3.9 Land Use

3.9.1 Introduction

This section provides information related to land use within and adjacent to the proposed Project and its alternatives. It includes a summary of the methods used for data collection, review, mapping and analysis, identification of the Land Use Study Area and its three regions, a description of the Land Use Study Area at regional scale, and more detailed descriptions of land use related information for the proposed Project and its alternatives. Although this section identifies agricultural, wilderness, open space and recreational uses, as well as proposed and existing Habitat Conservation Plans (HCPs), Significant Ecological Areas (SEAs), and Natural Community Conservation Plans (NCCPs), it does not provide detailed descriptions of these plans and areas. A detailed analysis of agricultural uses can be found in Section 3.2 (Agricultural Resources), and a detailed analysis of wilderness and recreational resources and uses can be found in Section 3.15 (Wilderness and Recreation). Information and analysis related to SEAs, HCPs and NCCPs can be found in Section 3.4 (Biological Resources). Sensitive receptors, including schools, churches and other religious establishments, hospitals and nursing homes, and cemeteries are addressed in Sections 3.3 (Air Quality) and 3.10 (Noise).

Scoping Issues Addressed

A series of scoping meetings were conducted with the public and government agencies during the scoping period for the EIR/EIS (August through October 2007) to gather information on issues and concerns related to SCE's proposed Project. In addition, written comments were sent by agencies and the public identifying issues and concerns. All of this input is summarized in the Scoping Report and Comment Analysis published by the CPUC and USDA Forest Service in November 2007. Relevant issues raised during the scoping process are summarized below.

- The proposed Project has the potential to be inconsistent with policies, goals, objectives and guidelines of adopted land use and resource management plans.
- Placement of new or expanded transmission lines in Chino Hills State Park would conflict with park-wide goals and guidelines for managing park-wide natural resources, interpretation, visitor uses, and development.
- SCE's exercise of its existing easement rights in Pasadena has damaged property and reduced the usable life and safety of the easement.
- The proposed Project could be inconsitent with local zoning ordinances and design standards, including those related to transmission tower heights.
- The proposed Project's existing ROW is accessed for unauthorized uses such as off-road vehicles and dirtbikes. SCE needs to monitor and post private property signs on the access roads to their transmission line towers to prevent trespassing.
- The proposed Prjoect would conflict with, or otherwise impede future development projects.
- Acquisition of additional ROWs require review and approval of the County of Los Angeles Department of Public Works. SCE should obtain permits for any work within the County of Los Angeles easements.

Summary and Comparison of Alternatives

Table 3.9-1 on the following page presents some key factors related to land use for each alternative. It is important to note that the "Environmental Issues" indicated in Table 3.9-1 are not necessarily impact statements, but rather selected information items that provide a comparison between the alternatives.

Table 3.9-1. Summary Comparison of Environmental Issues/Impacts – Land Use

Environmental Issues	Alternative 1 (No Project/Action)	Alternative 2 (SCE's Proposed Project)	Alternative 3 (West Lancaster)	Alternative 4 (Chino Hills)	Alternative 5 (Partial Underground)	Alternative 6 (Max. Heli. Construction in ANF)	Alternative 7 (66-kV Subtransmission)
Residential land uses would be temporarily disrupted, displaced or precluded by construction.	Potential projects would likely traverse the same geographic regions as either the proposed Project or Alternatives 3 through 7, and subsequently introduce similar types of impacts.	No residential land uses would be temporarily or permanently displaced. In comparison to Alt.3, a slightly greater number of residential land uses would be temporarily disturbed or disrupted by construction.	The number of residential land uses disturbed or disrupted by construction would be slightly reduced in the North Region compared to Alternative 2.	The greatest reduction of temporary disturbances to residential land uses during construction.	Slightly reduced temporary disturbances to residential land uses during construction along the underground portion of the alignment, except at transition stations where construction-related disturbances would increase.	Increased temporary disruptions to residential land uses within private in-holdings in the ANF Outside of the ANF, temporary impacts to residential land uses would be the same as Alternative 2.	Same as Alternative 2.
Residential land uses would be permanently disrupted, displaced or precluded by operation and maintenance (O&M).	Same as above.	No residential land uses would be permanently displaced or precluded by O&M.	Slightly reduced number of residential land uses disturbed by O&M in the North Region compared to Alternative 2.	The greatest reduction of long-term disturbances to residential land uses due to O&M.	Same as Alternative 2.	Same as Alternative 2.	Same as Alternative 2.
Non-residential land uses would be temporarily disrupted, displaced or precluded by construction.	Same as above.	Non-residential land uses would be temporarily disrupted, displaced or precluded by construction, particularly in the South Region along Segments 7, 11, and 8.	Same as Alternative 2.	Same as Alternative 2 except along Segment 8, where no impacts to existing non-residential land uses along a portion of Segment 8A (16 miles) and all of Segments 8B (6.8 miles) and 8C (6.4 miles) would occur. Temporary disruption, displacement and preclusion of non-residential land uses within CHSP.	Same as Alternative 2 except along Segment 8A between MP 21.9 and MP 25.8. At S8A MP 25.8 construction would result in the permanent displacement (removal) of commercial land uses.	Increased temporary disruptions to non-residential land uses within the ANF. Additional coordination required with the FAA and L.A. County Sherriff's Department related to the use of helicopters in the ANF. Outside of the ANF, temporary impacts to non-residential land uses would be the same as Alternative 2.	Same as Alternative 2 except along Peck Rd. and Durfee Ave. (adjacent to Segment 7 between MPs 11.5 and 12.1) and through the Duck Farm Project area, where construction-related activities would be intensified.

Table 3.9-1. Summary Comparison of Environmental Issues/Impacts – Land Use

Environmental Issues	Alternative 1 (No Project/Action)	Alternative 2 (SCE's Proposed Project)	Alternative 3 (West Lancaster)	Alternative 4 (Chino Hills)	Alternative 5 (Partial Underground)	Alternative 6 (Max. Heli. Construction in ANF)	Alternative 7 (66-kV Subtransmission)
Non-residential land uses would be permanently disrupted, displaced or precluded by operation and maintenance (O&M).	Same as above.	No non-residential land uses would be permanently displaced or precluded by O&M.	Same as Alternative 2.	Same as Alternative 2 except along Segment 8, where no impacts to existing non-residential land uses along a portion of Segment 8A (16 miles) and all of Segments 8B (6.8 miles) and 8C (6.4 miles) would occur. Would result in the long-term disruption, displacement and preclusion of non-residential land uses within CHSP.	Same as Alternative 2 except along Segment 8A between MP 21.9 and MP 25.8. At MP 25.8, O&M would result in the permanent displacement (removal) of commercial land uses.	Same as Alternative 4; however, on-going coordination with the FAA and Los Angeles County Sheriff's Department required to ensure that no conflicts related to the use of O&M helicopters in the ANF.	Same Alternative 2.
Construction, operation or maintenance would conflict with applicable federal, State or local land use plans, goals, or policies.	Same as above.	No conflicts with any applicable federal, State or local land use plans, goals, or policies.	Same as Alternative 2.	Same as Alternative 2 except within CHSP. Construction and O&M would conflict with the CHSP General Plan.	Same as Alternative 2.	Same as Alternative 2; however, additional agency coordination would be necessary related to the increased level of helicopter construction within the ANF.	Same as Alternative 2.

Table 3.9-2. Existing Land Use Classification Scheme*

Land Use	Land Use Categories
Residential	- Single Family Residential (High-Density Single Family Residential, Low-Density Single Family Residential, Multi-Family Residential, Mixed Multi-Family Residential, Duplexes, Triplexes and 2-or 3-Unit Condominiums and Townhouses, Low-Rise Apartments, Condominiums, and Townhouses, Medium-Rise Apartments and Condominiums, High-Rise Apartments and Condominiums) - Mobile Homes and Trailer Parks (Trailer Parks and Mobile Home Courts, High-Density, Mobile Home Courts and Subdivisions, Low-Density) - Mixed Residential - Rural Residential (High-Density, Low-Density)
Commercial and Services	- General Office Use (Low- and Medium-Rise Major Office Use, High-Rise Major Office Use, Skyscrapers) - Retail Stores and Commercial Services(Regional Shopping Center (Retail Centers [Non-Strip With Contiguous Interconnected Off-Street Parking], Modern Strip Development, Older Strip Development) - Other Commercial (Commercial Storage, Commercial Recreation, Hotels and Motels, Attended Pay Public Parking Facilities)
Public and Special Use Facilities	- Public Facilities (Government Offices, Police and Sheriff Stations, Fire Stations, Major Medical Health Care Facilities, Religious Facilities, Cemeteries, Other Public Facilities, Non-Attended Public Parking Facilities - Special Use Facilities (Correctional Facilities, Special Care Facilities, Other Special Use Facilities)
Educational Facilities	- Pre-Schools/Day Care Centers, Elementary Schools, Junior or Intermediate High Schools, Senior High Schools, Colleges and Universities, Trade Schools and Professional Training Facilities
Military Installations	- Base (Built-up Area), Vacant Area, Air Field, Former Base (Built-up Area), Former Base Vacant Area, Former Base Air Field
Industrial	- Light Industrial (Manufacturing, Assembly, and Industrial Services, Motion Picture and Television Studio Lots, Packing Houses and Grain Elevators, Research and Development) - Heavy Industrial (Manufacturing, Petroleum Refining and Processing, Open Storage, Major Metal Processing, Chemical Processing) - Extraction (Mineral Extraction - Other Than Oil and Gas, Mineral Extraction - Oil and Gas) - Wholesaling and Warehousing
Transportation-Communications-Utilities	- Transportation (Airports, Railroads, Freeways and Major Roads, Park-and-Ride Lots, Bus Terminals and Yards, Truck Terminals, Harbor Facilities, Navigation Aids) - Communication Facilities - Utilities (Solid Waste Disposal Facilities, Liquid Waste Disposal Facilities, Water Storage Facilities, Natural Gas and Petroleum Facilities, Water Transfer Facilities, Improved Flood Waterways and Structures, Mixed Utilities) - Maintenance Yards - Mixed Transportation - Mixed Transportation and Utility
Electrical Power Facilities	- Electrical Transmission Lines
Mixed Uses	- Mixed Commercial and Industrial - Mixed Urban - Under Construction

Table 3.9-2. Existing Land Use Classification Scheme*

Land Use	Land Use Categories
Open Space/Recreation	- Private and Public Golf Courses - Local Parks and Recreation (Developed and Undeveloped) - Regional Parks and Recreation (Developed and Undeveloped) - Wildlife Preserves and Sanctuaries - Specimen Gardens and Arboreta - Beach Parks - Other Open Space and Recreation
Agriculture	- Cropland and Improved Pasture Land (Irrigated and Non-Irrigated) - Orchards and Vineyards - Nurseries – Commercial and Retail - Dairy, Intensive Livestock, and Associated Facilities - Poultry Operations - Other Agriculture - Horse Ranches
Open Space/Undeveloped	- Vacant Undifferentiated, Abandoned Orchards and Vineyards, Vacant With Limited Improvements, Beaches (Vacant)
Water	- Water (Undifferentiated) - Harbor Water Facilities - Marina Water Facilities - Water Within a Military Installation - Area of Inundation (High Water)

* For the purposes of a consistent existing land use mapping classification scheme of the North, Central and Southern Regions, the majority of NFS lands have been assigned Open Space/Undeveloped or Open Space/Recreation. However, it is noted that the SCAG existing land use data used for the mapping does not apply to lands under federal jurisdiction and management.

Specific impact statements that have been identified for the Project and alternatives, in accordance with the significance criteria introduced in Section 3.9.4.1 (Criteria for Determining Impact Significance) are described in Sections 3.9.5 through 3.9.11.

3.9.2 Affected Environment

The identification of existing land uses was based upon a consolidation of the classification scheme used by the Southern California Association of Governments (SCAG) for its mapping of existing land uses. Use of the SCAG General Plan land use designation data ensures a consistent classification scheme across all of the various jurisdictions potentially affected by the proposed Project. Table 3.9-2 provides a summary of the existing land use classification scheme used for this analysis. Following establishment of the classification scheme, existing land use GIS data was mapped to a distance of one-half mile of either side of the proposed Project's Right-of-Way (ROW), as well as the ROWs of the alternatives. Identified land uses were subsequently verified through review of recent aerial photographs and published maps (SCE, 2007b; SCE 2007c; DeLorme Mapping Company, 2006; Rand McNally, 2007a and 2007b; Google Earth, 2007 and 2008), as well as field reconnaissance conducted on July 12 and 13, and December 11 and 20 of 2007 (Aspen Environmental Group, 2007).

Because the SCAG's existing land use data did not include information related to Kern County, the identification of existing land uses in this area was based upon GIS data provided by Kern County (Kern County, 2007), and subsequently verified through analysis of recent aerial photographs and published maps as outlined in the above paragraph, as well as field reconnaissance (Aspen Environmental Group, 2007).

Within the ANF, the SCAG GIS data for both existing land uses and General Plan land use designations do not apply because NFS lands fall under federal jurisdiction and management. Consequently, existing land uses were identified through review of the USDA Forest Service Land Management Plan for the Angeles, Cleveland, Los Padres and San Bernardino National Forests (USDA Forest Service, 2005a), the Angeles National Forest Atlas (USDA Forest Service, 2005b), analysis of recent aerial photographs (SCE, 2007b; SCE 2007c; Google Earth, 2007 and 2008), discussions with ANF USDA Forest Service personnel, and field reconnaissance (Aspen Environmental Group, 2007).

General Plan land use designation maps were additionally obtained from Kern County and mapped to a distance of one-half mile of either side of the proposed Project's ROW and the ROWs of its alternatives (Kern County, 2007). Table 3.9-3 provides a summary of the General Plan land use designations used for Kern, Los Angeles, San Bernardino, Orange and Riverside Counties.

For the proposed Project's routing alternatives (Alternatives 3 and 4), the Antelope Valley Areawide General Plan was used for General Plan land use designations associated with Alternative 3 (Los Angeles County Regional Planning Department, 1986). For Alternative 4, the General Plan land use designation maps for Orange County, the City of Brea and the City Chino Hills were obtained (Orange County, 2005; City of Brea, 2003; City of Chino Hills, 2006), as were the land use zones contained in the Chino Hills State Park General Plan (California Department of Parks and Recreation, 1999). Existing land uses within one-half mile of these alternative ROWs were obtained from field reconnaissance and review of recent aerial photographs and published maps (Aspen Environmental Group, 2007; DeLorme Mapping Company, 2006; Rand McNally, 2007a and 2007b; Google Earth, 2007 and 2008).

Table 3.9-3. Summary of General Plan Land Use Designations

Los Angeles, San Bernardino, Orange and Riverside Counties		Kern County
Regional Retail	Other Institutions[4]	General Commercial
Retail/Services	Agriculture	Residential[9]
General Commercial	Open Not Developable[5]	Public or Private Recreation Areas
Miscellaneous Commercial[1]	Parks/Recreation[6]	Educational Facilities
Light Industry	Urban Mixed Categories	Other Facilities
Heavy Industry	General Industrial	Light Industrial/Comprehensive Plan Area
Miscellaneous Industry[2]	Residential	Heavy Industrial
K-12 Schools	No Data Available	Intensive Agriculture (Minimum 20 Acre Parcel Size)
Colleges/Junior Colleges	Unknown[7]	Extensive Agriculture (Minimum 20 Acre Parcel Size)
Transportation Categories	Military	Mineral and Petroleum (Minimum 5 Acre Parcel Size)
Utilities[3]	Offices[8]	Resource Management (Minimum 20 Acre Parcel Size)

Table Notes:

[1] Includes Recreational and Sports Complexes and RV Facilities

[2] Includes Extraction and Landfills

[3] Includes Sewage Treatments, Energy Facilities, Recycling

[4] Includes Government Facilities, Churches, Cemeteries, Etc.

[5] Includes Conservation, Flood Control and Lakes

[6] Includes Golf Course Categories and Open Space

[7] Includes Railroad/Highway oriented development

[8] Includes Professional, Commercial, Business Parks and Local Offices

[9] Includes all Residential Categories (Maximum Residential 10 Units/Net Acre/Comprehensive Plan Area; Maximum Residential 1 Unit/Net Acre; Minimum Residential 2.5 Gross Acres/Unit; Minimum Residential 5 Gross Acres/Unit; Minimum Residential 10 Gross Acres/Unit; Minimum Residential 20 Gross Acres/Unit

In addition to the above, adopted General Plans and related land use management and planning documents of the jurisdictions affected by the proposed Project and its alternatives were collected and reviewed for consistency. All of the plans evaluated are contained in the proposed Project's Policy Consistency Report (Aspen Environmental Group, 2008). Applicable goals, policies, programs and objectives associated with HCPs and NCCPs and SEA-specific Management Plans are evaluated in Section 3.4 (Biological Resources).

Airports and airstrips in the vicinity of the proposed Project and its alternatives were also identified from information provided in the PEA and review of published maps and recent aerial photography (SCE, 2007b; SCE 2007c; DeLorme Mapping Company, 2006; Rand McNally, 2007a and 2007b; Google Earth, 2007 and 2008).

3.9.2.1 Regional Setting

For the purposes of this analysis, the Land Use Study Area includes three regions, as follows:

- **North Region:** The North Region extends from the Windhub Substation (MP (for milepost) 0.0 of the proposed Project's Segment 10) to the Vincent Substation (MP 17.8 of the proposed Project's Segment 5). The North Region includes the proposed Project's Segments 4, 5 and 10 and traverses parts of southern Kern County and northern Los Angeles County, as well as the incorporated cities of Lancaster and Palmdale. The approved Windhub, proposed Cottonwood[1] and Whirlwind[2], and existing Antelope Substation are contained within the North Region.
- **Central Region:** The Central Region is located between the Vincent Substation and the southern boundary of the Angeles National Forest (ANF) (MP 24.5 of the proposed Project's Segment 11 and MP 26.9 of the proposed Project's Segment 6). The majority of the Central Region falls within the jurisdictional boundaries of the ANF and includes all of the proposed Project's Segment 6 and approximately 70 percent of Segment

[1] The proposed Cottonwood Substation is currently undergoing environmental review and approval under a separate action and is not proposed for development as part of Tehachapi Renewable Transmission Project.

[2] Development of the proposed Whirlwind Substation is part of the Tehachapi Renewable Transmission Project.

11. The existing Vincent and Gould Substations are located outside of the ANF's jurisdictional boundaries, but are part of the Central Region.

- **South Region:** The South Region extends from the southern boundary of the ANF (MPs 0.0 and 24.5 of the proposed Project's Segments 7 and 11, respectively) to the Mira Loma Substation (MPs 35.2, 6.8 and 6.4 of the proposed Project's Segments 8A, 8B and 8C, respectively). The South Region includes the existing Goodrich, Rio Hondo, Mesa, Chino and Mira Loma Substations, and traverses lands within Los Angeles County, as well as several incorporated cities within San Bernardino County.

Figure 3.9-1 at the end of Section 3.9, provides a map of the three regions outlined above.

The proposed Project and its alternatives extend from the approved Windhub Substation, which is to be located approximately 11 miles southeast of Tehachapi in Kern County to the existing Mira Loma Substation, which is located along the eastern boundary of the City of Ontario in San Bernardino County. At a regional scale, the Land Use Study Area includes portions of Kern County, the ANF, and incorporated and unincorporated areas of Los Angeles and San Bernardino Counties. Additionally, a portion of Riverside County is located within one-half mile of the Mira Loma Substation, and Alternative 4 would traverse a portion of Orange County.

North Region

The North Region, as defined above, includes portions of southern Kern County and northern Los Angeles County. The predominant existing land uses located within the North Region include large expanses of undeveloped open space, agriculture and residential development. There are also several large tracts of undeveloped land which are planned for future development within this region. The cities of Palmdale and Lancaster, located in northern Los Angeles County, are both rapidly developing urban areas that include large tracts of residential development, as well as other uses such as commercial, business and industrial development.

General Plan land use designations of the North Region in Kern County are predominately Intensive and Extensive Agriculture, Resource Management, and Residential. In northern Los Angeles County, the predominant General Plan land use designations include Agriculture, Residential, and Urban Mixed Categories.

Lands in the North Region fall under the planning, management and jurisdictional authority of multiple federal, State and local agencies, including the U.S. Department of the Interior's Bureau of Land Management (BLM); California State Lands Commission (CSLC); California State Department of Parks and Recreation; Kern County; Los Angeles County; City of Palmdale; and City of Lancaster. Additionally, the northern portion of the ANF is located within the North Region. There are also several airports in the North Region which are subject to the regulations of the Federal Aviation Administration (FAA) and County-specific Airport Land Use Compatibility Plans.

The North Region also contains several existing and proposed ecological preserves and SEAs, and falls within the boundaries of the West Mojave Desert Plan, a HCP which has been incorporated into the BLM's California Desert Conservation Area Plan.

Central Region

The Central Region is primarily located within the ANF, the majority of which is made-up of undeveloped lands used for recreation and natural resource management. Additional uses of the ANF include rural residential, commodity and commercial uses (non-recreation special uses such as the infrastructure required to provide water, energy, communications and transportation and other needs, mineral and non-renewable exploration and development, and timber production and grazing), and fire

management (Forest Service, 2005). Within the ANF there are also some parcels of privately held land which do not fall under the jurisdiction of the Forest Service.

Suitable land uses within the ANF have been established through eight land use zones. These zones include: Developed Area Interface (DAI); Back Country (BC); Back Country Motor Use Restricted (BCMUR); Back Country Non-Motorized (BCNM); Critical Biological (CB); Existing Wilderness (EW); Recommended Wilderness (RW); and, Experimental Forest (EF) (Forest Service, 2005). Table 3.9-4 provides a summary of the land use zones within the ANF. Figure 3.9-2 at the end for Section 3.9 provides a map of these land use zones within the ANF.

There is also a set of special designation overlays which identify suitable land uses within each land use zone of the ANF. These special designation overlays are summarized in Table 3.9-5.

Inventoried Roadless Areas (IRAs) are undeveloped areas on NFS lands that are inventoried as lacking authorized roadways as determined through the USDA Forest Service's Roadless Area Review and Evaluation (RAREII) process. IRAs may include trails suitable for hiking and equestrian use, but do not include NFS authorized roads that would accommodate either full-sized vehicles (including high-clearance and passenger vehicles) or Off-Highway Vehicles (OHVs). IRAs are intended to protect: areas for their natural or wilderness qualities; self-contained ecosystems; and, undeveloped areas adjacent to existing Wilderness Areas As (USDA Forest Service, 2005d). Figure 3.9-2 provides a map of the designated IRAs that are located within the southern portion of the ANF.

Some designated IRAs qualify as Wilderness Areas. The Wilderness Area evaluation of an IRA is based on three primary criteria: capability; availability; and, need. "Capability" refers to the degree to which a Roadless Area contains the basic characteristics of a Wilderness Area, such as special features and recreation opportunities. "Availability" is reflective of other potential resource uses for the roadless area which could be more valuable than a "wilderness" designation for the same area. "Need" is based on a comparison of existing Wilderness Areas and their proximity to the Roadless Area under consideration (USDA Forest Service, 2005d). Section 3.9.2.2 (Alternative 2: SCE's Proposed Project) provides a summary of those IRAs which are located within one-half mile of the proposed Project and their associated Wilderness Area evaluation criteria.

