (Prepare and Implement Worker Environmental Awareness Program [WEAP]), Mitigation Measure H-2 (Identify Pesticide/Herbicide Contamination), and Mitigation Measure HYD-1 (Develop a Stormwater Pollution Prevention Plan and Implement BMPs) would also reduce impacts on sensitive natural communities. With implementation of these measures, impacts to sensitive natural communities from construction and operation of the Proposed Project would be less than significant.

Mitigation Measure for Loss of Sensitive Habitat

MM B-11Replace or Offset Sensitive Habitat Loss. This mitigation measures augments APM BIO-5
(Avoidance of Sensitive Habitats). In the case of any conflict between Mitigation Measure
B-11 and APM BIO-5, Mitigation Measure B-11 supersedes the APM.

Native vegetation in Big Sagebrush Scrub, Blue Oak Woodland, and Foothill Pine–Oak Woodland vegetation communities and aquatic features in construction sites shall be flagged for avoidance prior to construction activities. If avoidance is not feasible, SCE shall implement one or both of the following measures to offset or compensate for those impacts.

- On-site Restoration. If sensitive vegetation communities or habitat that may support special-status plants or animals are removed or degraded due to temporary project impacts, the applicant shall prepare and implement an Ecological Restoration Plan, to restore any temporary habitat loss within five (5) years of initial disturbance. The Plan will be subject to review and approval by the CPUC, in coordination with CDFW. The Ecological Restoration Plan's goal will be to replace habitat values that are damaged or degraded by the project. The plan will include: (a) soil or substrate preparation measures, such as recontouring, decompacting, or imprinting; (b) provisions for soil or substrate salvage and storage; (c) plant material collection and acquisition guidelines, including guidelines for salvaging, storing, and handling seed, cuttings, or rooted plants from the project site, as well as obtaining materials from commercial nurseries or collecting from outside the project area; (d) time of year that the planting or seeding will occur and the methodology of the planting; (e) an irrigation plan or alternate measures to ensure adequate water; (f) quantitative success criteria, to reflect yearly progress and final completion; (g) a detailed monitoring program to evaluate conformance with the success criteria; and (h) contingency measures to remediate the restoration site if success criteria are not met.
- Compensation. If sensitive vegetation communities or habitat that may support specialstatus species are removed or degraded, resulting in long-term or permanent project impacts (i.e., impacts lasting more than five [5] years), the applicant will provide for long-term habitat replacement by acquiring and protecting compensation land that

will provide habitat value equivalent or greater than habitat removed for the project. Compensation may include off-site habitat restoration or other habitat improvements as needed, to replace habitat components affected by the project. In addition, the applicant will provide funding for long-term conservation management of the compensation land. The applicant will prepare a Compensation Plan, identifying the proposed compensation lands, proposed habitat improvements and long-term management, and specific legal mechanism for long-term preservation (e.g., holder of conservation easement or fee title). The Conservation Plan will be subject to review and approval by the CPUC in consultation with the CDFW. After approval, the Conservation Plan must be implemented in full. In cases where a federally or state-listed threatened or endangered species may be affected, the Conservation Plan will conform to applicable conditions under any CESA or federal ESA Incidental Take Permit, Biological Opinion, or other consultation documents. Where a Habitat Conservation Plan or similar conservation instrument is applicable, then participation in that plan may constitute compliance with this habitat compensation requirement.

c. Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) either individually or in combination with the known or probable impacts of other activities through direct removal, filling, hydrological interruption, or other means?

Less THAN SIGNIFICANT WITH MITIGATION INCORPORATED. The proposed Banducci Substation site contains no federally protected wetlands as defined in Section 404 of the CWA. Therefore, construction and operation of the proposed Banducci Substation would result in no impacts to federally protected wetlands. The proposed Banducci Substation site contains an agricultural drainage ditch, potentially under the jurisdiction of the CDFW pursuant to the California Fish and Game Code.

No federally protected wetlands as defined by Section 404 of the CWA are present on the proposed 66 kV subtransmission line routes. Construction and operation of the proposed subtransmission line would not have a substantial adverse effect on federally protected wetlands.

Hydrophytic vegetation present in certain drainages and tributaries to Brite Creek is likely to meet the definition of wetland under Section 404 of the CWA, such as those that cross the Proposed Telecommunications Route 2 along West Valley Boulevard, west of the City of Tehachapi. Construction activities would have the potential to impact these hydrologic features.

In APM BIO-1 (Pre-construction Surveys and Construction Monitoring), the applicant commits to biological monitoring of construction activities in areas with special-status species, native vegetation, wildlife habitat, or unique resources to ensure such resources are avoided. APM BIO-5 specifies that SCE would minimize impacts and permanent loss of Big Sagebrush Scrub, oak woodlands, and aquatic features at construction sites by flagging native vegetation to be avoided.

APMs alone would not reduce potential impacts to federally protected wetlands to a less-than-significant level because they do not address training workers to understand and abide by environmental restrictions or taking precautions to minimize the introduction of invasive weeds, and do not require a jurisdictional delineation or ensure compliance with state and federal regulations. In addition, Mitigation Measure B-1 (Perform Biological Resource Surveys), Mitigation Measure B-3 (Minimize Noxious Weeds), and Mitigation Measure B-12 (Delineate Jurisdictional Wetlands and Waters) are required. Mitigation Measure AQ-1 (Implement EKAPCD Dust Control Measures), Mitigation Measure H-1 (Prepare and Implement Worker Environmental Awareness Program [WEAP]), Mitigation Measure H-2 (Identify Pesticide/ Herbicide Contamination), and Mitigation Measure HYD-1 (Develop a Stormwater Pollution Prevention Plan and Implement BMPs) would also reduce potential impacts on protected wetlands. With implementation of APM BIO-1, APM BIO-5, and these mitigation measures, impacts to federally protected wetlands from construction and operation of the Proposed Project would be less than significant.

Mitigation Measure for Impacts to Wetlands

MM B-12 Delineate Jurisdictional Wetlands and Waters. Prior to the start of construction, a jurisdictional delineation shall be conducted to describe the type and extent of waters of the United States, including wetlands, and/or waters of the State within the proposed impact area. The presence or absence of wetlands shall be verified through an analysis of any hydrological conditions, hydrophytic vegetation, and hydric soils pursuant to the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE, 2008). SCE shall provide copies of delineation reports to the CPUC.

Prior to any impacts to jurisdictional areas, permits/agreements from the USACE, the CDFW, and the RWQCB shall be obtained for direct and indirect impacts to areas within these agencies' jurisdictions. SCE would implement all measures required by the permits/ agreements as issued by the resource agencies, potentially including constraints on proposed activities and restoration of disturbed jurisdictional areas and/or replacement as determined by the resource agencies. Copies of permits issued shall be provided to the CPUC.

d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of wildlife nursery sites?

LESS THAN SIGNIFICANT. Although no specific wildlife corridors have been mapped near the Proposed Project, natural open space and low-density development in the project study area is contiguous with offsite habitats to the north and south. Open space contiguous with the Proposed Project provides opportunities for movement of mammals with large home ranges, such as mule deer, bobcat, mountain lion, and pronghorn antelope. Moreover, the Tehachapi Mountains are recognized as an important wildlife connectivity area that links the Sierra Nevada to the north and the Sierra Madre to the west (Beier et al., 2006; Penrod et al., 2006; Block et al., 1992).

The proposed Banducci Substation site is on agricultural land and is surrounded by similar land in every direction. Agricultural land contains limited native vegetation that would be suitable for native or migratory species in the substation area. Construction and operation of the proposed Banducci Substation would not interfere substantially with migratory wildlife, established wildlife corridors, or native wildlife nursery sites. Therefore, construction and operation of the proposed Banducci Substation would have a less than significant impact on wildlife movement, and no mitigation is required.