In addition to the above, the ANF has been divided into a set of 11 geographical units called "Places." Each Place has a theme, setting, desired condition and management program emphasis. Of these 11 Places, eight are located within the southern portion of the ANF. Figure 3.9-2 provides a map of these 11 Places, and Table 3.9-9 of Section 3.9.2.2 provides a summary description of those Places crossed by, or within one-half mile, of the proposed Project.

South Region

The South Region extends from the southern boundary of the ANF to the existing Mira Loma Substation, as illustrated in Figure 3.9-1. The majority of this region is made up of a complex mix of land uses ranging from agricultural and undeveloped open space areas to intensively developed residential, commercial and industrial uses. In addition, the South Region contains numerous tracts of land planned for future development or redevelopment.

Table 3.9-4. Land Use Zones Within the ANF

Land Use Zone	Total Acreage of Land Within the ANF	Percentage of Land Within the ANF	Land Use Zone Descriptions
Developed Area Interface (DAI)	85,828	13	The DAI zone includes areas adjacent to communities or concentrated developed areas with more scattered or isolated community infrastructure. The level of human use and infrastructure is typically higher than in other zones. This zone may have a broad range of higher intensity uses; however, the management intent is to limit development to a slow increase of carefully designed facilities to help direct use into the most suitable areas and improving existing facilities before developing new ones.
Back Country (BC)	161,392	24	The BC zone includes areas that are generally undeveloped with few roads. The level of human use and infrastructure is low. Most of the ANF's remote recreational and administrative facilities are found in this zone. Although the BC zone generally allows for a broad range of uses, its management intent is to retain its natural character and limit the level and type of development. Additionally, it is anticipated that this zone will be managed for no increase, or a very low level of increase, in its road system.
Back Country Motorized Use Restricted (BCMUR)	52,791	8	The BCMUR zone includes areas of the ANF that are generally undeveloped with few roads. Few facilities are found in this zone, but some may occur in remote locations. The level of human use and infrastructure is low to moderate. Although this zone allows a range of low intensity land uses, its management intent is to retain its natural character and limit the level and type of development. Some roads may be constructed and maintained, but the intent is to manage the zone for no increase, or a very low level of increase, in its road system.
Back Country Non-Motorized (BCNM)	248,399	37	The BCNM zone generally includes areas of the ANF that are undeveloped with few, if any roads. Developed facilities supporting dispersed recreation activities are minimal and generally limited to trails and signage. The level of human use and infrastructure is low. While a range of non-motorized public uses are generally allowed, the management intent of this zone is to retain its undeveloped character and limit development to a low level of increase. Facility construction (except trails) is generally not allowed, but may occur in remote locations where roaded access is not needed for maintenance.
Critical Biological (CB)	3,920	< 1	The CB zone includes the most important areas in the ANF for the protection of species-at-risk. Facilities are minimal to discourage human use. The level of human use and infrastructure is low to moderate. The management intent of this zone is to retain its natural character and habitat characteristics and limit the level of human development. Activities and modifications to existing infrastructure are allowed if they are beneficial or neutral to the species for which the zone is primarily managed. Human uses are more restricted in this zone than in BCNM zone in order to protect species needs, but are not excluded. Low impact uses, such as hiking, mountain biking and hunting are generally allowed. Road density will not be increased.
Existing Wilderness (EW)	81,924	12	The EW zone includes Congressionally designated wildernesses. Only uses consistent with all applicable wilderness legislation and the zone's primitive character are allowed. Road access is limited. The management intent of this zone is focused on public use and enjoyment while preserving its wilderness character and natural conditions.
Recommended Wilderness (RW)	13,231	2	The RW zone includes lands which are recommended to Congress for wilderness designation. These lands are managed in the same manner as EW zone. If RW lands are not designated as wilderness by Congress, they are zoned BCNM until modified by a subsequent amendment to the Forest Service Land Management Plan. No inventoried roads are found in the RW zone.
Experimental Forest (EF)	15,498	2	The EF zone provides for research and demonstration areas. The EF zone is generally closed to the public except by permit. Within the ANF, only the San Dimas Experimental Forest is zoned EF.

Source: USDA Forest Service, 2005.

Table 3.9-5. Special Designation Overlays Within the Angeles National Forest	
Special Designation Overlay	Description
Wild and Scenic Rivers	This special designation overlay identifies river and river segments that have been designated as Wild, Scenic and Recreational. Land uses within these designated river corridors must comply with USDA Forest Service Handbook 1909.12, Chapter 8.2. Eligible Wild and Scenic river corridors within the ANF include Little Rock Creek, Piru, San Antonio Canyon Creek, San Francisquito Canyon and the San Gabriel River (East, West and North Forks).
Inventoried Roadless Areas	This special designation overlay identifies those portions of the ANF where either: (1) no road construction or reconstruction is allowed and the area been recommended or is designated Wilderness; (2) no road construction or reconstruction is allowed and the area has not been recommended or is not designated Wilderness; (3) road construction or reconstruction is allowed. Figure 3.9-2 provides a map of the ANF's inventoried roadless areas.
Research Natural Areas	This special designation overlay identifies relatively undisturbed, pristine areas of the ANF that form a long-term network of ecological reserves designated for research, education, and the maintenance of biodiversity. Established Research Natural Areas within the ANF include Falls Canyon and Fern Canyon.
Special Interest Areas	This special designation overlay identifies areas that protect and foster public use and enjoyment of their respective scenic, historical, geological, botanical, zoological, paleontological and other special attributes. Special Interest Areas within the ANF include Devil's Punchbowl, Mt. Baden-Powell, Mt. San Antonio, Aliso-Arrastre Middle and North, and Liebre Mountain.
Other Designations	This special designation overlay identifies areas of the ANF that have been designated for a specific use, including communication sites, utility corridors, transportation corridors, recreation residential tracts, shooting areas, and sediment disposal sites. There are 12 designated utility corridors within the ANF, including: Interstate 5 (Tejon Pass); Old Ridge Route; Saugus/Mesa; Saugus Del Sur; Ranaldi Department of Water and Power; Gorge Ranaldi; BPL; Vincent Gould; Vincent Rio Hondo; 3-P Line; Midway Vincent; and, Vincent Pardee.

Source: USDA Forest Service, 2005a.

The South Region falls within Los Angeles and San Bernardino Counties and is in close proximity to northern Orange County and eastern Riverside County. Within Los Angeles County, there are 33 incorporated cities located south of the ANF boundary, east of the Mesa Substation, north of Orange County boundary and State Route 72, and west of the San Bernardino County boundary. There are also six incorporated cities in southwest San Bernardino County, west of Interstate 15. Within Orange County, the City of Brea is located within the Land Use Study Area. Table 3.9-6, below, lists the incorporated cities of the South Region.

Table 3.9-6. Incorporated Cities of the South Region		
Los Angeles County		
Alhambra	Irwindale	Montebello
Arcadia	La Cañada Flintridge	Monterey Park
Azusa	La Habre Heights	Pasadena
Baldwin Park	La Puente	Pico Rivera
Bradbury	La Verne	Pomona
City of Industry	Monrovia	Rosemead
Claremont	South Pasadena	San Dimas
Covina	Temple City	San Gabriel
Diamond Bar	Walnut	San Marino
El Monte	West Covina	Sierra Madre
Glendora	Whittier	South El Monte
San Bernardino County		
Chino	Ontario	
Chino Hills	Rancho Cucamonga	
Montclair	Upland	
Orange County		
City of Brea		

Source: Los Angeles Almanac, 2007; County of San Bernardino, 2007

In addition to the above, lands within the South Region fall under the jurisdictional authority of several federal and State agencies, including, the U.S. Department of Defense (DoD), the BLM, the U.S. Army Corps of Engineers, the California State Department of Parks and Recreation, and the CSLC. There are also several public and private airports and heliports in the South Region which are subject to the regulations of the FAA and County-specific Airport Land Use Compatibility Plans.

General Plan land use designations in the South Region vary widely. Throughout this region there are both large and small tracts of land designated residential, punctuated by all of the other land use designations outlined in Table 3.9-3. The majority of lands located along major local streets and highways are designated for retail/services, general and miscellaneous commercial, industrial, office and mixed urban uses. Parallel to the boundary between Los Angeles and Orange Counties there are also large tracts of lands designated open not developable, consistent with several SEAs located in this area. As with Los Angeles County, in San Bernardino County there is a similar pattern of highly mixed land use designations with large tracts of lands designated for residential use, and variable patterns of non-residential land use designations located along major transportation corridors and in the centers of incorporated cities and other unincorporated urban areas.

3.9.2.2 Alternative 2: SCE's Proposed Project

The proposed Project ROW extends from the approved Windhub Substation, located in Kern County, to the existing Mira Loma Substation, located in the City of Ontario, San Bernardino County. The following description of land uses within one-half mile of the proposed Project's ROW has been divided into the three regions defined in Section 3.9.2.1.

North Region

The North Region includes proposed Segments 10, 4 and 5, as well as the approved Windhub Substation, the proposed (under a separate action) Cottonwood Substation, the proposed (as part of the proposed Project) Whirlwind Substation, and the existing Antelope Substation. The North Region falls within the jurisdictional boundaries of Kern and Los Angeles Counties, as well as the cities of Palmdale and Lancaster. Existing land uses and General Plan land use designations in the North Region are provided in Figures 3.9-3 and 3.9-4 of the Tehachapi Renewable Transmission Project Map and Figures Series Volume (TRTP Map and Figure Series Volume) and summarized in Table 3.9-7.

Segment 10 would require the construction of approximately 17 miles of new ROW in Kern County. The ROW width would be 330 feet. Existing land uses within one-half mile of Segment 10 are primarily open space/undeveloped, rural residential and agricultural; mining operations and existing wind energy generation facilities additionally occur in the northern-most portion of Segment 10. General Plan land use designations within one-half mile of Segment 10 include Heavy Industrial, Mineral and Petroleum, Extensive Agriculture, Resource Management, Federal, Residential, Public or Private Recreation Areas, and Educational Facilities. Lloyd's Landing Strip is located approximately 3.8 miles east of MP 11, and several Specific Plans are either crossed by or within one-half mile of the proposed ROW, as outlined in Tables 3.9-7 and 3.9-8. The proposed ROW would additionally be located within the boundaries of the West Mojave Desert Plan, and falls within one-half mile of lands under the jurisdiction of the CSLC.

Table 3.9-7. Land Uses: North Region

Approximate Location‡	Jurisdiction Within ½ Mile of ROW	Jurisdiction Within ROW‡	Existing Land Uses Within ½ Mile of ROW	General Plan Land Use Designations Within ½ Mile of ROW	Additional Land Use Related Information
Segment 10					
S 10 MP 0.0 – MP 7.5	Kern County	Kern County	Open Space/Undeveloped, Energy Generation, Mineral Resources, Residential, Transportation-Communications-Utilities	Heavy Industrial, Mineral and Petroleum, Extensive Agriculture, Resource Management	- Proposed El Paso Line Conversion Project is within ½ mile of, and crossed by the ROW at MP 1.4 - Los Angeles Aqueduct is within ½ mile of the ROW between MP 6.0 and MP 7.5, and crossed by the ROW at MP 6.7 - The Edwards Air Force Base boundary is located approximately 10 miles east of MP 7.0 through MP 7.5 - All portions of Segment 10 are located within the boundaries of the West Mojave Desert Plan
S 10 MP 7.5 – MP 16.8	Kern County	Kern County	Open Space/Undeveloped, Residential, Transportation-Communications-Utilities	Extensive Agriculture, Resource Management, Residential, Public or Private Recreation Areas, Educational Facilities	- Los Angeles Aqueduct is within ½ mile of the ROW between MP 7.5 and MP 9.6 - California State Lands Commission property is within ½ mile of the ROW between MP 9.4 and MP 10.2 - Lloyd's Landing Strip is located approximately 3.8 miles east of MP 11.0 - Willow Springs Specific Plan is within ½ mile of, and crossed by the ROW between MP 11.3 and MP 16.8 - Antelope Valley Water Bank Project is within ½ mile of, and crossed by the ROW between MP 15.8 and 16.8 - The Edwards Air Force Base boundary is located between 10.0 to 16.0 miles east of MP 7.5 through MP 16.8, depending on MP-specific location - All portions of Segment 10 are located within the boundaries of the West Mojave Desert Plan
Segment 4					
S 4 MP 0.0 – MP 3.7	Kern County	Kern County	Open Space/Undeveloped, Residential, Agriculture, Electrical Power Facilities, Transportation-Communications-Utilities	Extensive Agriculture, Resource Management, Residential	- Proposed PdV Wind Energy Project boundary is located within ½ mile of MP 0.0 - The Cottonwood Substation is located at MP 0.0 (currently in environmental review) - Los Angeles Aqueduct within ½ mile of, and crossed by the ROW at MP 2.0 - Willow Springs Specific Plan is within ½ mile of, and crossed by the ROW between MP 2.7 and MP 3.7 - All portions of Segment 4 are located within the boundaries of the West Mojave Desert Plan
S 4 MP 3.7 – MP 6.9	Kern County	Kern County	Open Space/Undeveloped, Residential, Agriculture, Electrical Power Facilities	Residential, Intensive Agriculture, Resource Management, Light Industrial / Comprehensive Plan Area, Public or Private Recreation Areas, General Commercial	- Willow Springs Specific Plan is within ½ mile of, and crossed by the ROW between MP 3.7 and MP 6.9 - Antelope Valley Water Bank Project is within ½ mile of, and crossed by the ROW between MP 4.8 and 6.9 - Skyotee Ranch Airstrip is located approximately 0.9 miles east of MP 6.0 - The Edwards Air Force Base boundary is located approximately 16.0 miles east of MP 3.7 through MP 6.9 - All portions of Segment 4 are located within the boundaries of the West Mojave Desert Plan

Table 3.9-7. Land Uses: North Region

Approximate Location‡	Jurisdiction Within ½ Mile of ROW	Jurisdiction Within ROW‡	Existing Land Uses Within ½ Mile of ROW	General Plan Land Use Designations Within ½ Mile of ROW	Additional Land Use Related Information
Whirlwind Substation (S 4 MP 3.9 – MP 4.3) (S 10 MP 16.1 – MP 16.5)	Kern County	Kern County	Open Space/Undeveloped, Residential, Agriculture, Electrical Power Facilities	Residential, Resource Management, Public or Private Recreation Areas, General Commercial	- The footprint of the substation falls within the Willow Springs Specific Plan - The footprint of the substation is within ½ mile of the Antelope Valley Water Bank Project - The Edwards Air Force Base boundary is located approximately 16.0 miles east of the footprint of the substation - The footprint of the substation is within the boundaries of the West Mojave Desert Plan
S 4 MP 6.9 – MP 17.4	Los Angeles County, City of Lancaster	Los Angeles County	Open Space/Undeveloped, Residential, Agriculture, Transportation-Communications-Utilities, Electrical Power Facilities	Agriculture, Open Not Developable	- ROW enters Los Angeles County at MP 6.9 - A portion of the existing Joshua Tree Woodland Habitat SEA is located within ½ mile of the ROW between MP 9.0 and MP 9.8, and crossed by the ROW between MP 9.1 and MP 9.6 - A portion of the proposed Joshua Tree Woodland Habitat SEA is located within ½ mile of, and crossed by the ROW between MP 8.7 and MP 9.2 - A portion of the existing Fairmont-Antelope Buttes SEA is located within ½ mile of, and crossed by the ROW between MP 10.6 and MP 12.9 - A portion of the existing Antelope Valley California Poppy Reserve is located within ½ mile of the ROW at MP 12.9 - General William J. Fox Airfield is located approximately 4.58 miles east of MP 14.8 - The Edwards Air Force Base boundary is located approximately 16.0 to 13.0 miles east of MP 6.9 through MP 11.5, depending on MP specific location. - A portion of the southwest boundary of the Del Sur Ranch Development Specific Plan is located ½ mile away from the ROW between MP 15.8 and MP 15.9 - All portions of Segment 4 are located within the boundaries of the West Mojave Desert Plan
S 4 MP 17.4 – MP 19.6	City of Lancaster	City of Lancaster	Open Space/Undeveloped, Residential, Agriculture, Electrical Power Facilities	Agriculture, Residential	- Bohunk's Airpark is located approximately 1.1 miles northeast of MP 19.6 - All portions of Segment 4 are located within the boundaries of the West Mojave Desert Plan
Antelope Substation (S 4 MP 19.3 – MP 19.6) (S 5 MP 0.0 – MP 0.4)	City of Lancaster	City of Lancaster	Open Space/Undeveloped, Residential, Agriculture, Electrical Power Facilities	Agriculture, Residential	- The footprint of the substation and its proposed expansion area are within the boundaries of the West Mojave Desert Plan

Table 3.9-7. Land Uses: North Region

Approximate Location‡	Jurisdiction Within ½ Mile of ROW	Jurisdiction Within ROW‡	Existing Land Uses Within ½ Mile of ROW	General Plan Land Use Designations Within ½ Mile of ROW	Additional Land Use Related Information
Segment 5					
S 5 MP 0.0 – MP 3.5	City of Lancaster	City of Lancaster	Open Space/Undeveloped, Residential, Open Space/Recreation, Commercial and Services, Agriculture, Mixed Uses, Electrical Power Facilities	Agriculture, Residential	- All portions of Segment 5 are located within the boundaries of the West Mojave Desert Plan
S 5 MP 3.5 – MP 11.1	City of Palmdale, Los Angeles County	- City of Palmdale (MP 3.5 – MP 5.8) - Los Angeles County (MP 5.8 – MP 7.4) - City of Palmdale (MP 7.4 – MP 11.1)	Open Space/Undeveloped, Residential, Agriculture, Mixed Uses, Industrial, Transportation-Communications-Utilities, Electrical Power Facilities	Residential, Agriculture, Open Not Developable, Other Institutions, Miscellaneous Industry, Urban Mixed Categories	- Los Angeles Aqueduct is within ½ mile of the ROW between MP 3.5 and MP 5.2, and crossed by the ROW at MP 4.4 - Palmdale Regional Airport/United States Air Force Plant is located approximately 8.5 miles east of MP 5.0 - Planned Amargosa Creek Improvements Project is within ½ mile of the ROW between MP 6.6 and MP 7.7, and crossed by the ROW between MP 7.7 and MP 7.8 - Ritter Ranch Master Planned Community Specific Plans is within ½ mile of, and crossed by the ROW between MP 7.4 and MP 9.8 - Joshua Ranch Planned Development is within ½ mile of the ROW between MP 8.0 and MP 8.2 - City Ranch Planned Development (Ana Verde) is within ½ mile of the ROW between MP 9.2 and MP 9.6, and crossed by the ROW between MP 9.8 and MP 11.1 - A portion of the existing Ritter Ridge SEA is within ½ mile of the ROW between MP 6.3 and 9.8, and crossed by the ROW between MP 6.1 and MP 8.0 - A portion of the proposed San Andreas Rift Zone SEA is within ½ mile of the ROW between MP 3.5 and 8.9, and crossed by the ROW between MP 4.3 and MP 8.0 - All portions of Segment 5 are located within the boundaries of the West Mojave Desert Plan
S 5 MP 11.1 – MP 17.8	Los Angeles County	Los Angeles County	Open Space/Undeveloped, Residential, Agriculture, Transportation-Communications-Utilities, Commercial and Services, Mixed Uses, Industrial, Electrical Power Facilities	Agriculture, Open Not Developable, Transportation	- BLM lands are located within ½ mile of the ROW between MP 11.8 and MP 13.2, and MP 13.7 through MP 13.9 - Quail Valley Annexation and Development Plan is within ½ mile of the ROW between MP 12 and MP 14.3, and crossed by the ROW between MP 12.5 and MP 13, and MP 13.2 through MP 14.3 - Planned Maglev Project and California High Speed Rail Project are within ½ mile of, and crossed by the ROW between MP 16.5 and MP 16.8 - A portion of the existing Kentucky Springs SEA is within ½ mile of the ROW between MP 17.1 and MP 17.8, and crossed by the ROW between MP 17.2 and MP 17.8 - A portion of the proposed Santa Clara River SEA is within ½ mile of the ROW between MP 17.1 and MP 17.8, and crossed by the ROW between MP 17.3 and MP 17.8 - All portions of Segment 5 are located within the boundaries of the West Mojave Desert Plan

Table 3.9-7. Land Uses: North Region

Approximate Location‡	Jurisdiction Within ½ Mile of ROW	Jurisdiction Within ROW‡	Existing Land Uses Within ½ Mile of ROW	General Plan Land Use Designations Within ½ Mile of ROW	Additional Land Use Related Information
Vincent Substation (S 5 MP 17.4 – MP 17.8) (S 6 MP 0.0 – MP 0.1) (S 11 MP 0.0 – MP 0.2)	Los Angeles County	Los Angeles County	Open Space/Undeveloped, Residential, Agriculture, Transportation-Communications-Utilities, Electrical Power Facilities	Agriculture, Transportation, Open Not Developable	- The footprint of the substation and proposed expansion area are within ½ mile of lands falling under the jurisdiction of the BLM - The footprint of the substation and proposed expansion area are within the boundaries of the proposed Santa Clara River SEA - The footprint of the substation and proposed expansion area are within the boundaries of the existing Kentucky Springs SEA - The footprint of the substation and proposed expansion area are within the boundaries of the West Mojave Desert Plan

‡ Mile Post locations are approximate

Table 3.9-8. Summary of Large Development and Specific Plans Crossed by or Within ½ Mile of the Proposed Project*

Region	Development and Specific Plans
North Region	• El Paso Line 1903 Conversion Project (Segment 10) • Willow Springs Specific Plan (Segments 4 and 10, Whirlwind Substation) • PdV Wind Energy Project (Segment 4) • Antelope Valley Water Bank Project (Segments 4 and 10) • Del Sur Ranch Development Project (Segment 4) • Amargosa Creek Improvement Project (Segment 5) • Ritter Ranch Master Planned Community (Segment 5) • Joshua Ranch Planned Development (Segment 5) • City Ranch (Ana Verde) Development (Segment 5) • Quail Valley Annexation and Development Plan (Segment 5) • Maglev Orangeline Project (Segment 5) • California High Speed Rail Project (Segment 5)
Central Region	• Angeles Crest Scenic Byway California State Route 2 Enhancement Project and Corridor Management Plan (Segments 6 and 11)
South Region	• Specific Plan 02SP 05-01/TTM 062064 (Segment 7) • Encanto Parkway Project (Segment 7) • Rancho Verde Specific Plan (Segment 7) • Las Brisas Specific Plan (Segment 7) • Metro Gold Line Foothill Extension Pasadena to Montclair (Segment 7) • Maglev Line at Interstate 10 (Segments 7 and 11) • California High Speed Rail Project adjacent to Interstate 605 (Segment 8A) • Aera Masterplan Community Project (Segment 8A) • Chino Hills Specific Plan (Segment 8A) • Majestic Spectrum Project (Segment 8A) • Commons at Chino Hills (Segment 8A) • Eucalyptus Business Park (Segment 8A) • Magelv Line through Chino Hills (Segment 8A) • Chino College Park Specific Plan (Segments 8A, 8B and 8C) • East Chino Project (Segments 8A, 8B and 8C) • New Model Colony (Segments 8A, 8B and 8C) • East Pasadena Project (Segment 11) • East Colorado Project (Segment 11) • Valley Boulevard Sustainability Plan (Segment 11)

Source: SCE, 2007.
* For the North and South Regions, Please refer to Tables 3.9-7, and 3.9-12 for Mile Post locations.

The proposed Whirlwind Substation is located at the southern terminus of Segment 10. This substation would require the acquisition of approximately 106 acres of land. Existing land uses within one-half mile of this site include residential, agriculture and open space/undeveloped uses; the General Plan land use designation for the substation site is Mineral and Petroleum. The proposed site also falls within the boundaries of the Willow Springs Specific Plan.

Segment 4 would begin at the Cottonwood Substation, and would terminate at the existing Antelope Substation; the proposed Whirlwind Substation is located between approximately MP 3.9 and 4.3. Segment 4 would be constructed in a new ROW parallel to an existing ROW. At MP 6.9 Segment 4 leaves Kern County and enters lands under the jurisdiction of Los Angeles County. At MP 17.4 the proposed ROW enters lands under the City of Lancaster. Existing land uses within one-half mile of Segment 4 are primarily open space/undeveloped, rural residential, agriculture, and electrical power facilities. General Plan land use designations within Kern County include Residential, Intensive Agriculture, Extensive Agriculture, Resource Management, Light Industrial/Comprehensive Plan Area, Public or Private Recreation Areas, and Educational Facilities. General Plan land use designations within Los Angeles County and City of Lancaster include Agriculture and Residential. Several SEAs and Specific Plans are located within one-half mile of Segment 4, as outlined in Table 3.9-7; additionally, the proposed ROW falls within the boundaries of the West Mojave Desert Plan, and is located approximately

4.6 miles east of the General William J. Fox Airfield at MP 14.8 and 1.1 miles northeast of Bohunk's Airpark at MP 19.6.

Proposed modifications at the existing Antelope Substation would require the acquisition of approximately 18 additional acres of land. Existing land uses within one-half mile of the substation include open space/undeveloped, residential, agriculture, and electrical power facilities. The substation is located within the jurisdictional boundaries of the City of Lancaster; General Plan land use designations within one-half mile include Agriculture and Residential. The footprint of the substation and its proposed expansion area are additionally within the boundaries of the West Mojave Desert Plan.

Segment 5 begins at the existing Antelope Substation and terminates at the existing Vincent Substation. Segment 5 would be constructed within an existing ROW and would require the removal of the existing Antelope-Vincent and Antelope-Mesa transmission lines. As outlined in Table 3.9-7, Segment 5 traverses land under the jurisdiction of the City of Lancaster, City of Palmdale, and Los Angeles County. In comparison to Segments 4 and 10, Segment 5 traverses more intensively developed/urban areas along some portions of its ROW. Existing land uses within one-half mile of the proposed ROW include open space/undeveloped, residential, open space/recreation, commercial and services, agriculture, transportation-communications-utilities, industrial, and electrical power facilities. General Plan land use designations within one-half mile of the ROW include Residential, Agriculture, Open Not Developable, Other Institutions, Miscellaneous Industry, Urban Mixed Categories, and Transportation. Additionally, Segment 5 traverses within one-half mile of lands under the jurisdiction of the BLM, and numerous SEAs and Specific Plans (please refer to Table 3.9-7). The proposed ROW is also an estimated 8.5 miles east of the Palmdale Regional Airport/United States Air Force Plant at MP 5.0 and falls within the boundaries of the West Mojave Desert Plan.

As noted in Table 3.9-7, the proposed Project traverses several proposed and approved Specific Plans and other development projects. Table 3.9-8 provides a summary of these planned development projects.

Central Region

The Central Region includes the Vincent Substation, all of proposed ROW Segment 6, the northern-most 24.5 miles of Segment 11, and the Gould Substation. The majority of the Central Region falls within the jurisdictional boundaries of the ANF; exceptions include the Vincent Substation, MPs 0.0 through 1.5 of proposed ROW Segments 6 and 11, the Gould Substation, and a series of parcels punctuated along Segments 6 and 11 within the ANF and along its southern boundary.

The Vincent Substation and MPs 0.0 through 1.5 of Segments 6 and 11 fall within an unincorporated area of Los Angeles County. Within one-half mile of these segments all lands have a General Plan land use designation of Agriculture. Existing land uses include residential, agriculture, open space/undeveloped and electrical power facilities. Proposed modifications to the Vincent Substation would require the acquisition of approximately 0.2 acre; the total proposed expansion of the substation would be an estimated 18 acres. The existing Kentucky Springs SEA and the proposed Santa Clara River SEA are crossed by both Segments 6 and 11 between their respective MPs 0.0 through 1.4. The ANF boundary and West Mojave Desert Plan boundaries are located at MP 1.4 of both Segments 6 and 11.

Within the ANF, along Segment 6, all of the proposed Project's ROW would fall within an existing, designated utility corridor. Predominant land uses within one-half mile of Segment 6 include recreation, open space, resource management, and designated electrical utility corridors. Specific recreational facilities and opportunities are detailed in Section 3.15 (Wilderness and Recreation). The ANF Places that are either traversed by, or within one-half mile of Segment 6 include the: Soledad Front County; Angeles

High Country; Angeles Uplands (West); Angeles Uplands (East); San Gabriel Canyon; and, Front Country. Each Place has a specific theme, setting, desired condition and management program emphasis. Table 3.9-9 provides a summary description of these Places and Table 3.9-10 provides the approximate acreage of each of Place that is within one-half mile of Segment 6.

The ANF land use zones traversed by, or within one-half mile of Segment 6 include: Back Country Motorized Use Restricted; Back Country; Back Country, Non-Motorized; Critical Biological (Upper Big Tujunga); and, Existing Wilderness (San Gabriel Wilderness). Table 3.9-4 provides a summary description of these zones and Table 3.9-10 provides the approximate acreage of each zone that is within one-half mile of Segment 6. Figure 3.9-2 provides a map of the respective locations of these zones in relation to Segment 6. The Upper Big Tujunga Critical Biological Zone is located within the Angeles Uplands (West) and the primary special status species protected include the Arroyo toad (*Bufo californicus*) and California red-legged frog (*Rana draytonii*); the area includes a Los Angeles County road, access to private in-holdings, special uses, an Off-Highway Vehicle (OHV) corridor across Alder Creek and dispersed recreational uses (USDA Forest Service, 2005a). The San Gabriel Wilderness is located within three Places, including San Gabriel Canyon, Angeles Uplands (East) and Angeles High Country; it located within extremely rugged terrain with limited visitation (USDA Forest Service, 2005a). Uses of this area are predominantly recreational in nature and are concentrated along canyon bottoms and existing trails (USDA Forest Service, 2005a). Access to a portion of Segment 6 would additionally require use of a paved access road that is adjacent to the West Fork of the San Gabriel River, which is a designated Critical Biological Zone located within the San Gabriel Canyon Place. The primary species protected by this Critical Biological Zone is the Santa Ana sucker (*Catostomus santaanae*) (USDA Forest Service, 2005a); however, Project-related activities would be limited to the road itself.

Special designation overlays that are within one-half mile or, or traversed by Segment 6 include two Special Interest Areas (Aliso-Arrastre North and Aliso-Arrastre Middle) and one Eligible (for recreation only) Wild and Scenic River (the West Fork of the San Gabriel River). The Aliso-Arrastre North and Middle Special Interest Areas are located within the Soledad Front Country and are known for their heritage resource values; they include Native American archaeological sites as well as other uses, including an existing transmission line corridor, a clay mine operation, NFS roads, Los Angeles County roads, plantations, private in-holdings, and hiking and riding trails (USDA Forest Service, 2005a). The West Fork of the San Gabriel River, an Eligible Wild and Scenic River for recreation, is considered to be an outstanding recreational area and includes national recreational trails, year-round flowing water, high quality fishing opportunities, and several campgrounds (USDA Forest Service, 2005a).

A portion of Segment 6 additionally falls within one-half mile of the Westfork/San Gabriel River and West Fork/San Gabriel River Inventories Roadless Areas. Table 3.9-11 provides a summary of these IRAs, and Table 3.9-10 provides a summary of their acreage within one-half mile of Segment 6 and Figure 3.9-2 provides their location. These designated IRAs have a management prescription of "no construction," which means that no road construction or improvements are permitted to occur. These IRAs have not been recommended as Wilderness Areas.

From the Vincent Substation lands falling under the jurisdiction of the BLM are located within one-half mile of the Segment 6 ROW between MP 0.0 and 0.3. Non-NFS lands that would be traversed by Segment 6 occur from approximately MPs 1.7 through 2.8, 5.3 through 5.7, 24.8 through 25.8, and 25.8 through 26.9. Please refer to Figures 3.9-3 and 3.9-4 of the TRTP Map and Figure Series Volume for the existing land uses and General Plan land use designations within these privately held areas. The Pacific

Table 3.9-9. Places Traversed By or Within ½ Mile of Segments 6 and 11 – Angeles National Forest	
Place	Description
The Front Country Total Acreage: 101,232 Percent of ANF: 15	The Front Country Place rises from the Los Angeles Basin from an elevation of approximately 300 feet to an elevation of approximately 6,000 feet. The communities that make up the urban interface of the San Bernardino, San Fernando and San Gabriel Valleys define the lower elevation edge of this Place. The Front Country includes a variety of special designations, including the San Dimas Experimental Forest and Fern Canyon Research Natural Area (RNA). Five Inventoried Roadless Areas are located in the Front Country, some of which may be recommended as Wilderness. It is maintained as a natural appearing landscape. Management emphasis is on protecting communities from the threat of fire, accommodating high levels of recreational use, and maintaining urban and ANF infrastructure (facilities). An extensive trail network is managed to provide opportunities for hiking, biking, and equestrian trips of short duration and to provide linkages to the national forest trail network and the Pacific Crest Trail.
Angeles Uplands (East) Total Acreage: 56,049 Percent of ANF: 8	The Angeles Uplands East Place is a rugged and remote wilderness area that serves as a transition zone between the Front Country and the High Country; it includes a well developed trail system. Human use is most visible in the area around Mt. Baldy Village. Recreation use tends to be concentrated in riparian areas. This Place includes two Eligible Wild and Scenic Rivers (San Antonio Canyon Creek and the San Gabriel River), three Existing Wilderness (EW) zones (Cucamonga, San Gabriel and Sheep Mountain), and one Recommended Wilderness (RW) zone (Sheep Mountain). It is maintained as a naturally evolving landscape that functions as wilderness and provides remote and dispersed recreational use. Management is focused on forest health, sustaining existing urban and ANF infrastructure, and maintaining a sense of remoteness and solitude. Protection and enhancement of threatened, endangered, proposed, candidate and sensitive species is also emphasized.
Angeles Uplands (West) Total Acreage: 68,792 Percent of ANF: 10	The Angeles Uplands West Place is located between the Front and High Country Places. It is a popular chaparral-covered landscape that serves as a mid-elevation gateway to the Angeles High Country Place. It is one of the ANF's "Key Places," and includes the Falls Canyon RNA, San Gabriel River West Fork (an eligible Wild and Scenic River for recreation), and Upper Big Tujunga Critical Biological (CB) zone. Management emphasis is focused on forest health, accommodating high levels of recreational use, and maintaining existing urban and ANF infrastructure in a balanced and sustainable manner.
Big Tujunga Canyon Total Acreage: 5,495 Percent of ANF: 1	The Big Tujunga Canyon Place functions as a year-round, day-use recreational area in a river-based woodland setting. This Place offers access to the Angeles Uplands and Angeles High Country Places. Uses include intensive recreational and special-use authorization areas, utility corridors, water, flood control and retention basins, and sediment disposal areas. Most facilities and trails are located along the canyon bottom, on flats or cut into hillsides. Due to its accessibility to water, this Place is marked by concentrated public use. Management emphasis is focused on day-use, water oriented recreation and maintenance of existing urban and ANF infrastructure in sustainable manner, compatible with the Place's natural setting and with minimal effects on species and habitat of management concern. Recreation use carrying capacity levels will be developed. The protection and enhancement of threatened, endangered, proposed, candidate and sensitive species are also emphasized.
San Gabriel Canyon Total Acreage: 23,288 Percent of ANF: 4	The San Gabriel Canyon Place is located between the Angeles Uplands East and Front Country Places. Human influence is most apparent in its developed and dispersed recreational areas and along the paths flanking the San Gabriel River. Uses include intensive recreation, utility corridors, reservoirs and dams, borrow sites, sediment placement sites, and water retention basins. Due to its accessibility to water, concentrated public use exists in some areas, including the San Gabriel OHV open area. This Place includes one Eligible Wild and Scenic River (the San Gabriel River [West Fork, Lower Portion]), two EW zones (San Gabriel and Sheep Mountain), one RW zone (Sheep Mountain), and one proposed CB zone (West Fork San Gabriel River). Management emphasis is focused on extremely high levels of recreational use, and maintaining existing urban and ANF infrastructure in a sustainable manner that has minimal effects on species of management concern and their habitat. Numerous trailheads are managed to provide access to the wilderness. Protection and enhancement of threatened, endangered, proposed, candidate and sensitive species and their habitat is also emphasized.
Soledad Front Country Total Acreage: 59,338 Percent of ANF: 9	Within the southern portion of the ANF the Soledad Front Country Place runs southwest along California State Highway 14. A portion of the Pacific Crest National Scenic Trail occurs within this the Place, as does the Aliso-Arrastre Middle and North Special Interest Areas. It is identified as a "Key Place" for its natural appearance. Management emphasis is focused on the protection of communities from the threat of fire, accommodating high levels of recreational use, and maintaining existing urban and ANF infrastructure in a sustainable manner. Management is also focused on the protection of open space and boundary management in anticipation of future adjacent development.
Angeles High Country Total Acreage: 100,560 Percent of ANF: 15	The Angeles High Country Place is located within the eastern-most portion of the ANF. The Pacific Crest Trail is located within this Place, and traverses its entire width. It is also one of the ANF's "Key Places," and is regarded by many as the ANF's "core area." The Angeles High Country Place is maintained as a naturally evolving landscape that functions as a year-round, forested recreational area. Management emphasis of this Place is focused on forest health while maintaining its big tree setting, vistas and landscapes. Additional emphasis is placed on recreational use and maintaining existing urban and ANF infrastructure in a sustainable manner that has minimal effects on species of management concern and their habit.

Table 3.9-10. Approximate ANF Acreages and ANF Acreage Percentages for Places, Land Use Zones, Special Designation Overlays and Land Ownership Within ½ Mile of Segments 6 and 11[1]

	Segment 6		Segment 11		Total	
Land Use Attribute	Approximate Acreage[2]	Approximate Percentage of ANF Acreage[3]	Approximate Acreage[2]	Approximate Percentage of ANF Acreage[3]	Approximate Acreage[2]	Approximate Percentage of ANF Acreage[3]
Places						
• Soledad Front Country	3,147	5.3	3,153	5.3	6,300	10.6
• Angeles High Country	1,432	1.4	882	0.9	2,314	2.3
• Angeles Uplands (East)	326	0.6	0	0	326	0.6
• Angeles Uplands (West)	7,239	10.5	3,934	5.7	11,173	16.2
• Big Tujunga Canyon	0	0	378	6.9	378	6.9
• San Gabriel Canyon	339	1.5	0	0	339	1.5
• The Front Country	3,128	3.1	3,995	3.9	7,123	7.0
Land Use Zones						
• Back Country	9,873	6.1	3,199	2.0	13,072	8.1
• Back Country, Non-Motorized	2,498	1.0	2,739	1.1	5,237	2.1
• Back Country Motorized Use Restricted	2,583	4.9	5,527	10.5	8,110	15.4
• Developed Interface Area	0	0	876	1.0	876	1.0
• Existing Wilderness – Total	326	0.4	0	0	326	0.4
- San Gabriel Wilderness	326	9.8	0	0	326	9.8
• Recommended Wilderness	0	0	0	0	0	0.0
• Critical Biological - Total	322	8.2	0	0	322	8.2
- Upper Big Tujunga	322	39.3	0	0	322	39.3
• Experimental Forest	0	0	0	0	0	0
Special Designation Overlays						
• Special Interest Areas - Aliso-Arrastre Middle & North	1,549	19.7	1,758	22.4	3,307	4.3
• Research Natural Areas	0	0	0	0	0	0
• Wild and Scenic Rivers - San Gabriel River: West Fork	422	8.9	0	0	422	8.9
• Inventoried Roadless Areas – Total	572	0.4	214	0.2	786	0.6
- Strawberry Peak/Los Angeles River	0	0	28	0.4	28	0.4
- Arroyo Seco/Los Angeles River	0	0	186	4.0	186	4.0
- Westfork and West Fork/San Gabriel River	572	10.3	0	0	572	10.3
Ownership						
• Total	16,260	2.3	13,697	2.0	29,957	4.3
• NFS Lands	15,593	2.4	12,335	1.9	27,928	4.2
• Non-NFS Lands	667	1.7	1,362	3.5	2,029	5.2

1 Please refer to Figure 3.9-2 for the Places, Zones, Special Designation Overlays and ownership within the ANF, and Figures 3.9-3 and 3.9-4 of the TRTP Map and Figure Series Volume for the existing land uses and General Plan land use designations associated with privately held (Non-Forest Service) lands within the ANF.

2 Approximate acreages of ANF lands traversed by Segments 6 and 11 include a buffer area of ½ mile of either side of the ROWs. The ROWs themselves fall within designated utility corridors.

[3] Approximate acreage percentages within the ANF represent the percentage of acreage traversed by Segments 6 and 11, including a ½ mile buffer on either side of ROW, for any given land attribute listed in Table 3.9-10 in comparison to the total ANF acreage for that land attribute, as follows:

(a) The approximate percentages for Places are based upon the total acreage of each Place within the ANF as provided in Table 3.9-9.
(b) The approximate percentages for Zones are based upon the total acreage of each Zone within the ANF as provided in Table 3.9-4.
(c) The approximate percentages for the Existing San Gabriel Wilderness and Upper Big Tujunga Critical Biological Area are based upon their total acreages, which equal 3,319 and 819 acres, respectively (USDA Forest Service, 2005c).
(d) The approximate percentages for the Aliso-Arrastre Middle and North Special Interest Areas are based upon their total acreage of 7,850 acres, as provided in the 2005 Forest Plan (USDA Forest Service, 2005a).
(e) The approximate percentage for the San Gabriel River: West Fork Eligible Wild and Scenic River (for recreation only) is based upon its total acreage of 4,759 acres (USDA Forest Service, 2005c).
(f) The approximate percentages for the Inventoried Roadless Areas are based upon their total acreages as follows: ANF total: 137,277 acres; Strawberry Peak/Los Angeles River: 7,193 acres; Arroyo Seco/Los Angeles River: 4,674 acres; and, Westfork and West Fork/San Gabriel River combined: 5,541 (USDA Forest Service, 2005d).
(g) The approximate percentages for Ownership are based upon the following: Total lands falling within the outer-boundaries of the ANF: 700,863 acres; Total NFS Lands falling within the outer-boundaries of the ANF: 661,587 acres; Total Non-NFS lands (private in-holdings) falling within the outer-boundaries of the ANF: 39, 276 acres (USDA Forest Service, 2005c).

Table 3.9-11. Summary of Designated Inventoried Roadless Areas Within ½ Mile of Segments 6 and 11

Name/Ranger Station (Segment)	Size (Acres)	Management Prescription (Rx)	Wilderness Area Evaluation Criteria Ranking		
			Capability	Availability	Need
Westfork/San Gabriel River (Segment 6)	4,385	No Construction	High	High	Low
West Fork/San Gabriel River (Segment 6)	1,156	No Construction	High	High	Low
Strawberry Peak/Los Angeles River (Segment 11)	7,193	No Construction	Low	Low	Low
Arroyo Seco/Los Angeles River (Segment 11)	4,674	No Construction	Moderate	Low	Low

Source: USDA Forest Service, 2205d

Crest National Scenic Trail (PCT) is located within one-half mile of Segment 6 between MPs 6.8 and 7.7, and is crossed by the ROW at MP 7.4. Additionally, the ANF Mill Creek Summit Station and helipad are located adjacent to MP 7.4, and a La Cañada Unified School District campground is located within one-half mile of MP 13.5.

All of proposed Segment 11 is also located within an existing, designated utility corridor. As with Segment 6, predominant land uses within one-half mile of Segment 11 include recreation, open space, resource management, and designated electrical utility corridors. The ANF Places that are either traversed by, or within one-half mile of Segment 11 include the: Soledad Front County; Angeles High Country; Angeles Uplands (West); Big Tujunga Canyon; and, Front Country. Table 3.9-9 provides a summary description of these Places and Table 3.9-10 provides the approximate acreage of each of Place that is traversed by or within one-half mile of Segment 11. Figure 3.9-2 provides a map of their locations.

The ANF land use zones that are either traversed by, or fall within one-half mile of Segment 11 include the: Back Country; Back Country Motorized Use Restricted; Back Country, Non-Motorized; and, Developed Area Interface, as summarized in Table 3.9-9. Table 3.9-10 provides the approximate acreage of each of land use zone that is traversed by or within one-half mile of Segment 11, and Figure 3.9-2 provides a map of their respective locations. Segment 11 does not traverse or fall within one-half mile of any Critical Biological or Existing Wilderness Zones.

The Aliso-Arrastre Middle North and Middle Special Interest Areas, as described above, are located within the Soledad Front Country and would be traversed by Segment 11. Additionally, Segment 11 would fall within one-half mile of two IRAs, including the Strawberry Peak/Los Angeles River IRA and Arroyo Seco/Los Angeles River IRA. The acreages of these IRAs within one-half mile of Segment 11 are provided in Table 3.9-10 and their summary descriptions are provided in Table 3.9-11. Their respective locations are provided in Figure 3.9-2.

Along Segment 11, privately held lands are crossed by the ROW from approximately MPs 3.5 through 3.8, 16.8 though 17.2, 18.7 through 19.3, 20.3 through 20.8, 21.3 through 21.8, 22.6 through 23.0, and 24.0 through 24.3. Please refer to Figures 3.9-3 and 3.9-4 of the TRTP Map and Figure Series Volume for the existing land uses and General Plan land use designations associated with these areas. The PCT is located within one-half mile of the ROW between MPs 7.1 and 7.7 and is crossed by the ROW at MP 7.2. An ANF heliport site is located approximately one-half mile east of the ROW at MP 7.8, and is within one-half mile of the Little Gleason Forestry Plantation at this location. The Camp 2 and Mesa Heliports are both located south of MP 19.8 and are a distance of 1.25 miles and 0.6 mile, respectively, from the ROW.

Two SEAs are also located within one-half mile of, or crossed by Segment 11, including the: existing Kentucky Springs SEA (MP 0.0 though 1.5); and, proposed Santa Clara River SEA (MP 0.0 though 5.3). Construction of Segment 11 would require an expanded ROW between approximately MP 15.9 and 18.9 to maintain an overall ROW width of 250 feet; however, the expanded ROW would remain within an existing utility corridor.

The existing Gould Substation is located between approximately MPs 18.7 and 18.9 of Segment 11. The footprint of the substation is located within the jurisdictional boundaries of the City of La Cañada Flintridge. Existing land uses within one-half mile of the substation include residential, open space/recreation, open space/undeveloped, transportation-communications-utilities, water, and electrical power facilities. General Plan land use designations within one-half mile of the substation include Open Not Developable, Parks, and Residential. The substation is additionally located within one-half mile of the

ANF's Front Country, and areas containing an ANF land use zone of Back Country, Back Country Motorized Use Restricted, and Developed Area Interface. All proposed modifications to this substation would occur within its existing fence lines.