The proposed 66 kV subtransmission line routes and the Proposed Telecommunications Routes 1 and 2 would not obstruct or impede wildlife movement and would therefore not interfere substantially with migratory wildlife, established wildlife corridors, or native wildlife nursery sites. Construction activities could interfere with wildlife movement within the project corridor; however, these impacts would be temporary and would not interfere with biological connectivity or impede access to nursery sites. Therefore, construction and operation of the proposed 66 kV subtransmission line routes and the proposed telecommunications routes would have a less than significant impact on wildlife movement, and no mitigation is required.

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED. The Kern County General Plan includes policies regarding the conservation and protection of oak trees and oak woodlands. See Regulatory Background in Subsection 5.4.1.

Construction and operation of the proposed Banducci Substation would not conflict with any local policies or ordinances protecting biological resources. Additionally, the proposed Banducci Substation site contains no native trees; therefore, construction and operation of the proposed Banducci Substation site would not conflict with any tree preservation policies or ordinances.

Construction and operation of the proposed 66 kV subtransmission line routes would not conflict with any local policies or ordinances protecting biological resources. Additionally, the Proposed 66 kV subtransmission line routes contain no native trees; therefore, construction and operation of this portion of the Proposed Project would not conflict with any tree preservation policies or ordinances.

Although located on road shoulders in non-native grassland, disturbed, and agricultural areas with limited native vegetation, several oak trees occur within the Proposed Telecommunications Route 2 on West Valley Boulevard west of the Tehachapi city limits and on Proposed Telecommunications Route 1 within the California Correctional Institution property. Construction and operation of the Project may impact these oak trees.

In APM BIO-1 (Pre-construction Surveys and Construction Monitoring), the applicant commits to biological monitoring of construction activities in areas with special-status species, native vegetation, wildlife habitat, or unique resources to ensure such resources are avoided. APM BIO-5 specifies that SCE would minimize impacts and permanent loss of Big Sagebrush Scrub, oak woodlands, and aquatic features at construction sites by flagging native vegetation to be avoided.

APMs alone would not reduce potential conflicts with local ordinances to a less-than-significant level because they do not address tree trimming and removal or ensure compliance with local tree protection ordinances. In addition, Mitigation Measure H-1 (Prepare and Implement Worker Environmental Awareness Program [WEAP]), Mitigation Measure B-1 (Perform Biological Resource Surveys), and Mitigation Measure B-13 (Identify Trees Affected by Project) are required. With implementation of APM BIO-1, APM BIO-5, and these mitigation measures, conflicts with local ordinances from construction and operation of the Proposed Project would be less than significant.

Mitigation Measure for Conflicts with Local Policies or Ordinances Protecting Trees

MM B-13 Identify Trees Affected by Project. Prior to construction, SCE shall identify any trees covered by tree protection local policies or ordinances that may be affected by construction of the Proposed Project and consult with applicable jurisdictional agencies prior to any tree alteration, removal, or other impacts. Impacts include trimming or removal of the tree; any construction activities within the dripline of the tree; any trenching or excavation that may damage tree roots, and any other project-related activities that may cause damage to the tree or as specified by local policies or ordinances protecting trees.

If operation of the Proposed Project requires tree trimming to the extent that would require a tree alteration or removal permit as a requirement of a local policy or ordinance protecting trees, SCE shall consult with the local agency and a local agency certified arborist consistent with CPUC General Order No. 131 D.

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or State habitat conservation plan?

NO IMPACT. The proposed Banducci Substation, 66 kV subtransmission line routes, and Telecommunications Routes would not be located within an adopted HCP, NCCP, or other approved local, regional, or State HCP area. No conflicts with such plans are anticipated. The eastern portion of the study area is within the area covered by the Desert Renewable Energy Conservation Plan (DRECP). However, the DRECP has not yet been approved and no estimated date of approval is available (DRECP, 2012). This page intentionally blank.



SCE Banducci Substation Project INITIAL STUDY

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SCE Banducci Substation Project INITIAL STUDY

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