In addition to the above, within the ANF 33 towers would be constructed by helicopter, including 17 towers along Segment 6 and 16 towers along Segment 11. Twelve sites have been identified as helicopter staging areas; seven of these sites are located along Segment 11, five are located along Segment 6 and one is located along the northern-most portion of Segment 7, as shown in Figure 2.2-38. Four of the sites are located off National Forest Service lands, including Sites SCE #0, 4, 5 and 9 (see Figure 2.2-83). Within the ANF, one site is located within the Angeles High Country (SCE #1), five are within the Angeles Uplands (West) (SCE #2, 3, 6, 6B and 7), one is within Big Tujunga Canyon (SCE #3B), and one is within The Front Country (SCE #8). These sites carry land use zones as follows: Back Country Motorized Use Restricted (SCE #2, 3, and 8); Back Country (SCE #1, 6, 6B. and 7); and, Developed Area Interface (SCE #3B). Additionally, SCE #7 is located within one-half mile of the San Gabriel River, West Fork (eligible as a Wild and Scenic River for recreation only). Existing land uses associated with all of these sites are open space/undeveloped.

Site SCE #0, located along Segment 11, is within a private in-holding of the ANF. This site falls within an unincorporated area of Los Angeles County and carries a General Plan land use designation of Open Not Developable. This site is within an area of rural residential and agricultural (livestock) uses. Outside of the ANF boundaries, the remaining helicopter staging areas are located within the City of La Cañada-Flintridge (SCE #4 and 5) and the City of Duarte (SCE #9). Sites SCE #4 and 5 have a General Plan land use designation of Residential. Both sites are open space/undeveloped; however, SCE #5 is immediately adjacent to residential land uses and the Gould Substation. Site SCE #9 is used as a private rifle range and carries General Plan land use designation of Open Not Developable.

South Region

The South Region includes all of Segments 7 and 8, and the southern-most 11.7 miles of Segment 11. It additionally includes the Goodrich, Rio Hondo, Mesa, Chino and Mira Loma Substations, of which facility upgrades within existing fence lines are proposed at the Mesa and Mira Loma Substations. Table 3.9-12 provides a summary of the jurisdictions crossed by, or within one-half mile of the proposed ROW and its substations, as well as information regarding existing land uses, General Plan land use designations, and other notable land uses.

Construction of the southern-most 11.7 miles of Segment 11 would occur within existing ROW. Jurisdictions crossed by the ROW itself include Los Angeles County, Temple City, the City of Rosemead, and City of Monterey Park. Lands within one-half mile of this portion of Segment 11 are highly urbanized in character; existing land uses and land use designations are summarized in Table 3.9-12. The predominant existing land use within one-half mile of this portion of Segment 11 is residential with associated commercial and services, public and special use facilities, local educational facilities and open space/ recreation facilities, and electrical power facilities. Within the ROW itself predominant existing land uses include commercial and services, agriculture (nurseries), transportation-communications-utilities, industrial, open space/recreation, open space/undeveloped, and electrical power facilities. The existing Goodrich Substation is located between approximately MP 27.2 and 27.4, and the existing Mesa Substation is located at the ROW's southern terminus. The El Monte Airport is located approximately 2.8 miles east of MP 32.0, and the Robert D. Cloud Heliport is located approximately 0.6 mile east of MP 35.2. The ROW additionally traverses or is within several Specific Plan or other development plan

projects, as outlined in Table 3.9-12. There are no proposed or existing SEAs located within one-half mile of this portion of Segment 11.

Segment 7 begins at the southern terminus of Segment 6, and ends at the existing Mesa Substation; it would be placed within existing ROW. Construction of Segment 7 would require removal of the existing Antelope-Mesa 220-kV transmission line, as well as either the relocation of approximately 45 existing double-circuit 66-kV transmission towers to the edge of the ROW between MP 4.4 and 15.8 (the ROW's entrance to the Mesa Substation), or the undergrounding of the transmission lines of these towers for the same11.4 miles. The ROW itself traverses lands falling under the jurisdiction of the U.S. Army Corps of Engineers, the cities of Duarte, Irwindale, Baldwin Park, Industry, South El Monte, Montebello and Monterey Parks, and Los Angeles County. Table 3.9-12 provides a summary of the jurisdictions crossed by, or within one-half mile of, the ROW. Existing land uses within one-half mile of Segment 7 are diverse and range from intensive industrial and commercial and services, to residential and open space/recreation. Table 3.9-12 also summarizes the existing land uses and General Plan land use designations within one-half mile of the ROW by milepost. The ROW itself includes extensive swaths of agriculture (predominantly nurseries), as well as open space/undeveloped, open space/recreation, industrial, commercial and services and transportation-communications-utilities uses. The existing Rio Hondo Substation is located between approximately MPs 4.9 and 5.2. Between MPs 1.0 and 3.6 there are five proposed Specific Plans or other development projects within one-half mile of, or crossed by the ROW, as outlined in Table 3.9-12, and the proposed Maglev project is crossed by the ROW at MP 8.2. Additionally, the ROW is within one-half mile of, or crosses several proposed and existing SEAs which are also outlined in Table 3.9-12.

As referenced in Table 3.9-12, Segment 7 traverses the Santa Fe Flood Control Basin and Dam, which falls under the jurisdictional authority and management of the U.S. Army Corps of Engineers; the basin and dam constitute a flood control facility, providing flood protection between the dam itself and the Whittier Narrows Flood Control Basin and Dam (U.S. Army Corps of Engineers, 2009a). The secondary use of the facility is recreation, as leased and operated by the County of Los Angeles. Recreational amenities include a 70-acre lake for boating, swimming and fishing, a children's water play area, picnic areas, trails for biking and hiking, and campsites (County of Los Angeles Department of Recreation and Parks, 2009a). Per the U.S. Army Corps of Engineers' regulations, a Master Plan has been prepared for the Santa Fe Flood Control Basin and Dam, focusing on: (1) regional and ecosystem needs; (2) facility resource capabilities and suitability; and, (3) expressed public interests and desires (U.S. Army Corps of Engineers, 2009b). A youth athletic facility, known as the KARE Youth League Athletic Park, is currently proposed within the Basin; it would include soccer, football, softball and baseball fields as well as basketball courts and a parking lot; also included would be a multi-purpose office/administration building with snack bar and indoor activity rooms, a picnic area and playground, a locker and restroom facility, and lighting structures for night-time activities (U.S. Army Corps of Engineers, 2006).

Segment 8 extends eastward from the Mesa Substation to the Mira Loma Substation. From Segment 8A MP 0.0 to the Chino Substation (Segment 8A MP 28.1 through MP 28.4) the acquisition of new ROW would be required from approximately MP 6.9 to 7.2, and for approximately 0.4 mile south of MP 13.2; the acquisition of expanded ROW by 100 feet would also be needed between approximately MP 11.5 and MP 13.2. Segments 8B and 8C begin at the Chino Substation and are approximately 6.8 and 6.4 miles in length, respectively. Segment 8A is approximately 36.2 miles in length. East of the Chino Substation, no new ROW or ROW expansion would be required.

Within the ROW itself, Segment 8A traverses the jurisdictions of the U.S. Army Corps of Engineers, the cities of Monterey Park, Montebello, South El Monte, Pico Rivera, Industry, La Habra Heights, Diamond Bar, Chino Hills, and Chino, and Los Angeles County. The ROW crosses into San Bernardino County at approximately MP 20.6. The eastern-most portion of Segment 8A, from MP 0.0 through 7.0, is similar to Segment 7 in that, within one-half mile of its ROW, it contains a diverse set of existing land uses. This portion of the ROW is surrounded by relatively limited residential uses, but includes tracts of land of various sizes and distributions for commercial and services, transportation-communications-utilities, open space/recreation, public and special use facilities, open space/ undeveloped, industrial, agricultural, water, and electrical power facilities uses. Within the ROW itself existing land uses primarily include open space/ undeveloped, agriculture, open space/recreation, industrial, and transportation-communications-utilities. General Plan land use designations within this portion of Segment 8A are provided in Table 3.9-12. This portion of the ROW additionally traverses through several proposed and existing SEAs, as outlined in Table 3.9-12. Specific plans and other large development plans crossed by, or within one-half mile of the ROW are provided in Table 3.9-9.

As referenced in Table 3.9-12, the Whittier Narrows Flood Control Basin and Dam is traversed by both Segments 7 and 8A. This flood control facility also falls under the jurisdictional authority of the U.S. Army Corps of Engineers and impounds water from the San Gabriel River and Rio Hondo, including water conservation pools (U.S. Army Corps of Engineers, 2009c). As with the Santa Fe Flood Control Basin and Dam, this flood control facility also has a Master Plan, which is currently being updated (U.S. Army Corps of Engineers, 2009b). Additionally, there is a Water Control Manual for the Whittier Narrows Flood Control Basin and Dam, and an Operation, Maintenance, Repair, Replacement, and Rehabilitation Manual for the San Gabriel River (as applicable to both the Whittier Narrows and Santa Fe Flood Control Basins and Dams) (U.S. Army Corps of Engineers, 2009b). The Whittier Narrow Recreation Area in located within the Basin, which is leased and operated by the County of Los Angeles Department of Parks and Recreation. Recreational amenities include fishing lakes, comfort stations, picnic areas, playgrounds, a nature center, an equestrian facility, trails, tennis courts, a multipurpose athletic complex, a military museum, soccer fields, volleyball courts, and archery, skeet, pistol and trap ranges (County of Los Angeles Department of Recreation and Parks, 2009b). The San Gabriel River Discovery Center is currently being planned within the Basin's recreational area; the Center is proposed to present the story of the San Gabriel River watershed and provide public educational and outdoor experiences (San Gabriel River Discovery Center Authority, 2009).

From Segment 8A MP 7.0 to the Chino Substation, land uses within one-half mile of the proposed ROW predominantly include open space/recreation, residential, open space/undeveloped, agriculture, transportation-communications-utilities, educational facilities, public and special use facilities, agriculture, commercial and services, and electrical power facilities. Within the ROW itself existing land uses between approximately MPs 7.0 and 8.8, MPs 9.8 through 11.1, MP 11.5 through MP 13.4 and MP 13.8 through MP 21 are made-up of large tracts of open space/undeveloped and open space/recreation. Existing land uses within the remaining portions of this section of the proposed ROW also include open space/ undeveloped and open space/recreation immediately flanked by developed residential areas as well as agriculture, commercial and services, transportation-communications-utilities and industrial uses. The proposed ROW enters San Bernardino County at approximately MP 20.6; other jurisdictions crossed by the proposed ROW and the General Plan land use designations within one-half mile of it are provided in

Table 3.9-12. Land Uses: South Region

Approximate Location‡	Jurisdiction Within ½ Mile of ROW	Jurisdiction Within ROW‡	Existing Land Uses Within ½ Mile of ROW	General Plan Land Use Designations Within ½ Mile of ROW	Additional Land Use Related Information
Segment 11					
S 11 MP 24.5 – MP 25.5	Los Angeles County	Los Angeles County	Residential, Open Space/Recreation, Open Space/Undeveloped, Mixed Uses, Electrical Power Facilities	Open Not Developable, Agriculture, Residential, Other Institutions	
S 11 MP 25.5 – MP 28.7	City of Pasadena	City of Pasadena	Residential, Open Space/Recreation, Open Space/Undeveloped, Commercial and Services, Agriculture, Mixed Uses, Educational Facilities, Industrial, Electrical Power Facilities	Open Not Developable, Residential, Regional Retail, Other Institutions, General Industrial, K- 12 Schools, Urban Mixed Categories, General Commercial	- The East Pasadena Specific Plan is located within and along both sides of the ROW between MP 27.2 & MP 27.6 - The East Colorado Boulevard Specific Plan is located within and along both sides of the ROW between MP 27.6 & MP 27.8 - The Goodrich Substation is located between MP 27.2 & MP 27.4
S 11 MP 28.7 – MP 31.0	Los Angeles County	Los Angeles County	Residential, Educational Facilities, Commercial and Services, Transportation-Communications-Utilities, Agriculture, Public and Special Use Facilities, Water, Electrical Power Facilities	Residential, Open Not Developable, Other Institutions, K – 12 Schools, Regional Retail, General Commercial	
S 11 MP 31.0 – MP 31.5	Temple City	Temple City	Residential, Commercial and Services, Industrial, Educational Facilities, Open Space/Recreation, Electrical Power Facilities	General Commercial, Residential, K-12 Schools, Open Not Developable, Light Industry, Other Institutions	
S 11 MP 31.5 – MP 34.5	City of Rosemead, City of San Gabriel	City of Rosemead	Residential, Commercial and Services, Educational Facilities, Industrial, Open Space/Recreation, Open Space/Undeveloped, Transportation-Communications-Utilities, Mixed Uses, Public and Special Use Facilities, Agriculture, Industrial, Electrical Power Facilities	General Commercial, Other Institutions, K-12 Schools, Residential, Urban Mixed Categories, Light Industry	- The El Monte Airport is located approx. 2.8 miles east of MP 32.0 - The Valley Boulevard Sustainability Plan Project is located within ½ mile of the ROW between MP 32.3 & MP 33.0 - The proposed Maglev Project is located within ½ mile of, and crossed by the ROW at MP 33.0
S 11 MP 34.5 – MP 35.2	Los Angeles County	Los Angeles County	Residential, Commercial and Services, Open Space/ Undeveloped, Educational Facilities, Public and Special Use Facilities, Electrical Power Facilities	Residential, Parks/Recreation, Other Institutions	- The Robert D. Cloud and SCE Rosemead Heliports are located approx. 0.6 mile east of MP 35.2

Table 3.9-12. Land Uses: South Region

Approximate Location‡	Jurisdiction Within ½ Mile of ROW	Jurisdiction Within ROW‡	Existing Land Uses Within ½ Mile of ROW	General Plan Land Use Designations Within ½ Mile of ROW	Additional Land Use Related Information
S 11 MP 35.2 – MP 36.2	City of Monterey Park, City of Montebello	City of Monterey Park	Residential, Commercial and Services, Agriculture, Industrial, Transportation-Communications-Utilities, Educational Facilities, Public and Special Use Facilities, Open Space/Undeveloped, Open Space/Recreation, Electrical Power Facilities	Residential, Open Not Developable, General Commercial, Parks/Recreation, Other Institutions	
Mesa Substation (S 7 MP 15.6 – MP 15.8) (S 8A MP 0.0 – MP 0.2) (S 11 MP 35.9 – MP 36.2)	City of Monterey Park, City of Montebello	City of Monterey Park	Open Space/Recreation, Open Space/Undeveloped, Commercial and Services, Industrial, Transportation-Communications-Utilities, Residential, Educational Facilities, Public and Special Use Facilities, Water, Electrical Power Facilities	Open Not Developable, General Commercial, Residential, Parks/Recreation, Other Institutions	
Segment 7					
S 7 MP 0.0 – MP 1.9	City of Duarte, City of Azusa	City of Duarte	Open Space/Undeveloped, Residential, Transportation-Communications-Utilities, Educational Facilities, Open Space/Recreation, Electrical Power Facilities, Industrial, Mixed Uses, Education Facilities	Open Not Developable, Residential, K-12 Schools, Light Industry, Parks/Recreation, Urban Mixed Uses	- A portion of Specific Plan 02SP 05-01/TTM 062064 is located within ½ mile west of the ROW at MP 1.1 - The Encanto Parkway Specific Plan is located within ½ mile of the ROW between MP 1.7 & MP 1.8 - The Rancho Verde Specific Plan is located within ½ mile of, and crossed by the ROW between MP 1.8 & MP 1.9 - A portion of the proposed San Gabriel SEA is within ½ mile of, and crossed by the ROW between MP 0.0 & MP 0.2 - A portion of the existing Santa Fe Dam Floodplain SEA is within ½ mile of the ROW between MP 1.4 & MP 1.9
S 7 MP 1.9 – MP 7.3	City of Irwindale, City of Duarte, City of Baldwin Park, City of Arcadia, City of El Monte, City of Baldwin Park	City of Irwindale	Residential, Educational Facilities, Transportation-Communications-Utilities, Open Space/Undeveloped, Commercial and Services, Industrial, Mixed Uses, Electrical Power Facilities, Water, Public and Special Use Facilities, Electrical Power Facilities	Residential, Open Not Developable, K-12 Schools, Urban Mixed Categories, General Industrial, Miscellaneous Commercial, Other Institutions, Miscellaneous Industry, Heavy Industry, Light Industry, Regional Retail, General Commercial, Miscellaneous Commercial	- The Las Brisas Specific Plan is located approx. ½ mile northwest of the ROW at MP 1.9 - A portion of the Santa Fe Flood Control Basin (U.S. Army Corps of Engineers) is within ½ mile of, and crossed by the ROW between MP 2.7 & MP 4.4 - The proposed Metro Gold Line Foothill Extension Pasadena to Montclair Project is within ½ mile of, and crossed by the ROW at MP 2.5 - Rio Hondo Substation is located between MP 4.9 & MP 5.2 - The El Monte Airport is located approx. 2 miles west of MP 6.7 - A portion of the existing Santa Fe Dam Floodplain SEA is within ½ mile of the ROW between MP 1.9 & MP 4.1

Table 3.9-12. Land Uses: South Region

Approximate Location‡	Jurisdiction Within ½ Mile of ROW	Jurisdiction Within ROW‡	Existing Land Uses Within ½ Mile of ROW	General Plan Land Use Designations Within ½ Mile of ROW	Additional Land Use Related Information
S 7 MP 7.3 – MP 8.8	City of Baldwin Park, City of El Monte	City of Baldwin Park	Residential, Commercial and Services, Educational Facilities, Public and Special Use Facilities, Open Space/Recreation, Agriculture, Industrial, Transportation-Communications-Utilities, Electrical Power Facilities	Residential, Miscellaneous Commercial, General Commercial, Other Institutions, Parks/Recreation, Light Industry, Miscellaneous Industry, Heavy Industry, General Industrial, K-12 Schools, Parks/Recreation	- The proposed Maglev Project is within ½ mile of, and crossed by the ROW at MP 8.2
S 7 MP 8.8 – MP 10.3	City of Industry, Los Angeles County, City of El Monte, City of South El Monte	City of Industry	Residential, Commercial and Services, Educational Facilities, Open Space/Recreation, Transportation-Communications-Utilities, Open Space/Undeveloped, Agriculture, Industrial, Electrical Power Facilities	Residential, Regional Retail, Miscellaneous Industry, Open Not Developable, Other Institutions, General Industrial, Heavy Industry	- A portion of the proposed Rio Hondo College Wildlife Sanctuary is within ½ mile of, and crossed by the ROW between MP 10.2 & MP 10.3
S 7 MP 10.3 – MP 13.9	Los Angeles County, City of South El Monte, City of Industry	- Los Angeles County (MP 10.3 – MP 10.8) - City of South El Monte (MP 10.8 – MP 11.4) - Los Angeles County (MP 11.4 – MP 13.9)	Residential, Open Space/Recreation, Educational Facilities, Transportation-Communications-Utilities, Industrial, Open Space/Undeveloped, Agriculture, Commercial and Services, Water, Electrical Power Facilities	Residential, General Commercial, General Industrial, Heavy Industry, Light Industry, Other Institutions, Open Not Developable, Parks/Recreation, Other Institutions	- A portion of the proposed Rio Hondo Wildlife Sanctuary is within ½ mile of the ROW between MP 10.3 and MP 13.9, and crossed by the ROW between MP 10.3 & MP 12.1 and MP 13.4 through MP 13.9 - A portion of the existing Whittier Narrows Dam County Recreation Area SEA is within ½ mile of, and crossed by the ROW between MP 11.1 & MP 13.9 - A portion of the Whittier Narrows Flood Control Dam (U.S. Army Corps of Engineers) and Basin is within ½ mile of, and crossed by the ROW between MP 11.4 & MP 13.7 - The Robert D. Cloud and SCE Rosemead Heliports are located approx. 1 mile north of MP 13.9
S 7 MP 13.9 – MP 15.4	City of Montebello, City of Rosemead, City of South San Gabriel, City of Monterey Park	City of Montebello	Residential, Commercial and Services, Educational Facilities, Industrial, Open Space/Recreation, Public and Special Use Facilities, Open Space/Undeveloped, Transportation-Communications-Utilities, Electrical Power Facilities	Residential, General Commercial, Parks/Recreation, Open Not Developable, K-12 Schools	

Table 3.9-12. Land Uses: South Region

Approximate Location‡	Jurisdiction Within ½ Mile of ROW	Jurisdiction Within ROW‡	Existing Land Uses Within ½ Mile of ROW	General Plan Land Use Designations Within ½ Mile of ROW	Additional Land Use Related Information
S 7 MP 15.4 – MP 15.8	City of Monterey Park, City of Montebello	City of Monterey Park	Residential, Commercial and Services, Transportation-Communications-Utilities, Open Space/Recreation, Public and Special Use Facilities, Open Space/Undeveloped, Industrial, Electrical Power Facilities	Residential, General Commercial, Open Not Developable, Parks/Recreation, Other Institutions	- Mesa Substation is located at MP 15.8 (see Segment 11, above)
Segment 8					
Segment 8A					
S 8A MP 0.0 – MP 0.3	City of Monterey Park, City of Montebello	City of Monterey Park	Residential, Commercial and Services, Transportation-Communications-Utilities, Open Space/Recreation, Public and Special Use Facilities, Open Space/Undeveloped, Industrial, Electrical Power Facilities	Residential, General Commercial, Open Not Developable, Parks/Recreation, Other Institutions	- Mesa Substation is located at MP 0.0 (see Segment 11, above)
S 8A MP 0.3 – MP 2.1	City of Montebello, City of Monterey Park	City of Montebello	Residential, Commercial and Services, Educational Facilities, Industrial (Oil Field), Open Space/Recreation, Public and Special Use Facilities, Open Space/Undeveloped, Transportation-Communications-Utilities, Water, Electrical Power Facilities	Residential, General Commercial, Parks/Recreation, Open Not Developable, K-12 Schools	
S 8A MP 2.1 – MP 3.8	City of South El Monte, City of Whittier	City of South El Monte	Open Space/Recreation, Open Space/Undeveloped, Agriculture, Transportation-Communications-Utilities, Industrial, Water, Electrical Power Facilities	Open Not Developable, Parks/Recreation, Heavy Industry	- A portion of the existing Whittier Narrows Dam County Recreation Area SEA is within ½ mile of, and crossed by the ROW between MP 2.2 & MP 3.8 - A portion of the Whittier Narrows Flood Control Dam and Basin (U.S. Army Corps of Engineers) are within ½ mile of, and crossed by the ROW between MP 3.2 & 3.8 - A portion of the proposed Rio Hondo College Wildlife Sanctuary is within ½ mile of the ROW between MP 2.2 & MP 2.4 and MP 3.2 through MP 3.8
S 8A MP 3.8 – 4.4	City of Pico Rivera	City of Pico Rivera	Open Space/Recreation, Transportation-Communications-Utilities, Agriculture, Industrial, Commercial and Services, Electrical Power Facilities	Parks/Recreation, Open Not Developable, General Industrial, Heavy Industry	- A portion of the existing Whittier Narrows Dam County Area SEA is within ½ mile of, and crossed by the ROW between MP 3.8 and MP 4.2 - A portion of the Whittier Narrows Flood Control Dam and Basin (U.S. Army Corps of Engineers) is within ½ mile of, and crossed by the ROW between MP 3.8 & MP 4.2 - A portion of the proposed Rio Hondo College Wildlife

Table 3.9-12. Land Uses: South Region

Approximate Location‡	Jurisdiction Within ½ Mile of ROW	Jurisdiction Within ROW‡	Existing Land Uses Within ½ Mile of ROW	General Plan Land Use Designations Within ½ Mile of ROW	Additional Land Use Related Information
					Sanctuary is within ½ mile of the ROW between MP 3.8 & MP 4.2, and crossed by the ROW between MP 3.8 & MP 3.9
S 8A MP 4.4 – MP 4.6	City of Industry	City of Industry	Industrial, Agriculture, Open Space/Undeveloped, Electrical Power Facilities	General Industrial, Heavy Industry, General Commercial	
S 8A MP 4.6 – MP 11.1	Los Angeles County, City of Whittier	- Los Angeles County (MP 4.6 – MP 8.7) - City of Whittier (MP 8.7 – MP 8.9) - Los Angeles County (MP 8.9 – 9.8) - City of Whittier (MP 9.8 – MP 10.0) - Los Angeles County (MP 10.0 – MP 11.1)	Industrial, Commercial and Services, Transportation-Communications-Utilities, Mixed Uses, Educational Facilities, Open Space/Recreation, Open Space/Undeveloped, Agriculture, Residential, Public and Special Use Facilities, Electrical Power Facilities	Heavy Industry, Open Not Developable, Other Institutions, Residential, General Commercial	- The proposed California High Speed Rail Project is within ½ mile of, and crossed by the ROW at MP 4.7 - A portion of the existing Sycamore-Turnball Canyons SEA is within ½ mile of the ROW between MP 7.4 & MP 7.9 - A portion of the existing Powder Canyon-Puente Hills SEA is within ½ mile of the ROW between MP 6.1 & MP 11.1, and crossed by the ROW between MP 6.9 & MP 8.9 and MP 9.3 through MP 11.1
S 8A MP 11.1 – MP 13.4	City of La Habra Heights, Los Angeles County	City of La Habra Heights	Open Space/Recreation, Residential, Open Space/Undeveloped, Agriculture, Mixed Uses, Electrical Power Facilities	Residential, Open Not Developable	- A portion of the existing Powder Canyon-Puente Hills SEA is within ½ mile of, and crossed by the ROW between MP 11.1 & MP 13.4 - A portion of the existing Powder Canyon – Puente Hills SEA is within ½ mile of, and crossed by the ROW between MP 11.5 & MP 13.4
S 8A MP 13.4 – MP 20.6	Los Angeles County, City of Diamond Bar	Los Angeles County	Open Space/Recreation, Public and Special Use Facilities, Agriculture, Educational Facilities, Transportation-Communications-Utilities, Open Space/Undeveloped, Commercial and Services, Mixed Uses, Electrical Power Facilities	Residential, Open Not Developable, Other Institutions, Agriculture, Transportation	- U.S. Department of Defense property is within ½ mile of the ROW between MP 14.7 & MP 15.5, and crossed by the ROW between MP 15.2 & MP 15.5 - A portion of the Aera Master Plan Community Specific Plan is within ½ mile of the ROW between MP 14.2 & MP 17.7, and crossed by the ROW at MP 14.5, and between MP 15.3 through MP 17.0, and MP 17.1 through MP 17.7 - A portion of the existing Powder Canyon-Puente Hills SEA is within ½ mile of the ROW between MP 13.4 & MP 20.6, and crossed by the ROW between MP 13.4 & MP 13.5, and MP 13.9 through MP 20.6 - A portion of the proposed NAP SEA is within ½ mile of the ROW between MP 13.5 & MP 14.9

Table 3.9-12. Land Uses: South Region

Approximate Location‡	Jurisdiction Within ½ Mile of ROW	Jurisdiction Within ROW‡	Existing Land Uses Within ½ Mile of ROW	General Plan Land Use Designations Within ½ Mile of ROW	Additional Land Use Related Information
					- A portion of the existing Tonner Canyon-Chino Hills SEA is within ½ mile of the ROW between MP 15.1 & MP 20.6, and crossed by the ROW between MP 15.8 & MP 20.0 - A portion of the Firestone Boy Scout Reservation is located within ½ mile of, and crossed by the ROW between MP 17.7 & MP 20.6
S 8A MP 20.6 – MP 25.2	City of Chino Hills	City of Chino Hills	Residential, Open Space/Recreation, Open Space/Undeveloped, Educational Facilities, Public and Special Use Facilities, Agriculture, Commercial and Services, Mixed Uses, Transportation-Communications-Utilities, Water, Electrical Power Facilities	Open Not Developable, Other Institutions, Agriculture, General Commercial, Residential	- The ROW enters San Bernardino County at MP 20.6 - The Chino Hills Specific Plan is within ½ mile of, and crossed by the ROW between MP 20.6 & MP 25.2
S 8A MP 25.2 – MP 25.4	City of Chino	City of Chino	Residential, Open Space/Recreation, Open Space/Undeveloped, Educational Facilities, Commercial and Services, Transportation-Communications-Utilities, Electrical Power Facilities	Residential, Other Institutions, Regional Retail, Open Not Developable	- The Majestic Spectrum Specific Plan is within ½ mile of the ROW at MP 25.4 - The City of Chino Hills Specific Plan is within ½ mile of the ROW between MP 25.2 & MP 25.4
S 8A MP 25.4 – MP 25.6	City of Chino Hills	City of Chino Hills	Residential, Commercial and Services, Industrial, Open Space/Undeveloped, Open Space/Recreation, Educational Facilities, Public and Special Use Facilities, Agriculture, Transportation-Communications-Utilities, Electrical Power Facilities	Residential, General Commercial, Regional Retail	- The Chino Hills Specific Plan is within ½ mile of, and crossed by the ROW between MP 25.4 & MP 25.6 - The Majestic Spectrum Specific Plan is within ½ mile of the ROW between MP 25.4 & MP 25.6 - The western boundary of Eucalyptus Business Park Specific Plan is within ½ mile of the ROW at MP 25.6
S 8A MP 25.6 – MP 29.9	City of Chino	City of Chino	Industrial, Public and Special Use Facilities, Educational Facilities, Commercial and Services, Residential, Open Space/Undeveloped, Open Space/Recreation, Agriculture, Transportation-Communications-Utilities, Electrical Power Facilities	General Industrial, Light Industry, General Commercial, Residential, Regional Retail, K-12 Schools, Colleges/Junior Colleges, Open Not Developable, Urban Mixed Categories, Utilities, Parks/Recreation	- The Eucalyptus Business Park Specific Plan is within ½ mile of, and crossed by the ROW between MP 25.6 & MP 27.1 - The Majestic Spectrum Specific Plan located within ½ mile of ROW between MP 25.6 & MP 26.0 - The Commons at Chino Hills Specific Plan is within ½ mile of the ROW between MP 25.8 & MP 26.0 - The proposed Maglev Project is within ½ mile of, and crossed by the ROW at MP 26.7 & MP 27.0 - The Chino College Park Specific Plan is within ½ mile of the ROW between MP 27.7 & MP 29.0, and crossed by the ROW between MP 27.7 & MP 28.5

Table 3.9-12. Land Uses: South Region

Approximate Location‡	Jurisdiction Within ½ Mile of ROW	Jurisdiction Within ROW‡	Existing Land Uses Within ½ Mile of ROW	General Plan Land Use Designations Within ½ Mile of ROW	Additional Land Use Related Information
					- The East Chino Specific Plan is within ½ mile of, and crossed by the ROW between MP 29.0 & MP 29.9 - The California Institution for Men and State Youth Correctional Facility property is within ½ mile of the ROW between MP 26.9 & MP 29.9 - The Chino Substation is located between MP 28.1 & MP 28.4
S 8A MP 29.9 – MP 35.2	City of Ontario	City of Ontario	Agriculture, Open Space/Undeveloped, Residential, Educational Facilities, Public and Special Use Facilities, Mixed Uses, Industrial, Transportation-Communications-Utilities, Open Space/Recreation, Commercial and Services, Electrical Power Facilities	Residential, General Commercial, Other Institutions, Open Not Developable, Retail/Services, Utilities, Light Industry, K-12 Schools	- The Chino Airport is located approx. 1.6 miles south of MP 30.6 - The Los Angeles/Ontario International Airport is located approx. 4.0 miles north of MP 32.9 - The New Model Colony Specific Plan is within ½ mile of, and crossed by the ROW between MP 30.0 & MP 35.2 - The western boundary of Riverside County is within ½ mile of the ROW at MP 35.2 (Mira Loma Substation)
Mira Loma Substation (S 8A MP 35.2) (S 8B MP 6.8) (S 8C MP 6.4)	City of Ontario	City of Ontario	Agriculture, Residential, Open Space/Undeveloped, Commercial and Services, Educational Facilities, Industrial, Transportation-Communications-Utilities, Electrical Power Facilities	Residential, Retail/Services, Light Industry, K-12 Schools	- The footprint of the substation is within the boundaries of the New Model Colony Specific Plan - A U.S. Naval Reservation Station is located approx. 5.0 mile south of the substation
Segment 8B					
S 8B MP 0.0 – MP 1.5	City of Chino	City of Chino	Industrial, Residential, Agriculture, Open Space/Undeveloped, Open Space/Recreation, Educational Facilities, Mixed Uses, Commercial and Services, Water, Electrical Power Facilities	Light Industry, General Industrial, K-12 Schools, Residential, Colleges, Utilities, General Commercial, Open Not Developable	- The Chino Substation is located at MP 0.0 - The proposed Maglev Project is located within ½ mile of the ROW at MP 0.0 - The East Chino Specific Plan is within ½ mile of, and crossed by the ROW between MP 0.5 & MP 1.5 - The Chino College Park Specific Plan northern boundary is within ½ mile of the ROW between MP 0.0 & MP 0.5
S 8B MP 1.5 – MP 6.8	City of Ontario	City of Ontario	Agriculture, Open Space/Undeveloped, Residential, Educational Facilities, Public and Special Use Facilities, Industrial, Transportation-Communications-Utilities, Commercial and Services, Mixed Uses, Electrical Power Facilities	Residential, Other Institutions, Open Not Developable, Retail/Services, Utilities, Light Industry, K – 12 Schools	- The Chino Airport is located approx. 2.0 miles south of MP 2.2 - The Los Angeles/Ontario International Airport is located approx. 3.5 miles north of MP 4.5 - New Model Colony Specific Plan is within ½ mile of the ROW between MP 1.5 & MP 6.8, and crossed by the ROW between MP 1.5 & MP 4.9 and MP 6.0 through MP 6.8 - The western boundary of Riverside County is within ½ mile of MP 6.8 (Mira Loma Substation) - The Mira Loma Substation is located at MP 6.8 (see Segment 8A, above)

Table 3.9-12. Land Uses: South Region

Approximate Location‡	Jurisdiction Within ½ Mile of ROW	Jurisdiction Within ROW‡	Existing Land Uses Within ½ Mile of ROW	General Plan Land Use Designations Within ½ Mile of ROW	Additional Land Use Related Information
Segment 8C					
S 8C MP 0.0 – MP 1.5	City of Chino	City of Chino	Industrial, Residential, Agriculture, Open Space/Undeveloped, Open Space/Recreation, Educational Facilities, Transportation-Communications-Utilities, Commercial and Services, Mixed Uses, Electrical Power Facilities	Light Industry, General Industrial, Urban Mixed Categories, Residential, Colleges, Utilities, General Commercial, K – 12 Schools, Open Not Developable	- The Chino Substation is located at MP 0.0 - The proposed Maglev Project is located within ½ mile of the ROW at MP 0.0 - The East Chino Specific Plan is within ½ mile of, and crossed by the ROW between MP 0.5 & MP 1.5 - The Chino College Park Specific Plan is within ½ mile of the ROW between MP 0.0 & MP 0.5
S 8C MP 1.5 – MP 6.4	City of Ontario	City of Ontario	Agriculture, Open Space/Undeveloped, Residential, Educational Facilities, Public and Special Use Facilities, Industrial, Transportation-Communications-Utilities, Commercial and Services, Mixed Uses, Electrical Power Facilities	Residential, Other Institutions, Open Not Developable, Retail/Services, K – 12 Schools, Utilities, Light Industry	- The Chino Airport is located approx. 1.6 miles south of MP 2.2 - The Los Angeles/Ontario International Airport is located approx. 4.0 miles north of MP 4.5 - New Model Colony Specific Plan is within ½ mile of, and crossed by the ROW between MP 1.5 & MP 6.4 - The western boundary of Riverside County is within ½ mile of MP 6.4 (Mira Loma Substation) - The Mira Loma Substation is located at MP 6.4 (see Segment 8A, above)

‡ Mile Post locations are approximate

Table 3.9-12. This portion of the proposed ROW traverses multiple proposed development projects and Specific Plans, as well as several proposed and existing SEAs, as outlined in Tables 3.9-8 and 3.9-13. The Chino Substation is located between approximately MP 28.1 and 28.4; no modifications to this substation are proposed.

The remainder of Segment 8A (from the Chino Substation to the Mira Loma Substation) is approximately 6.8 miles in length. The predominant existing land use within one-half mile of this portion of the proposed ROW is agriculture. Other existing land uses include residential, industrial, transportation-communications-utilities, open space/undeveloped, electrical power facilities, and comparatively small and scattered parcels of public and special use facilities, educational facilities, commercial and services, open space/recreation, and water. A portion of the eastern boundary of Riverside County is located within one-half mile of MP 35.2 (at the Mira Loma Substation); other jurisdictions crossed by the proposed ROW and the General Plan land use designations within one-half mile of it are summarized in Table 3.9-12. The Chino Airport is located approximately 1.6 miles south of MP 30.6. There are several proposed large development plans and Specific Plans located along this section of the proposed ROW, which are also summarized in 3.9-9. There are no proposed or existing SEAs within this section of the proposed ROW.

Segment 8B is approximately 6.8 miles in length and traverses the jurisdictions of the cities of Chino and Ontario. From MP 0.0 to 1.5 existing land uses within one-half mile of the ROW are primarily residential, although smaller parcels of industrial, agriculture, open space/undeveloped, open space/ recreation, educational facilities, transportation-communications-utilities, commercial and services, water, and electrical power facilities occur as well. From MP 1.5 to the Mira Loma Substation (MP 6.8) the predominant existing land use within one-half mile of the ROW is agriculture. Parcels of open space/ undeveloped, residential, educational facilities, public and special use facilities, industrial, transportation-communications-utilities, commercial and services, water, and electrical power facilities occur as well. Within the ROW itself, existing land uses are primarily agriculture, although between MP 4.9 and MP 5.7 the ROW is immediately flanked by residential uses. The Chino Airport is located approximately 2.0 miles south of MP 2.2. General Plan land use designations and proposed large development plans and Specific Plans along Segment 8B are summarized in Tables 3.9-14 and 3.9-9. There are no proposed or existing SEAs within one-half mile of Segment 8B.

Segment 8C is approximately 6.4 miles in length. The ROW of Segment 8C immediately parallels Segment 8A, as described above, up to MP 5.6, and then parallels Segment 8B, also described above, to the Mira Loma Substation.

The Mesa Substation is located within the City of Monterey Park at Segment 7 MP 15.8 (as well as Segment 8A MP 0.0 and Segment 11 MP 36.2). Existing land uses within one-half mile of the substation include a mix of residential, commercial and services, agriculture, industrial, transportation-communications-utilities, educational facilities, public and special use facilities, open space/undeveloped, open space/recreation, and electrical power facilities. The General Plan land use designation for the station is General Commercial; additional General Plan land use designations within one-half mile of the station are summarized in Table 3.9-12. There are no proposed or existing SEAs or proposed large development plans or Specific Plans located within one-half mile of the station.

The Mira Loma Substation is located within the City of Ontario at Segment 8A MP 35.2 (as well as Segment 8B MP 6.8 and Segment 8C MP 6.4). Existing land uses within one-half mile of the station include agriculture, residential, open space/undeveloped, commercial and services, educational facilities,

industrial, transportation-communications-utilities, water, and electrical power facilities. The station is additionally within the boundaries of the New Model Colony development plan, and, as noted above, is within one-half mile of Riverside County. The station's General Plan land use designation is Agriculture; additional General Plan land use designations within one-half mile of the station are summarized in Table 3.9-12.

3.9.2.3 Alternative 3: West Lancaster Alternative

Alternative 3, the West Lancaster Alternative, is located in the North Region in an unincorporated area of Los Angeles County; it is approximately one mile west of the City of Lancaster. This re-route would deviate from Segment 4 of the proposed Project at approximately MP 14.9 and traverse 115th Street southward for an estimated 2.9 miles. It would then turn to the east for an estimated one-half mile until rejoining the proposed Project's Segment 4 at MP 17.9. This alternative would be an estimated 3.4 miles in length. Figure 3.9-5 provides the location of this alternative.

Existing land uses within one-half mile of Alternative 3 include agriculture, rural residential and open space/undeveloped. A small (approximately 4.5 acre) motocross or off-road vehicle track is also located within one-half mile to the east of the ROW on Avenue H. The SCAG General Plan land use designation within one-half mile to the east of this alternative is agriculture. SCAG General Plan land use designation data to the west of the ROW was not available for review; however, under the Los Angeles County Antelope Valley Areawide General Plan this side of the ROW is designated Non-Urban (N1), under which agricultural uses are permitted (Los Angeles County Regional Planning Department, 1986). Consequently, it is assumed that within the SCAG General Plan land use designation classification system, areas within one-half mile to the west of the ROW would be designated agriculture. All other land use-related features associated with this alternative are noted in Table 3.9-7.

3.9.2.4 Alternative 4: Chino Hills Route Alternatives

Alternative 4, the Chino Hills Route Alternatives, is located in the South Region and consists of four options (Routes A through D). Each of these routes traverses portions of unincorporated Los Angeles and Orange Counties, the cities of Chino Hills and Brea, and Chino Hills State Park. Table 3.9-13 provides a summary of the existing and General Plan land use designations for these routes.

Table 3.9-13. Land Uses: Chino Hills Route Alternatives

Route	Miles[1] Traversed By Jurisdiction		Jurisdiction-Specific General Plan Land Use Designations within ½ Mile of the ROW‡	Existing Land Uses Within ½ Mile of the ROW
A	1.6 Miles	Los Angeles County	Open Space; Non-Urban	Open Space/Recreation (Firestone Boy Scout Reservation); Electrical Power Facilities
	1.2 Miles	City of Brea	Very Low Density Residential; Low Density Residential; High Density Residential; Recreational Commercial	Open Space/Undeveloped; Open Space/Recreation; Residential; Electrical Power Facilities
	0.9 Mile	Orange County	Open Space; Open Space Reserve	Open Space/Undeveloped; Agriculture (Grazing); Electrical Power Facilities
	0.2 Mile	City of Chino Hills	Agriculture/Ranches; Rural Residential	Open Space/Undeveloped; Agriculture (Grazing); Electrical Power Facilities
	2.3 Miles	Chino Hills State Park[2]	Natural Open Space Zone; Core Habitat Zone	Open Space/Recreation; Electrical Power Facilities

Table 3.9-13. Land Uses: Chino Hills Route Alternatives

Route	Miles[1] Traversed By Jurisdiction		Jurisdiction-Specific General Plan Land Use Designations within ½ Mile of the ROW‡	Existing Land Uses Within ½ Mile of the ROW
B	1.6 Miles	Los Angeles County	Open Space; Non-Urban	Open Space/Recreation (Firestone Boy Scout Reservation); Electrical Power Facilities
	1.2 Miles	City of Brea	Very Low Density Residential; Low Density Residential; High Density Residential; Recreational Commercial	Open Space/Undeveloped; Agriculture (Grazing);Open Space/Recreation; Residential; Electrical Power Facilities
	0.9 Mile	Orange County	Open Space; Open Space Reserve	Open Space/Undeveloped; Agriculture (Grazing); Electrical Power Facilities
	0.3 Mile	City of Chino Hills[2]	Agriculture/Ranches; Rural Residential; Low Density Residential; Public Open Space	Open Space/Undeveloped; Agriculture (Grazing);Electrical Power Facilities
	4.3 Miles	Chino Hills State Park	Natural Open Space Zone; Core Habitat Zone; Historic Zone; Recreation and Operations Zone	Open Space/Recreation; Electrical Power Facilities
C	1.6 Miles	Los Angeles County	Open Space; Non-Urban	Open Space/Recreation (Firestone Boy Scout Reservation); Electrical Power Facilities
	1.2 Miles	City of Brea	Very Low Density Residential; Low Density Residential; High Density Residential; Recreational Commercial	Open Space/Undeveloped; Open Space/Recreation; Agriculture (Grazing); Residential; Electrical Power Facilities
	0.9 Mile	Orange County	Open Space; Open Space Reserve	Open Space/Undeveloped; Agriculture (Grazing); Electrical Power Facilities
	2.3 Miles	City of Chino Hills[2]	Agriculture/Ranches; Rural Residential	Open Space/Undeveloped; Agriculture (Grazing); Residential; Electrical Power Facilities (to the Chino Hills State Park boundary only)
	3.3 Miles	Chino Hills State Park[3]	Natural Open Space Zone; Core Habitat Zone	Open Space/Recreation; Electrical Power Facilities (new ROW required)
D	1.6 Miles	Los Angeles County	Open Space; Non-Urban	Open Space/Recreation (Firestone Boy Scout Reservation); Electrical Power Facilities
	1.2 Miles	City of Brea	Very Low Density Residential; Low Density Residential; High Density Residential; Recreational Commercial	Open Space/Undeveloped; Agriculture (Grazing);Open Space/Recreation; Residential; Electrical Power Facilities
	0.9 Mile	Orange County	Open Space; Open Space Reserve	Open Space/Undeveloped; Agriculture (Grazing); Electrical Power Facilities
	4.0 Miles	City of Chino Hills[2]	Agriculture/Ranches; Rural Residential; Public Open Space; Low Density Residential	Open Space/Undeveloped; Residential; Agriculture (Grazing); Electrical Power Facilities (to the Chino Hills State Park boundary only)
	1.4 Miles	Chino Hills State Park	Natural Open Space Zone; Recreation and Operations Zone	Open Space/Recreation; Electrical Power Facilities (new ROW required)

[1] Mileage estimates are approximate and based upon conceptual routing maps provided in November 2007.
[2] An additional 4 to 12 acres of land would be required for a new switching station.
[3] New ROW for the re-routing of two existing 500-kV transmission lines to the new switching station.
‡ Sources: City of Brea, 2003; City of Chino Hills, 2006; Los Angeles County Regional Planning Department, 2008; Orange County, 2005; California Department of Parks and Recreation, 1999.

The closest public airport to Alternative 4 is the Chino Airport, which is located approximately 3.8 miles northeast of the northeast corner of the Chino Hill State Park boundary. Properties under the jurisdiction of the BLM and Department of Defense are located approximately 1.1 to 1.6 miles northeast and east of the Chino Hills State Park's eastern boundary (please refer to Figures 3.9-3i and 3.9-4i of the TRTP Map and Figure Series Volume). A private property located east of Chino Hills State Park was previously used for military purposes and contains contaminated materials requiring remediation.

3.9.2.5 Alternative 5: Partial Underground Alternative

Alternative 5 would follow the same route as the proposed Project except that a four-mile portion of Segment 8A between approximately MPs 21.9 and 25.8 would be installed underground. This alternative would occur in the South Region, within the jurisdictional boundaries of the City of Chino Hills. An existing transmission line which currently is not energized along the underground route would remain in place. The primary components of Alternative 5 include: Gas Insulated Line (GIL) system infrastructure; two aboveground transition stations and three ventilation system structures; an underground tunnel; and, vertical access shafts.

Existing land uses and General Plan land use designations along the four-mile route are summarized in Table 3.9-13 and mapped in Figures 3.9-3 and 3.9-4 of the TRTP Map and Figure Series Volume. In addition to the route itself, implementation of Alternative 5 would require two transition stations which would be located at either end of the route; each would be approximately 1.84 acres in size. The Western Transition Station (S8A, MP 21.9) would be located in an area just west of the current terminus of Eucalyptus Avenue. The site is located within the Pine Valley Estates property boundary, and is approximately 0.2 mile west of the Pine Valley Estates development boundary. The Pine Valley Estates development property is approved for a new housing development and is currently under construction. The western portion of the Pine Valley Estates property, within which the station would be located, is currently open space/undeveloped and is designated Agriculture. The Eastern Transition Station (S8A, MP 25.8) would be located approximately one-half mile west of Pipeline Avenue and adjacent to (north of) an existing flood control channel. Although the Eastern Transition Station would be partially situated in an existing ROW, the current 150-foot width of this ROW would not be sufficient to accommodate the required 250-foot width of the transition station. Due to the location of the flood control channel immediately south of the ROW at this location, installation of the Eastern Transition Station would require that the ROW be expanded to the north. Existing land uses immediately north of the ROW include a car wash operation, a retail business, and a parking lot. The site for the Eastern Transition Station is designated General Commercial.

In addition to the transition stations, three aboveground ventilation system structures would be installed along the length of Alternative 5's underground segment. These structures would be located within the existing Segment 8A ROW. Existing land uses and General Plan land use designations along the four-mile route are summarized in Table 3.9-12 and mapped in Figures 3.9-3 and 3.9-4 of the TRTP Map and Figure Series Volume.

3.9.2.6 Alternative 6: Maximum Helicopter Construction in the ANF Alternative

Alternative 6 would follow the same route as the proposed Project, as described in Section 3.9.2.2. However, within the ANF those towers that are located within an estimated two and one-half mile radius of eleven helicopter staging areas would be constructed via helicopter. In total, approximately 143 new 500-kV towers would be constructed by helicopter, including 87 towers along Segment 6, and 56 towers along Segment 11. Construction methods along all other ROW segments and at existing and proposed substations would be identical to the proposed Project.

The location of the eleven helicopter staging areas (or sites) associated with Alternative 6 are provided in Figure 2.6-1 of Chapter 2 (Description of Alternatives) of this EIR/EIS. Four of these sites are identical to the helicopter staging areas that would be used under Alternative 2; these sites include Alternative 6 Sites #7, 8, 9 and 11, which correspond to Alternative 2 sites SCE #6B, 3B, 7 and 8, respectively. The Alternative 6 helicopter staging areas would be an estimated four acres each. They are all located within

the ANF; however, one is located within a private in-holding that is east of Segment 11 at MP 3.75 (Site #2). Table 3.9-14 provides a land use summary of the ten helicopter staging areas.

The majority of the helicopter staging areas would be located on lands that are currently undeveloped; however, two sites (Sites #7 and 10) include either existing and/or abandoned public and special use facilities, and two staging areas (Sites #1 and 2) are located within one-half mile of residential land uses. The staging areas are located within the following Places: Soledad Front Country (Sites #1 and 3); Angeles Uplands (West) (Sites #4, 5, 6, 7 and 10); Angeles High County (Site #4); Big Tujunga Canyon (Site #8); and, The Front Country (Site #11). Site #9 is located along the boundary between the Angeles Uplands (West) and The Front Country. The private in-holding staging area (Site #2) is surrounded by the Soledad Front Country.

Seven of the staging areas would be located within lands having an ANF zoning of Back Country (see Table 3.9-14), one site is zoned Developed Area Interface (Site #8), and two sites are zoned Back Country Motorized Use Restricted (Sites #4 and 11). Additionally, one site (Site #6) is immediately adjacent to lands zoned Critical Biological (Upper Big Tujunga). The private in-holding site (Site #2) is located adjacent to ANF lands zoned Back Country Motorized Use Restricted; it has a County of Los Angeles General Plan land use designation of Open Not Developable. Sites #1 and 3 are also located within lands having an ANF Special Designation Overlay (the Aliso-Arrastre Middle Special Interest Area), and Site #2 is surrounded by the Aliso-Arrastre Middle Special Interest Area. Figure 3.9-2 at the end of Section 3.9 provides a map of these land use zones and Places within the ANF.

3.9.2.7 Alternative 7: 66-kV Subtransmission Alternative

Alternative 7 would be identical to the proposed Project in the North and Central Regions. However, in the South Region, Alternative 7 would differ from the proposed Project in three aspects, as follows:

- Duck Farm 66-kV Underground Re-Route: At Valley Boulevard (approximately S7, MP 8.8), the existing Rio Hondo-Amador-Jose-Mesa 66-kV subtransmission line, which, under the proposed Project would run parallel to Segment 7, would be placed underground for an estimated 6,000 linear feet (approximately 1.1 miles) to the south to approximately S7 MP 9.9. The line would then transition back above ground; the placement of the undergrounded section would be along the western edge of SCE's existing ROW.
- Whittier Narrows 66-kV Underground Re-Route: At Peck Road (approximately S7, MP 11.4), the existing Jose-Mesa 66-kV subtransmission line, which, under the proposed Project would also parallel Segment 7, would be re-routed and undergrounded in a new ROW for an estimated 3,300 linear feet between approximately S7 MPs 11.4 and 12.025.
- Whittier Narrows 66-kV Overhead Re-Route: At the San Gabriel Junction, located at Segment 8A, MP 2.2, the existing Mesa-Narrows 66-kV and Walnut-Hillgen-Industry-Mesa-Reno 66-kV subtransmission lines would be re-routed from their existing ROWs. Under this alternative they would proceed southeast for an estimated 2,580 feet along San Gabriel Boulevard/Durfee Avenue, and then run southeast along Siphon Road for approximately 2,100 feet to the San Gabriel River. The lines would then cross the San Gabriel River and tie back into the existing overhead 66-kV lines located at approximately MP 3.8 of Segment 8A. From the San Gabriel River crossing to S8A PM 3.8 an estimated 1,200 linear feet of new ROW would be needed. These two re-routes would be above ground.

Table 3.9-14. Land Uses: Alternative 6 Helicopter Staging Areas

Segment	Site Number	Approximate Site Location	Existing Land Uses of Site	Existing Land Uses Within ½ Mile of Site	ANF Zoning and Places of Site	ANF Special Designation Overlays of Site
6	1	• West of Angeles Forest Highway at the intersection with Mt. Emma Road; approx. 0.1 mile east of MP 3.0	Open Space/Undeveloped	Residential, Agriculture, Open Space/Undeveloped (Including Recreational Facilities), Electrical Power Facilities	• Back Country • Soledad Front Country	• Aliso-Arrastre Middle Special Interest Area
	5	• Near Forest Road 4N18; approx. 0.1 mile west of MP 9.75	Open Space/Undeveloped	Open Space/Undeveloped (Including Recreational Facilities), Electrical Power Facilities	• Back Country • Angeles Uplands (West)	• None; adjacent to Designated Utility Corridor
	6	• Adjacent and west of Upper Big Tujunga Canyon Road; approx. 0.25 to 0.30 mile west of MP 14.0	Open Space/Undeveloped	Open Space/Undeveloped (Including Recreational Facilities), Electrical Power Facilities	• Back Country; immediately adjacent to [east of] Critical Biological (Upper Big Tujunga) • Angeles Uplands (West)	• None
7		• Approx. 1.8 miles west of MP 16.75	Public and Special Use Facilities (Existing and Abandoned)	Open Space/Undeveloped (Including Recreational Facilities)	• Back Country • Angeles Uplands (West)	• None
	11	• Approx. 0.35 mile west of MP 26	Open Space/Undeveloped	Open Space/Undeveloped (Including Recreational Facilities)	• Back Country Motorized Use Restricted • The Front Country	• None
11	2	• South of Aliso Canyon Road; immediately east of MP 3.75	Open Space/Undeveloped	Residential, Agriculture, Open Space/Undeveloped (Including Recreational Facilities), Electrical Power Facilities	• Private In-Holding; surrounded by Back Country Motorized Use Restricted and Soledad Front Country • Los Angeles County General Plan Land Use Designation: Open Not Developable	• None; surrounded by Aliso-Arrastre Middle Special Interest Area and adjacent to Designated Utility Corridor
	4	• Approx. 1.6 miles west of MP 8.0	Open Space/Undeveloped	Open Space/Undeveloped (Including Recreational Facilities)	• Back Country Motorized Use Restricted • Angeles Uplands (West)	• None
	8	• Approx. 0.15 mile west/southwest of Big Tujunga Canyon Road and MP 14.5	Open Space/Undeveloped	Open Space/Undeveloped (Including Recreational Facilities), Electrical Power Facilities	• Developed Area Interface • Big Tujunga Canyon	• None
		• Approx. 0.1 mile west of S11 MP 19.5	Open Space/Undeveloped	Open Space/Undeveloped (Including Recreational Facilities), Electrical Power Facilities	• Back Country • Boundary between Angeles Uplands (West) and The Front Country	• None

Table 3.9-14. Land Uses: Alternative 6 Helicopter Staging Areas

Segment	Site Number	Approximate Site Location	Existing Land Uses of Site	Existing Land Uses Within ½ Mile of Site	ANF Zoning and Places of Site	ANF Special Designation Overlays of Site
		• North of intersection of Lower Big Tujunga Canyon Road and the Angeles Forest Highway; approx. 0.8 mile east/northeast of MP 13.5	Public and Special Use Facilities (Abandoned)	Open Space/Undeveloped (Including Recreational Facilities)	• Back Country • Angeles Uplands (West)	• None
Between 6 and 11	3	• South of Aliso Canyon Road and east of Price Ranch Road; approx. 1.6 miles east of S11 MP 4.2 and 0.85 mile west of S6 MP 4.5	Open Space/Undeveloped	Open Space/Undeveloped (Including Recreational Facilities)	• Back County • Soledad Front Country	• Aliso-Arrastre Middle Special Interest Area

The jurisdictions, existing land uses, General Plan land use designations and proposed and existing SEAs within one-half mile of the Duck Farm 66-kV Underground Re-Route would be identical to Segment 7 for MPs 8.8 through 9.9, as provided in Table 3.9-12 and Figures 3.9-3h and 3.9-4h of TRTP Map and Figure Series Volume.

Existing land uses in or within one-half mile of the Whittier Narrows 66-kV Underground Re-Route include: residential; commercial and services; educational facilities; industrial; transportation-communications-utilities; electrical power facilities; open space/recreation; agriculture; open space/ undeveloped; and, water (SCAG, 2007; Google Earth, 2008). This underground re-route would fall in or within one-half mile of unincorporated areas of Los Angeles County and the City of South El Monte. General Plan land use designations in or within one-half mile of this re-route for the County of Los Angeles include Open Space - Parks and Recreation and Open Space - Water (Los Angeles County Regional Planning Department, 2008a). General Plan land use designations within the City of El Monte that would fall in or within one-half mile of the re-route include: Mixed Use; Parks; Commercial Manufacturing; Low Density Residential; and, Commercial (City of El Monte, 2006). This re-route would additionally traverse an estimated 0.64 mile of ROW falling under the jurisdiction of the U.S. Army Corps of Engineers between Peck Road and Durfee Avenue (Segment 7 MP 12). The proposed Puente Hills SEA and existing Whittier Narrows Dam County Recreation Area SEA are crossed by this re-route as well.

Existing land uses in or within one-half mile of the Whittier Narrows 66-kV Overhead Re-Route include: residential; commercial and services; industrial; transportation-communications-utilities; electrical power facilities; open space/recreation; agriculture; open space/undeveloped; and, water (SCAG, 2007; Google Earth, 2008). The jurisdictions crossed by, or within one-half mile of this re-route include unincorporated areas of Los Angeles County, the City of Montebello and the City of Industry; it would also fall within the City of Pico Rivera's Sphere of Influence (Planning Network, 1993). The County of Los Angeles' General Plan land use designations in or within one-half mile of this re-route include: Transportation Corridor; Suburban High Density Residential; Light Industrial; Open Space - Parks and Recreation; Open Space – Mineral Resources; and, Open Space – Water (Los Angeles County Regional Planning Department, 2008a).Within the City of Montebello, the General Plan land use designations in or within one-half mile of the re-route include: General Commercial; Parks, Recreation, Open Space; Residential Low Density; Residential Medium Density; Residential High Density; and Residential Very High Density (Koebig & Koebig, Inc., 1990). The City of Industry's General Plan land use designations that fall within one-half mile of the re-route include Industrial and Recreation and Open Space (Gruen Associates, et. al., 1971). This re-route would additionally traverse an estimated 0.86 mile of ROW falling under the jurisdiction of the U.S. Army Corps of Engineers from Lincoln Avenue to Siphon Road and across the San Gabriel River. This re-route also crosses the proposed Puente Hills SEA and existing Whittier Narrows Dam County Recreation Area SEA.

3.9.3 Applicable Laws, Regulations, and Standards

This discussion of applicable regulations, plans, and standards addresses land use, except for those regulations, plans and standards associated with wilderness and recreation and agriculture. Please refer to Sections 3.2 (Agricultural Resources) and 3.15 (Wilderness and Recreation) for the regulations, plans, and standards associated with these subject areas. Additionally, please refer to Section 3.4 (Biological Resources) for the applicable laws, regulations and standards associated with existing and proposed SEAs, HCPs and NCCPs.

The proposed Project and alternatives would traverse or fall within one-half mile of federal, State, and local jurisdictions. The following discussion provides a summary of these jurisdictions and their associated laws, regulations and standards.

3.9.3.1 Federal

As outlined in Section 3.9.2, the proposed Project and its alternatives would traverse the ANF, which is under the jurisdiction of the Forest Service. Additionally, the proposed Project and its alternatives would come in close proximity (within one-half mile) of lands or uses under the jurisdiction of the BLM, and the US Department of Defense (DoD). Additionally, due to the proximity of several airports within the vicinity of the proposed Project and its alternatives, some regulations falling under the authority and administration of the Federal Aviation Administration (FAA) apply as well. The following section outlines the applicable regulations, plans and standards of these federal agencies.

Forest Service Manual

The Forest Service Manual Section 2700 (Special Uses Management) provides direction for the administration of special-use authorizations (SUAs) on NFS lands (Forest Service, 1997). As described in Section 2703.2, the Forest Service is instructed to deny a written request for the use of NFS lands according to the following criteria:

- The proposal is inconsistent with Forest land and resource management plans;
- The proposal is in conflict with other Forest management objectives, or applicable federal statutes and regulations; or
- The proposal can be reasonably accommodated on non-NFS lands, provided however, that First Amendment group uses (freedom of assembly and worship) may not be denied on this basis.

The Forest Service may not authorize the use of NFS lands just because it affords the applicant a lower cost and less restrictive location when compared with non-NFS lands (Forest Service, 1997).

However, additional guidance regarding the management of special uses such as transmission lines across NFS lands has been provided in the Forest Service Manual Region 5 Supplement No. 2700-92-8 (Forest Service, 1992). As stated in Section 2726.43 of the supplement, the objectives for the management of transmission lines include the following:

- To eliminate or mitigate long-term conflicts between powerlines and the management of NFS lands and resources; and
- To eliminate identified fire and safety hazards.

According to the direction provided in Section 2726.43 for the construction of transmission lines over 35 kV, aerial construction of transmission line structures (as opposed to underground construction) may be authorized, except in those areas where the environmental analysis clearly indicates unacceptable effects on NFS resource and environmental values (Forest Service, 1992). This supplement recognizes that construction costs and operational problems increase substantially for underground construction of transmission lines over 35 kV, and states that the authorizing officer would consider undergrounding only after a thorough assessment of the situation (Forest Service, 1992).

Angeles National Forest Land Management Plan (2005)

The 2005 Angeles National Forest Land Management Plan (Forest Plan) consists of three parts that examine the vision, strategy, and design criteria for the ANF. Part 1 of the Forest Plan provides a "vision" of the ANF as serving as an open space, visual backdrop, recreation destination, and natural environment for a diverse urban population. Part 1 additionally includes a discussion of forest goals and desired conditions for resources, which are linked to the Forest Service National Strategic Plan. The following is a list of goals that pertain to development of the proposed Project across NFS.

National Strategic Plan Goal 4 – Help meet energy resource needs. Consider opportunities for energy development and the supporting infrastructure on forests and grasslands to help meet the nation's energy needs:

- Work with other agencies to identify and designate corridors for energy facilities, improve permit application processing efficiency, and establish appropriate land tenure (including transferability clauses) in easements and other authorizations to provide for long-term project viability.

Forest Goal 4.1b. Administer Renewable Energy Resource developments while protecting ecosystem health.

Forest Goal 7.1. Retain natural areas as a core for a regional network while focusing the built environment into the minimum land area needed to support growing public needs.

Part 2 of the Forest Plan includes the ANF program emphasis and objectives and strategic management direction, which allows the Forest Service to make progress towards its vision as presented in Part 1 of the Forest Plan. Within the strategic management direction, land use zones are designated to show allowable uses and opportunities. Table 3.9-4 summarizes the land use zones within the ANF, and Table 3.9-10 identifies the approximate acreage of each of the land use zones that would be traversed by, or are within one-half mile of the proposed Project and its alternatives.

Part 2 of the Forest Plan additionally contains a suite of special designation overlays to the primary land use zones outlined in Table 3.9-4. Suitable uses established by the land use zones are generally suitable with these overlays unless specifically excluded. When differences between the suitable uses of the land use zones and special designation overlays occur, the more restrictive set of allowable uses apply. Table 3.9-5 summarizes the special designation overlays within the ANF, and Table 3.9-10 identifies the approximate acreage of each special designation overlay areas that would be crossed by, or within one-half mile of the proposed Project and its alternatives.

Part 2 of the Forest Plan also subdivides the ANF into geographical "Places," for which the desired condition and the program emphasis is described for each. Table 3.9-9 provides a summary of the Places that would be traversed by, or within one-half mile of the proposed Project and its alternatives, and Table 3.9-10 identifies the approximate acreage of each Places that would fall within one-half mile of the proposed Project and its alternatives.

Part 2 of the Forest Plan notes the program emphasis and objectives for non-recreation special uses is to manage infrastructure needs to support communities while preserving open space and natural settings. Special uses are authorized only when they cannot be reasonably accommodated on non-NFS lands. Maintaining open space is given priority over accommodating urban needs (Forest Service, 2005a).

Part 2 describes the prospectus (trends and expectations, as well as anticipated resource improvements planned over the next three to five years). The program emphasis and objectives for non-recreation special uses is to manage infrastructure needs to support communities while preserving open space and

natural settings. Special uses are authorized only when they cannot be reasonably accommodated on non-NFS lands. Maintaining open space is given priority over accommodating urban needs.

Part 2, Appendix B, of the Forest Plan includes a list of program strategies that the ANF may choose to emphasize to make progress towards achieving the desired conditions and goals of the Forest Plan. The following is a summary of the tactics of the program strategy related to land use and Special Use Authorizations (SUAs) as related to the proposed Project and its alternatives.

Lands 2-Non-Recreation Special-Use Authorizations. Optimize utilization of encumbered NFS land and efficiently administer (SUAs):

- Work with SUA holders to better administer NFS land and reduce administrative cost.
- Require SUAs to maximize opportunities to co-locate facilities and minimize encumbrance of NFS land.

Part 3 of the Forest Plan provides the management and design criteria that the Forest Service is directed to implement to achieve the vision of the ANF, as outlined in Part 1 of the Forest Plan. It includes management standards for: vegetation; aesthetics; fish and wildlife; soil, water, riparian and heritage resources; wild and scenic rivers; cultural and historic resources; geographic Places; other design criteria; and, monitoring.

Federal Aviation Administration, Federal Aviation Regulation Title 14, Part 77

The FAA issues and enforces regulations related to air traffic control and the assignment and use of airspace. The FAA's regulations are found in the Federal Aviation Regulations (FAR). FAR Title 14, Part 77, establishes the standards for determining obstructions in navigable airspace, including height limitations on structures taller than 200 feet or within 20,000 feet (approximately 3.8 miles) of an airport. As outlined in Section 3.9.2, the proposed Project and its alternatives are located near several airports, and would have to comply with the safety requirements established by Title 14 Part 77, as applicable.

The standards and notification requirements of FAR Title 14 Part 77 are intended to: 1) evaluate the effect of the construction or alteration of structures on airport operating procedures; 2) determine if the construction or alteration would result in a potential hazard to air navigation; and, 3) identify measures to enhance safety. The FAA requires notification through the filing of FAA Form 7460-1, Notice of Proposed Construction or Alteration, and Form 117–1, Notice of Progress of Construction or Alteration, if any of the following criteria are met due to implementation of a proposed action (Title 14 Part 77.13) (Federal Aviation Administration, 2007):

- Any construction or alteration [of a structure or object] of more than 200 feet in height above the ground level at its site
- Any construction or alteration [of a structure or object] of greater height than an imaginary surface extending outward and upward at one of the following slopes:
  - 100 to 1 for a horizontal distance of 20,000 feet from the nearest point of the nearest runway of each airport with at least one runway more than 3,200 feet in actual length, excluding heliports
  - 50 to 1 for a horizontal distance of 10,000 feet from the nearest point of the nearest runway of each airport specified with its longest runway no more than 3,200 feet in actual length, excluding heliports
  - 25 to 1 for a horizontal distance of 5,000 feet from the nearest point of the nearest landing and takeoff area of each heliport
- Any proposed highway, railroad, or other traverse way for mobile objects, with a height which would exceed the standards of Part 77.13 (a) (1). (2) or (3)

- When requested by the FAA, any construction or alteration [of a structure or object] that would be in an instrument approach area (defined in the FAA standards governing instrument approach procedures) and available information indicates it might exceed a standard of subpart C of this Part [Part 77]
- Any construction or alteration of a structure or object located on a public use airport or heliport that meets the criteria of Part 77.13 (a) (5)

U.S. Department of the Interior, Bureau of Land Management

The US Department of the Interior, Bureau of Land Management (BLM) is responsible for the management, administration and conservation of over 40 percent of all public lands which are managed by the Federal government. The functions of the BLM are principally outlined in the Federal Land Policy and Management Act (FLPMA) of 1976, as amended (BLM, 2007). The FLPMA directs the BLM to manage and administer public lands on a multiple-use basis, and requires its development and maintenance of, and, when appropriate, revision to, land use and resource management plans (BLM, 2007). The proposed Project and its alternatives fall within the BLM's California District, including areas managed by the Ridgecrest Field Office (Kern County) and the Barstow Field Office (Los Angeles and San Bernardino Counties) (BLM, 2007). Segment 5 (between MP 11.8 and 13.2 and MP13.7 through 13.9) and the Vincent Substation are both within one-half mile of lands managed by the BLM. All of the North Region, and MPs 0.0 through 1.4 of Segment 6 and MPs 0.0 through 1.5 of Segment 11 (in the Central Region) fall within the boundaries of the BLM's West Mojave Desert Plan; however, the West Mojave Desert Plan only applies to lands falling under the BLM's jurisdiction. Additionally, the northeastern-most elements of Alternative 4 (the Chino Hills Route Alternative) are located approximately 1.1 miles southwest of a property falling under the jurisdiction of the BLM. The proposed Project and its alternatives do not directly traverse lands under the jurisdiction of the BLM; consequently, no conflicts with the BLM's land management plans or the FLPMA would occur.

U.S. Department of Defense

There are a number of federal and State laws mandating the development of environmental plans, including land and resource management plans, for military installations (US Department of Defense, 2007). The US Department of Defense (DoD) provides supplemental guidance to these laws at a component-specific level (e.g. the US Air Force, US Army, etc.). In most instances, each DoD component establishes additional compliance guidance to promote uniformity; each component may also obligate its respective installations to prepare additional environmental plans and documents, depending on the nature of its specified mission (DoD, 2007). The proposed Project and its alternatives traverse DoD lands in the South Region between MPs 15.2 and 15.5 of Segment 8A; however, this crossing is located within an existing SCE easement and no widening of the easement is proposed. Per land use field reconnaissance conducted on December 20, 2008, no access to this property was identified, and no signs indicating its past or current use were posted.

Within the South Region, facilities under the jurisdiction of the DoD are also located approximately 5.8 miles south of the Mira Loma Substation (the Naval Warfare Assessment Station). Additionally, DoD properties are located approximately 1.1 to 1.6 miles northeast and east of the Alternative 4 (the Chino Hills Route Alternatives), as indicated on Sheet 9 of 9 of Figures A-1 and A-2. In the North Region, the proposed Project and its alternatives are located approximately 10 to 16 miles west of Edwards Air Force Base, as outlined in Table 3.9-7, and the Air Force Plant 42 facility, a shared military installation, is located approximately 8.5 miles east of proposed Segment 5 at MP 5.0. Due to the existing SCE easement associated with Segment 8A, and the distance between the proposed Project and its alternatives from the

remaining DoD properties, no conflicts with existing land management plans and operations would be anticipated.

U.S. Army Corps of Engineers

The U.S. Army Corps of Engineers (USACE) is responsible for the planning, design, construction and operation of water resources and other civil works projects, the design and construction management of military facilities for the U.S. Army and U.S. Air Force, and providing design and construction management support for other U.S. defense departments and federal agencies (USACE, 2008). The Corps' Los Angeles District encompasses 226,000 square miles in four states, protects 420 miles of Southern California, and supports nine military bases (USACE, 2008). Within the proposed Project area, the USACE holds jurisdiction over all "navigable waters of the United States," as well as several flood control basins and dams and associated infrastructure. These flood control facilities include the Santa Fe Flood Control Basin, located along Segment 7 between approximately MP 2.7 and MP 4.4, the Whittier Narrows Flood Control Dam and Basin, located along both Segment 7 between approximately MP 11.4 and MP 13.7 and Segment 8A between approximately MP 3.2 and MP 4.2. USACE lands are also traversed for an estimated 0.2 mile near the Rio Hondo Substation, located along Segment 7 near MP 4.8.

Due to the USACE jurisdictional proximity to Segments 7 and 8A, on November 5, 2008 the Forest Service transmitted a letter the USACE requesting the USACE state their desired level of participation under NEPA. On November 25, 2008 the USACE responded to the Forest Service, and requested to participate in the NEPA environmental review process as a Cooperating Agency.

3.9.3.2 State

California Public Utilities Commission (CPUC)

Pursuant to Article XII of the Constitution of the State of California, the CPUC is charged with the regulation of investor-owned public utilities. The CPUC's General Order (GO) Number 131-D, Section XIV B states that: "Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the Commission's [CPUC's] jurisdiction. However in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Under GO Number 131-D, no local discretionary permits (e.g., land use permits) for the proposed Project or its alternatives would be required because the CPUC has preemptive jurisdiction over public utilities in California and the Forest Service has jurisdiction over NFS lands. However, SCE would still be required to obtain all ministerial building and encroachment permits from local (County and incorporated cities) jurisdictions, and the CPUC will ensure that the Project complies with local regulations to the greatest degree feasible to minimize project conflicts with local conditions, in accordance with GO Number 131-D.

California State Lands Commission (CSLC)

Public lands under the CSLC's jurisdiction include sovereign and school lands. Sovereign lands include the beds of California's naturally navigable rivers, lakes and streams, and the State's tide and submerged lands along the coast. School lands are located throughout the State and were originally granted to California by Congress in 1853 to benefit public education. Under the CSLC, the State retains surface and mineral ownership of approximately 469,000 acres of school lands, and retains the mineral rights to an additional 790,000 acres (CSLC, 2007). The CSLC's Land Management Division has primary responsibility for the surface management of all sovereign and school lands in the State, including their

leasing and management. Pursuant to the California Code of Regulations, Title 2, Division 3, Chapter 1, Article 2, public and private entities may apply for leases or permits on public lands for a variety of uses, including rights-of-way. The proposed Project ROW and its alternatives do not traverse public lands falling under the jurisdiction of the CSLC. However, the proposed Project ROW is located within one-half mile of the CSLC lands between MP 9.4 and MP 10.2 of Segment 10.

California Department of Parks and Recreation

The California Department of Parks and Recreation manages 280 units throughout the State. Units are classified by statute and can include, but are not limited to, State Parks, State Recreation Areas, State Vehicular Recreation Areas, State Reserves and State Historic Parks. Units of the State Parks system can also include sub-units, such as State Wilderness, Cultural Preserves and Natural Preserves. For the purposes of lands managed by California State Parks, the State is divided into 19 Districts. The Land Use Study Area passes through the Tehachapi District, Angeles District, and Inland Empire District. The proposed Project does not traverse lands under the jurisdiction of the California Department of Parks and Recreation. However, a portion of the existing Antelope Valley California Poppy Reserve, which is under the jurisdiction of California Department of Parks and Recreation and within its Tehachapi District, is located within one-half mile of proposed Segment 4 at MP 12.9.

All routes associated with Alternative 4 (the Chino Hills Route Alternative) would affect lands within Chino Hills State Park (Park or CHSP). The CHSP General Plan (General Plan) was adopted in February 1999 (California Department of Parks and Recreation, 1999). The General Plan identifies four management zones, including the Core Habitat Zone, Natural Open Space Zone, Historic Zone, and Recreation and Operations Zone. The General Plan additionally provides a management zone matrix, which includes the primary goal, resource management activities, carrying capacity, typical visitor activity, public access and range of appropriate facilities for each zone (California Department of Park and Recreation, 1999). Within this matrix, patrol and utility company vehicles and motorized equipment is permitted on designated Park roads and trails within the Core Habitat and Natural Open Space Zones, and vehicles and motorized equipment are allowed on designated Park roads and trails in the Recreation and Operations Zone. Within the General Plan, the series of existing transmission line easements (and associated access roads) which traverse the Park, including those associated with Alternative 4, are noted as being prominent negative visual features which detract from the experience of the Park's visitors; additionally, the General Plan notes that these utility features are of public concern. The General Plan also notes that SCE personnel use several dirt roads in the Park to access gas pipelines and electric transmission lines, and that the maintenance activities, uses, and planning efforts of the California Department of Parks and Recreation that affect safe access to SCE's facilities are a concern of SCE (California Department of Parks and Recreation, 1999).

3.9.3.3 Local

As noted in Section 3.9.3.2, the CPUC has preemptive jurisdiction over the construction, maintenance, and operation of public utilities in the State of California. Therefore, no local discretionary land use permits or local plan consistency evaluations are required. However, local land use plans are evaluated in the Policy Screening Report (Aspen Environmental Group, 2008) to assist the CPUC and Forest Service in determining whether the proposed Project and its alternatives would be consistent with locally adopted land use plans, goals, and policies. The following sections list the local land use plans applicable to jurisdictions traversed or within one-half mile of the proposed Project and its alternatives. Figures 3.9-3

and 3.9-4 of the TRTP Map and Figure Series Volume provide the various jurisdictional boundaries associated with the proposed Project's ROWs.

General Plans

The proposed Project and alternative ROWs would traverse, or come within one-half mile, of the boundaries of numerous cities and counties. As stipulated by California Government Code Section 65300 *et seq.*, cities and counties are required to develop and adopt General Plans to guide local decision-making related to existing and future land use, growth, and other local infrastructure, such as circulation systems, public open space, and other public facilities. In addition to General Plans, the State requires cities and counties to adopt local zoning ordinances (Government Code Section 65800 *et seq.*) to implement their adopted General Plan through development standards and regulations. Pursuant to General Order 131-D, as addressed in Section 3.9.3.2, SCE would be required to obtain all ministerial building and encroachment permits from local jurisdictions, which would inherently require compliance with, or issuance of a variance for deviation from, all applicable local zoning ordinances. Therefore, local zoning ordinances are not addressed further in this discussion. For the purposes of this land use analysis, the following city and county-based General Plans were considered:

- Kern County
- Los Angeles County
- San Bernardino County
- Orange County
- City of Arcadia
- City of Azusa
- City of Baldwin Park
- City of Bradbury
- City of Brea
- City of Chino
- City of Chino Hills
- City of Diamond Bar
- City of Duarte
- City of El Monte
- City of Industry
- City of Irwindale
- City of La Canada Flintridge
- City of La Habra Heights
- City of Lancaster
- City of Monrovia
- City of Montebello
- City of Monterey Park
- City of Ontario
- City of Palmdale
- City of Pasadena
- City of Pico Rivera
- City of Rosemead
- City of San Gabriel
- City of San Marino
- City of South El Monte
- City of Temple City
- City of Whittier

Airport Land Use Plans

In 1967 the California State Legislature authorized the creation of Airport Land Use Commissions (ALUC) to protect the "public health, safety, and welfare by encouraging orderly expansion of airports and the adoption of land use measures that minimize exposure to excessive noise and safety hazards within areas around public airports to the extent that these areas are not already devoted to incompatible uses" (California Department of Transportation, 2007). The law requires each County's ALUC to prepare an Airport Land Use Compatibility Plan (ALUCP) with a 20-year planning horizon. The law additionally provides for several alternative processes to the establishment of ALUC's for the adoption of ALUCPs, one of which calls for local agency (i.e., a county and the cities within it which are affected by operation of an airport) development and adoption of an ALUCP. Under either the ALUC process or one of its alternatives, the primary focus of an ALUCP is on noise and safety as related to land use and land use compatibility. In addition, ALUCs (or their alternative local decision making bodies) make compatibility determinations for compliance of all proposed development around an airport (California Department of Transportation, 2007).

Kern County. The Kern County ALUCP has been developed and adopted at a local level, including Kern County and the incorporated cities of Bakersfield, California City, Delano, Shafter, Taft, Tehachapi and Wasco (Kern County, 1996). The geographic scope for the compatibility review policies and supporting compatibility review criteria contained in the ALCUP apply to the following airports:

- Bakersfield Municipal Airport
- California City Airport
- Delano Municipal Airport
- Elk Hills – Buttonwillow Airport
- Inyokern Airport
- Kern Valley Airport
- Lost Hills Airport
- Meadows Field
- Mojave Airport
- Mountain Valley Airport
- Poso-Kern Airport
- Rosamond Skypark
- Shafter Airport-Minter Field
- Taft-Kern County Airport
- Tehachapi Airport
- Wasco-Kern County Airport

In addition to the above, the ALUCP addresses military aviation operations associated with Edwards Air Force Base, the China Lake Naval Aviation Weapons Station, and the Joint Service Restricted Airspace R-2508 Complex (Kern County, 1996). The ALUCP defines a suite of six influence zones surrounding each airport that relate to the noise and safety risks associated with the types of operations that occur within them. The land use compatibility criteria for each of these influence zones is identified, including prohibited uses, normally acceptable and normally not acceptable uses, and the development conditions (such as the of aviation easements) for proposed development (Kern County, 1996). For each airport addressed in the ACLUP, information related to its specific operations and features is provided, including noise contour maps and maps depicting its influence zones. The proposed Project and its alternatives do not fall within the compatibility zones of any of the airports addressed in the ALUCP; of the applicable airports, the proposed and alternative ROWs are six miles southwest of the Mojave Airport, eight miles southeast of the Fantasy Haven Airport, nine miles west of the Rosamond Airport, and eleven miles west of Edwards Air Force Base. Therefore, implementation of the proposed Project or one of its alternatives would not be anticipated to conflicts with the Kern County ALUCP.

Los Angeles County. Pursuant to Section 21670.2 of the California Public Utilities Code (Chapter 4, Article 3.5), the Los Angeles County Regional Planning Commission has the responsibility for coordinating airport planning of public agencies and adopting an ALUCP (California Environmental Resources Evaluation System, 2007). In December 1991, abbreviated land use compatibility plans for 15 public-use and joint-use airports located in Los Angeles County were adopted. However, realizing the need for a more comprehensive set of airport land use compatibility policies, in 2002 a process to update these plans over a period of several years, subject to funding availability, was initiated (Los Angeles County Regional Planning Commission, 2007). In order to maintain as much consistency as practical among the various plans as they are updated, the update process calls for formatting the compatibility plan for each airport in two documents. The first document, the *Los Angeles County Airport Land Use Commission Review Procedures*, sets forth the review procedures and other policies that are generally applicable to all of the airports in Los Angeles County. This document was completed and adopted in December 2004 (Los Angeles County Regional Planning Commission, 2007). The second document, as completed, will be specific to each of the 15 public-use and joint-use airports, including:

- Agua Dulce Skypark
- Brackett Field (La Verne)
- Burbank Airport
- Catalina Airport-in-the-Sky
- Compton Airport
- El Monte Airport
- General William J. Fox Airfield (Lancaster)
- Hawthorne Airport
- Los Angeles International Airport
- Long Beach Municipal Airport
- Palmdale Regional Airport
- Santa Monica Municipal Airport
- Torrance Municipal Airport
- Van Nuys Airport
- Whiteman Airport (Pacoima)

The preparation and adoption schedule for each of these airport-specific documents will vary; however, each document will contain all of the applicable land use policies and compatibility criteria contained within the *Los Angeles County Airport Land Use Commission Review Procedures*.

San Bernardino County. As with Kern County, San Bernardino County develops and adopts ALUCPs at a local jurisdictional level (i.e., under an alternative process) which is determined by the location and ownership of each airport; the former San Bernardino County ALUC was decommissioned in either 1993 or 1994 (Squire, 2007). Within San Bernardino County, there are two public-use airports potentially affected by the proposed Project and its alternatives, including the Chino Airport and the Los Angeles/Ontario International Airport.

Chino Airport. The Chino Airport's ALUCP was adopted by the former San Bernardino County ALUC in 1991, and no amendments to it have been made since its adoption (Squire, 2007). The airport is owned by San Bernardino County, but is within the jurisdictional boundaries of the City of Chino. Therefore, any future amendments to this ALCUP will be adopted by the City of Chino, with input from other affected jurisdictions. The adopted ALUCP addresses the airport's existing (as of 1991) and future operations, and identifies designated areas ("referral areas') consisting of various noise, safety and height restriction attributes; a broader referral area for Riverside County is also identified (San Bernardino County Airport Land Use Commission, 1991). Noise, safety (for both aviation hazards and land use and population), as well as other potential impacts are subsequently assessed. Based on these assessments, the ALUCP contains a suite of findings and recommendations of each referral area (San Bernardino County Airport Land Use Commission, 1991).

Los Angeles/Ontario International Airport. The Los Angeles/Ontario International Airport (formerly referred to as Ontario International Airport) is owned and operated by Los Angeles World Airports (LAWA). The airport does not currently have an adopted ALUCP (Schoetzow, 2007; Mejia, 2007). However, the City of Ontario Planning Department is responsible for preparation of the ALUCP and any amendments to it, in consultation with other affected agencies such as LAWA, San Bernardino County, the California Department of Transportation (Caltrans), and the FAA (Schoetzow, 2007; Mejia, 2007). The City of Ontario's Planning Department is currently in the preliminary phases of the ALUCP's development, and anticipates preparation of the draft document in 2008; once finalized, the City of Ontario's City Council will be responsible for its adoption, as well as any amendments to it (Mejia, 2007).

3.9.4 Impact Analysis Approach

3.9.4.1 Criteria for Determining Impact Significance

To satisfy CEQA requirements, conclusions are made regarding the significance of each identified impact that would result from the proposed Project and alternatives. Appropriate criteria have been identified and utilized to make these significance conclusions. The following significance criteria for Land Use were derived from previous environmental impact assessments and from the CEQA Guidelines (Appendix G, Environmental Checklist Form, Section IX). Impacts of the proposed Project or alternatives would be considered significant and would require mitigation if:

- Criterion LU1: Preclude a permitted land use, or create a disturbance that would diminish the function of a particular land use.
- Criterion LU2: Conflict with any applicable federal, State or local land use plans, goals, or policies.

Significance conclusions for individual impacts are not required for compliance with NEPA. Therefore, conclusions presented in the following analysis regarding the significance of identified impacts are provided for the purposes of CEQA only.

3.9.4.2 Applicant-Proposed Measures (APMs)

The land use and planning analysis provided in the Proponent's Environmental Assessment (PEA) concludes that implementation of the proposed Project would not result in any potentially significant impacts which would require mitigation (SCE, 2007a). Therefore, no Applicant-Proposed Measures (APMs) for land use and planning are considered part of the proposed Project or factored into the impact analyses presented in this section.

3.9.4.3 Impact Assessment Methodology

There are two main components of the land use analysis: (1) the determination of potential short- and long-term conflicts with, or disruptions or preclusions of, existing and permitted land uses; and, (2) the identification of potential inconsistencies with adopted land use plans, goals, policies or regulations. Impacts on land use could result from various Project-related activities, including: removal or modification of existing facilities; construction of new or replacement transmission lines; construction of expanded substations; establishment of staging areas, pulling and tensioning sites and access roads; and, operation and maintenance of Project-related facilities.

To determine potential impacts, the impact significance criteria established in Section 3.9.4.1 were applied to the activities described in the above paragraph based upon the land use information provided in Sections 3.9.2 and 3.9.3. Impacts are identified as being either short- or long-term in nature. They are numbered under each impact significance criterion, as are applicable mitigation measures. The significance of each impact is also identified according to the following classification:

- Class I: Significant impact that cannot be mitigated to a level that is not significant. Class I impacts are significant adverse effects that cannot be mitigated below a level of significance through the application of feasible mitigation measures. Class I impacts are significant and unavoidable.
- Class II: Significant impact that can be mitigated to a level that is not significant. A Class II impact is a significant adverse effect that can be reduced to a less-than-significant level through the application of feasible mitigation measures.
- Class III: Adverse, but not significant. A Class III impact is a minor change or effect on the environment that does not meet or exceed the criteria established to gauge significance.
- Class IV: Beneficial impact. Class IV impacts represent beneficial effects that would result from project implementation.

3.9.5 Alternative 1: No Project/Action

Under the No Project/Action Alternative neither the proposed Project (Alternative 2) nor one of its re-routed or structurally changed alternatives (Alternatives 3 though 7) would be implemented. Consequently, associated impacts to land use would not occur. However, in the absence of either the proposed Project or one of its alternatives, the purpose and need for power transmission capabilities would not be met. Under this scenario, it is possible that a similar type of transmission line project would be constructed in the future to meet the power transmission needs of developing wind energy in the Tehachapi Wind Resource Area (TWRA). Due to the location of the TWRA, and the projected need for power in the greater Los Angeles area, such a project would likely traverse the same geographic regions as either the proposed Project or Alternatives 3 through 7, and subsequently introduce similar types of impacts to land use.

Environmental conditions of the Land Use Study Area would be expected to change over time, regardless of whether either the proposed Project or one of its physical alternatives is implemented. Therefore, the

regional setting and baseline conditions which are discussed in Section 3.9.2 (Affected Environment) would not remain static. The following section describes how land uses in the Land Use Study Area would be expected to change in the future under the No Project/Action Alternative. However, because the potential impacts of the proposed Project and Alternatives 3 through 7 would not occur under the No Project/Action Alternative, the significance criteria described in Section 3.9.4 (Impact Analysis Approach) are not used for this analysis.

North Region

As described in Section 3.9.2, the predominant existing land uses of the North Region include large expanses of undeveloped open space, agriculture and residential development. There are also several large tracts of undeveloped land which are planned for future development. The cities of Palmdale and Lancaster, located along the southern boundary of this region, are both rapidly developing urban areas which include large tracts of residential development, as well as other uses such as commercial, business and industrial development. Under the No Project/Action Alternative it would be expected that this region would continue its rapid rate of urban and suburban development, not only within the Palmdale and Lancaster areas, but also further to the north, along the southern boundary of Kern County. Assuming that growth in this region continues, it is expected that lands which are currently used for rural residential and agricultural purposes, as well as open space/undeveloped areas, would decrease at rates similar to that of development. However, all such development would require site-specific planning (e.g., the development of a Specific Plan, Master Plan, or similar land use planning document) and environmental review and approval prior to its implementation. Therefore, it is assumed that potential impacts to these rural land uses would be identified and mitigated, as feasible and appropriate.

Under the No Project/Action Alternative the existing Antelope-Magdum No. 1, Midway-Vincent No. 3, Antelope-Vincent and Antelope-Mesa transmission lines would continue to operate under their current conditions. Therefore, no new temporary or long-term impacts to existing and planned land uses within or adjacent to their respective ROWs would occur. However, under this alternative Segment 10 and the proposed Whirlwind Substation would not be constructed; thus there would be no corresponding net loss or preclusion of rural residential uses, open space/undeveloped area, or agricultural production. Similarly, there would be no temporary land disturbances due to construction.

Under the No Project/Action Alternative it is assumed that some type of new energy-related transmission would need to be constructed in lieu of the proposed Project or Alternatives 3 through 7. However, the specific location of this new transmission line is not known; consequently, the specific land uses that would be affected by its construction and operation are not known. Due to this uncertainty, it cannot be predicted if the No Project/Action Alternative would temporarily or permanently result in significant impacts to residential and non-residential land uses, or conflict with any applicable federal, State or local land use plans, goals, policies or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

Central Region

As outlined in Section 3.9.2, the Central Region is primarily located within the ANF, the majority of which is made-up of undeveloped lands used for recreation and natural resource management. Under the No Project/Action alternative, the existing management practices and plans of the USDA Forest Service would be anticipated to be maintained, and no substantial changes to the ANF's existing land use zones, Places, or special designation overlay areas would be expected to occur.

Under this alternative, there would be no expansion of the Vincent Substation, partial or full removal of existing 220-kV transmission lines, or construction of 500-kV new transmission lines in existing ROWs. Additionally, no upgrades to the Gould Substation would occur, and the existing Eagle Rock-Mesa transmission line would not be equipped to accommodate the proposed new Gould-Mesa 220-kV transmission line. Consequently, land disturbances due to the construction of new transmission lines and removal of existing transmission lines and related facilities would not occur. Similarly, no construction-related activities that would temporarily preclude or restrict existing uses of the ANF would occur, including short-term disturbances to residential areas and special use facilities. However, under the No Project/Action Alternative, it is assumed that some type of additional transmission line to serve the greater Los Angeles area would need to be constructed. Because the location of this new transmission line is not known, it cannot be predicted if it would directly or indirectly result in significant impacts to residential and non-residential land uses. Alternatives 2 through 7 would require the permanent allocation of expanded ROW along proposed Segment 11 to a width of 250 feet for an estimated three miles north of the Gould Substation, including new access and spur roads. Although the width of the ROW in this area is variable and unknown, the permanent dedication of additional ROW acreage would be needed. Additionally, expansion of the Vincent Substation would require the permanent disturbance of an estimated 18 acres. Consequently, Alternatives 2 though 7 would result in the permanent loss of lands to ROW and substation uses. As addressed above, under the No Project/Action Alternative it is assumed that a new transmission line would be needed to serve the purpose of either the proposed Project or Alternatives 3 through 7. However, because the specifics of this new transmission line are not known, it is not possible to predict if it would require the permanent loss of existing or planned land uses due to new or expanded ROW and associated substation facilities. Consequently, it cannot be predicted if it would result in significant permanent impacts to residential and non-residential land uses or conflict with any applicable federal, State or local land use plans, goals, policies or regulations.

Under the No Project/Action Alternative, it is assumed that some type of new energy-related transmission would need to be constructed in lieu of the proposed Project or Alternatives 3 through 7. If this transmission line were to traverse the ANF, a new Special Use Authorizations or other approvals from the USDA Forest Service would still be required; however, because the specific of this new transmission line are not known, it cannot be predicted if there would be a potential conflict (or conflicts) with the ANF's Land Management Plan.

South Region

The majority of the South Region is made up of a complex mix of intensively developed urban uses. Exceptions to this development are open space/undeveloped areas that fringe developed areas; typically they serve as either open space/recreational areas and "green belts," or existing or proposed SEAs. Under the No Project/Action Alternative the intensity of existing development would be expected to either remain the same, or expand into areas that are currently undeveloped. Substantial new development, particularly as related to residential uses and associated commercial and services and business uses, would be expected to occur in the vicinity of the cities of Chino Hills, Chino and Ontario. This new development would likely encroach on lands that are currently used for agricultural purposes or lands which are currently undeveloped.

Under the No Project/Action Alternative the new Gould-Mesa 220-kV transmission line would not be constructed (proposed Segment 11) and the existing Antelope-Mesa 220-kV transmission line would not be removed and replaced with the new Mira Loma-Vincent 500-kV transmission line (proposed Segment

7). Additionally, modifications to, or replacement of, existing transmission line facilities, new or expanded ROW, and new transmission lines would be not be undertaken along proposed Segment 8. Similarly, no upgrades to the Mesa and Mira Loma Substations would occur. Consequently, no construction-related activities that could temporarily preclude, restrict, or otherwise disturb existing or permitted (future) land uses would occur.

Under the proposed Project and its Alternatives 3, 4, 5, 6, and 7, new or expanded ROW would be needed in the South Region. Along proposed (and alternative) Segments 7 and 11 no new ROW or expanded ROW would be needed, although existing towers would be replaced with larger towers. Additionally, Alternative 4 would require the construction of a new switching station, which would result in the permanent disturbance of between 4 to 12 acres of land, depending on the type of type of power transmission technology used, and Alternative 5 would require two new permanent transition stations would be an estimate 1.8 acres each is size.

As with the North Region, under the No Project/Action Alternative it is assumed that if either the proposed Project or Alternatives 3 through 7 is not implemented, some type of replacement (e.g., new) transmission line would be required to serve the greater Los Angeles area. However, because the location and design specifics of this new transmission line are not known, it cannot be predicted is it would significantly impact, directly or indirectly, residential and non-residential land uses, either temporarily or permanently. Similarly, because the new transmission line ROW and its related facilities are not known, it cannot be predicted if it would conflict with any applicable federal, State or local land use plans, goals, policies or regulations.

3.9.5.1 Cumulative Effects Analysis

As discussed above, it is assumed that a similar type of transmission line project would likely be constructed in the future to meet the power transmission needs of developing wind energy in the Tehachapi Wind Resource Area (TWRA), which would introduce similar types of impacts as the proposed Project to land use such as: a preclusion, disruption, or division of planned and permitted land uses; short- or long-term conflicts with surrounding land uses; or, inconsistencies with federal, State or local land use policies or regulations. Construction could potentially contribute to a long-term cumulatively considerable effect. Operation and maintenance could also cause the long-term disruption of existing and planned residential land uses in combination with other energy projects; however, as with the proposed Project, they would be anticipated to result in a less-than-significant cumulative impact.

3.9.6 Alternative 2: SCE's Proposed Project

The following section describes the proposed Project's impacts on land use, as determined by the impact significance criteria provided in Section 3.9.4.1. Mitigation measures are recommended, as warranted and feasible, to reduce significant impacts to a level of less than significant.

Construction-related impacts refer to activities such as the removal of existing transmission line infrastructure, construction of new transmission lines, placement and use of staging, pulling and tensioning sites, placement and use of both temporary and permanent access roads, and the expansion or modification of substation sites. Operational and maintenance impacts refer to the effects resulting from the types of activities necessary for long-term operation and maintenance of the proposed transmission lines and substations, such as routine inspections and repairs along the ROWs, operation of substations, inspection and repair of permanent access roads, and, in the case of land use, the effects of permanent new or widened ROWs and substation expansions.

3.9.6.1 Direct and Indirect Effects Analysis

Direct and indirect effects associated with Alternative 2 (the proposed Project) are discussed below and summarized in Table 3.9-22 (Summary of Impacts and Mitigation Measures – Land Use).

Preclude a permitted land use, or create a disturbance that would diminish the function of a particular land use (Criterion LU1)

Impact L-1: Construction of the Project would temporarily disrupt, displace, or preclude existing residential land uses.

Construction-related activities would require the temporary use of lands for purposes other than their existing use. For example, lands that are currently undeveloped or vacant would be used for staging areas, access roads, and pulling, tensioning, and splicing sites. The use of these areas could temporarily restrict access to, or the use of, lands that surround them as well. Construction would additionally cause temporary disturbances due to site-specific access limitations and parking restrictions, increased traffic and congestion along construction routes and detour routes, increased dust generation and noise, and changes in the overall visual character of an area due to the presence of construction-related equipment, personnel, and associated activities.

Primary and secondary staging areas would be selected on the basis of accessibility to construction locations and proximity to transmission line and substation access roads. An area of five to 50 acres in size would be required for each primary staging area. The number and size of the secondary staging areas would be dependent upon a detailed ROW inspection; but they would typically be one to three acres in size and located approximately every five to ten miles along the transmission line alignment. In addition, helicopter staging areas would be required to support helicopter construction of towers within the ANF. The number of wire setup sites used for pulling/tensioner/splicing of conductor wire would vary by segment length and specific construction-related needs. Tables 2.2-2 through 2.2-9 of Chapter 2 (Description of Alternatives) provide the estimated temporary and permanent land disturbance acreages associated with each segment for these features. Table 3.9-15 provides a summary of the anticipated number of wire stringing sites and staging areas by segment.

Table 3.9-15. Summary of Estimated Construction-Related Staging Areas and Wire Setup Sites*
North Region
Segment 10
Approximately 16 new wire setup sites and 5 staging areas
Segment 4
Approximately 28 wire setup sites and 2 staging areas
Segment 5
Approximately 37 wire setup sites and 2 staging areas
Central Region
Segment 6
Approximately 19 wire setup sites, 4 staging areas, and 5 helicopter staging areas
Segment 11 *(Estimates includes the South Region)*
Approximately 36 wire setup sites, 5 staging areas, and 7 helicopter staging areas
South Region
Segment 7
Approximately 16 wire setup sites and 1 staging area
Segment 8
Approximately 33 wire setup sites and 2 or 3 staging areas

* The estimates provided in this table are based upon preliminary estimates provided the PEA (SCE, 2007a) and are subject to change.

Improvements to existing access and spur roads and the construction of new permanent and temporary access roads would also vary by segment. Additionally, the width of these road types would vary in relation to their purpose, as well as their surrounding topography. Access roads are through roads that run between tower sites along a ROW and serve as the transmission line's main transportation route. Spur roads are roads that lead from access roads and terminate at one or more tower sites. Under some circumstances, the transport of tubular steel poles (TSPs) or lattice steel towers (LSTs) requires larger haul trucks which require additional road area (radius) for turning along access and spur roads. Construction of the proposed Project would require the improvement of some existing access and spur roads in order to accommodate construction-related heavy equipment; the construction of some new access, spur, and radius roads would additionally be needed. Along Segments 6 and 11 implementation of the proposed Project would also involve helicopter construction within the ANF, which would result in temporary land disturbances due to the need for helicopter staging and support areas. Preliminary estimates for the mileage and acreage of new and improved access and spur roads, as well as the acreages needed for the helicopter staging and support areas are provided in Tables 2.2-2 through 2.2-9 of Chapter 2 (Description of Alternatives). The estimated total construction-related (e.g., temporary) and permanent land disturbance ranges for the proposed Project that are provided in Tables 2.2-2 though 2.2-9 is summarized in Table 3.9-16, below.

Table 3.9-16 Summary of Temporary and Permanent Land Disturbances

Region & Segment	Temporary Land Disturbances During Construction (Acres)	Permanent Land Disturbances (Acres)
North Region		
Segment 10 Land Disturbance Range (± 15%)	77.2 – 104.4	20.6 – 27.8
Segment 4 Land Disturbance Range (± 15%)	269.9 – 365.1	35.2 – 47.5
Segment 5 Land Disturbance Range (± 15%)	126.0 – 170.5	9.9 – 13.4
North Region Total Land Disturbance Range (± 15%)	473.1 – 640.0	65.7 – 88.7
Central Region		
Segment 6 Land Disturbance Range (± 15%)		
NFS Lands	108.4 – 146.6	45.5 – 61.6
Non-NFS Lands	27.6 – 37.4	2.1 – 2.8
All Lands	136.0 – 184.0	47.6 – 64.4
Segment 11Land Disturbance Range (± 15%) (*Gould-Vincent Only*)		
NFS Lands	112.3 – 152.0	46.3 – 62.7
Non-NFS Lands	68.6 – 92.8	5.4 – 7.3
All Lands	180.9 – 244.8	51.7 – 70.0
Central Region Total Land Disturbance Range (± 15%)		
NFS Lands	220.7 – 298.6	91.8 – 124.3
Non-NFS Lands	96.2 – 130.2	7.5 – 10.1
All Lands	316.9 – 428.8	99.3 – 134.4
South Region		
Segment 11 Land Disturbance Range (± 15%) (*Gould-Mesa Only*)		
NFS Lands	10.2 – 13.8	0.7 – 1.0
Non-NFS Lands	28.6 – 38.7	0.0 – 0.1
All Lands	38.8 – 52.5	0.7 – 1.1
Segment 7 Land Disturbance Range (± 15%)	121.6 – 164.5	2.2 – 2.9
Segment 8 Land Disturbance Range (± 15%)	301.8 – 408.4	12.7 – 17.2

Table 3.9-16 Summary of Temporary and Permanent Land Disturbances		
Region & Segment	Temporary Land Disturbances During Construction (Acres)	Permanent Land Disturbances (Acres)
South Region Total Land Disturbance Range (± 15%)		
NFS Lands	10.2 – 13.8	0.7 – 1.0
Non-NFS Lands	452.0 – 611.6	14.9 – 20.2
All Lands	462.2 – 625.4	15.6 – 21.2
Project-Wide Total ROW Land Disturbance Range (± 15%)		
NFS Lands	230.9 – 312.4	92.5 – 125.3
Non-NFS Lands	1,021.3 – 1,381.8	88.1 – 119.0
All Lands	1,252.2 – 1,694.2	180.6 – 244.3

Construction-related impacts would typically cause direct effects on land uses within approximately 1,000 feet of either side of a given ROW, or within approximately 1,000 feet of staging areas, wire setup sites, substation sites, and new and improved access and spur roads due to the presence of construction crews, the operation of heavy equipment, and associated crew, equipment, and material access (import and export) from these sites. Residents within 1,000 feet of construction could perceive activities as an intrusion of their privacy, and may adjust, limit, or cease some of their daily routines and activities in response to construction. For example, children may be restricted or prohibited from playing in their yards and surrounding environs, and some residents may choose to curtail or stop some or all outdoor-related activities within the boundaries of their property. Access to and from these residential properties may also be restricted during peak construction periods, which may hinder their daily schedules and routines. Indirect effects would also occur at distances greater than 1,000 feet from construction sites due to the placement of temporary access roads, which could cause limited access to some properties, and the need for construction-related detours through neighborhoods which are not directly affected by construction activities. Although these disturbances would be temporary in nature, restrictions and preclusions of, and inconveniences to, the daily routines and activities of local residences due to construction may be considered significant at an individual or family level.

Residential areas in the South Region are typically urban or suburban (single-family and multi-family residences), and have been developed at greater densities (i.e., houses/dwellings per acre) than in the Central and North Region. With the exception of the existing planned community developments in the vicinity of western Lancaster and Palmdale, residential uses in the North and Central Regions are generally rural. However, as referenced above, at an individual or family level, construction-related impacts could still be considered significant regardless of density. Table 3.9-17 below provides a summary of the residential uses associated with each Region.

Table 3.9-17. Summary of Residential Uses By Region		
Region	Segment or Substation	Predominant Type of Residential Development
North Region	10	Most rural residential properties within and adjacent to the ROW are undeveloped, although some homes are located within an estimated 1,000 feet of the ROW.
	Whirlwind Substation	The existing land use of the proposed site is open space/undeveloped and residential. Agricultural lands fall within the boundaries of the proposed site. These lands include several structures, one or more of which is likely residential.

Table 3.9-17. Summary of Residential Uses By Region

Region	Segment or Substation	Predominant Type of Residential Development
	4	As with Segment 10, most rural residential uses are undeveloped, although some homes are located within an estimated 1,000 feet of the ROW. Additionally, some agricultural lands likely include rural residential homes and fall within 1,000 feet of the ROW. South of West Avenue I (MP 16.4), there are approximately four to five rural residential homes that fall either immediately adjacent to the ROW centerline, or within an estimated 1,000 feet of it.
	Antelope Substation	The existing land use of the proposed expansion site is open space/undeveloped. Although there are no homes within the proposed expansion site, there is one residential use that falls within 1,000 feet of its boundaries, and several homes within one-half mile of its boundaries.
	5	Existing land uses traversed by the ROW include agriculture, rural residential and suburban residential. At MP 2.0 the ROW traverses directly over agricultural lands with several structures, one or more of which are likely rural residential homes. At MP 3.8 (south of Columbia Way at 75th Street) the ROW centerline falls within 1,000 feet of existing planned development homes (e.g., master planned residential developments). Between MP 7.0 and 8.0 there are several rural residential homes that fall within 1,000 feet of the ROW centerline. Between MP 8.7 and 11.3 there are multiple tracts of single-family (master planned) residential developments under construction. From MP 14.0 to the Vincent Substation there are multiple rural residential homes within 1,000 feet of the ROW centerline, some of which are immediately adjacent to it.
Central Region	Vincent Substation	Existing land use of the proposed expansion site is open space/undeveloped. Several rural residential uses are located within 1,000 feet of the boundaries of the site to the north and west. Additional rural residential home are located within one-half mile of the proposed expansion site to south and southeast.
	6	Between MP 0.0 and 7.0 there are several rural residential homes located within 1,000 feet of the ROW centerline.
	11	(*Segment 11 between MP 0.0 and 24.5*). Between MP 0.1 and 0.3 there are several rural residential properties located within 1,000 feet of the ROW centerline to the north. Between MP 1.0 and 1.5 there are also several rural residences within one-half mile of the ROW centerline, with some falling within 1,000 feet of centerline. Between MP 3.7 and 3.7 there are several rural residences located near or within 1,000 feet of the ROW centerline. Additional areas with urban/suburban residential development within an estimated 1,000 feet of the ROW centerline are located between MPs: 18.7 – 19.1; 20.4 – 20.7; 22.9; and, 23.8 – 24.1. See South Region for the remainder of Segment 11
	Gould Substation	The existing land use of the Gould Substation is electrical power facilities. Urban/suburban residential uses fall within 1,000 feet of the substation's boundaries to the northwest, west, south, and southeast.
South Region	11	(*Segment 11 between MP 24.5 and 36.2*). The ROW centerline falls within an estimated 1,000 feet of urban/suburban residential properties between MPs: 25.2 – 25.8; 26.7 – 27.5; 27.8 – 31.6; 31.7 – 35.8. Between MP 25.2 and 35.8 there are numerous portions of the ROW centerline that fall within an estimated 250 feet or less of residential properties.
	7	The ROW centerline falls within an estimated 1,000 feet of urban/suburban residential properties between MPs: 0.7 – 1.9; 2.0 – 2.2; 6.7 – 11.1; 13.6 – 13.8; and, 14.5 – 15.1. Several portions of the ROW centerline fall within approximately 250 feet or less of residential properties.
	Mesa Substation	The existing land use of the Mesa Substation is electrical power facilities. Urban/suburban residential development is located approximately 1,000 feet from the substation's boundaries to the north and southwest. Additional residential properties are located less than one-half mile from the substation's boundaries to the west and west-southwest.
	8A	The ROW centerline falls within approximately 1,000 feet of both urban/suburban and semi-rural residential uses between MPs: 0.7 – 1.3; 2.1 – 2.3; 8.8 – 11.6; 13.2 – 15.1; 17.1 – 18.1; 21.1 – 21.7; 21.8 – 25.4; 28.9 – 29.7; 33.3 – 33.8; and, 34.3 – 34.5. Several portions of the ROW centerline fall within an estimated 250 feet or less of residential properties.
	8B	The ROW centerline falls within approximately 1,000 feet of residential properties between MPs 0.5 – 1.3 and 4.9 – 6.0. Both of these portions of the ROW have a centerline that falls within estimated 250 feet or less of residential properties.
	8C	The residential areas within 1,000 feet of the Segment 8C centerline are the same as those which are outlined for Segment 8A between its MPs 28.9 through 34.5.
	Mira Loma Substation	The existing land use of the Mira Loma Substation is electrical power facilities. The closest urban/suburban residential uses to the substation are located approximately one-half mile to the north of the substation's northern boundary.

As outlined in Table 3.9-17, construction of the proposed Project would affect numerous residential areas, including rural, semi-rural, urban, and suburban residential uses. Many residential properties are located less than 250 feet away and, in some instances, less than an estimated 150 feet away from areas which would be subject to construction-related activity. Depending on the specific construction activity, work crews at any given location could range between two and 80 persons. Construction activities at or along any given element of the proposed Project would periodically occur between an estimated eight (Segment 10 construction) to 45 months (Vincent and Antelope Substation expansions). Due to the proximity of some residential uses to construction-related activities, in conjunction with the intensity of the workforce and equipment needed and the duration of construction itself, the impacts to residential uses which are outlined above would be considered adverse.

Mitigation Measures for Impact L-1

L-1a **Construction liaison – Property owners.** SCE shall provide the name and contact information for a public liaison to all affected property owners within 300 feet of construction-related activities. The identified public liaison shall act as the single point of contact and interface between residents and construction crews. The liaison shall be available both in person and by phone, as necessary, for at least 14 days prior to the start of any construction-related activities and for up to six months following construction. The liaison shall respond to all construction-related questions and concerns within a 72-hour period.

SCE shall provide summary documentation of all complaints, comments, and concerns communicated to the liaison every two months for the duration of construction and for one year following the completion of construction. The compliance documentation shall include the name and address of the person contacting the liaison, the date of contact, and what actions were taken by the liaison to rectify and/or address the complaints, comments or concerns expressed. The compliance documentation shall be submitted to the CPUC throughout the duration of construction and for one year following construction.

L-1b **Advance notification of construction - Property owners.** SCE shall give at least 14 days advance notice of the start of any construction-related activities to potentially affected property owners. The notification shall include the contact information for the construction liaison (Mitigation Measure L-1a, Construction liaison – Property owners), including a phone number, as well as an internet website address where additional information related to construction can be found. Notification shall be provided by: (1) mailing notices to all property owners within 300 feet of all approved ROW segments, construction-related work areas, and substation sites; and, (2) placing notices in local newspapers.

L-1c **Quarterly construction updates - Property owners.** Following publication/transmittal of the advance notification of construction (Mitigation Measure L-1b, Advance notification of construction – Property owners), SCE shall provide all affected property owners with updates and changes to all of the information provided in the pre-construction notification. The updates shall be provided every quarter for the duration of all construction-related activities, including post-construction restoration activities. The updates shall continue to provide the name and phone number of an SCE-employed representative to respond to all construction-related questions and concerns. The SCE-employed representative shall continue to respond to all questions and complaints within a 72-hour period (Mitigation Measure L-1a, Construction liaison – Property owners).

The updates shall be: (1) mailed to all property owners within 300 feet of all approved ROW segments, construction-related work areas, and substation sites; (2) placed in local newspapers; and, (3) posted on the Project's Internet website (Mitigation Measure L-1b).

CEQA Significance Conclusion

With implementation of Mitigation Measures L-1a through L-1c, above, in conjunction with implementation of the pre-construction and construction phase mitigation measures provided in Sections 3.3 (Air Quality), 3.10 (Noise), and 3.13 (Traffic and Transportation), construction-related impacts to residential land uses would be adverse but mitigable to a level of less than significant (Class II).

Impact L-2: Construction of the Project would temporarily disrupt, displace, or preclude existing non-residential land uses.

As addressed under Impact L-1, above, construction of the proposed Project would require the use of lands for purposes other than their existing uses to accommodate tower placement and removal areas, staging areas, access roads, and pulling, tensioning and splicing sites. Construction-related activities would also temporarily restrict or preclude access to, and potentially the use of, lands adjacent to construction-related work areas. Lands used for construction could additionally be damaged or otherwise impaired to a degree that their existing (e.g., pre-construction) uses are impaired. The intrusion of construction equipment, materials, and personnel typically constitutes an adverse but less than significant impact because it occurs for a limited period of time and does not result in permanent disturbances. However, there are instances where construction-related activities can disrupt or preclude land uses to a significant level even though these disturbances are temporary.

Portions of the proposed ROW itself are used for non-residential uses such as commercial nurseries and commercial and industrial parking lots. Additionally, areas adjacent to the proposed ROW and its associated construction areas are actively used for uses such as commercial centers, public/special use and educational facilities, office and business centers, utilities, and light and heavy industrial operations. In the North Region, mining operations and existing energy generation facilities, including access roads, are located within one-half mile of Segment 10. South the proposed Whirlwind Substation, properties within one-half mile of the proposed ROW include transportation, communications and utility facilities, industrial facilities, electrical power facilities, commercial and services uses, and mixed uses; some of these uses are directly traversed by the proposed ROW. The North Region additionally includes several airports and air fields (public and military); although these airports and airfields are not located within one-half mile of the proposed ROW, some are located in close proximity to it (please refer to Table 3.9-7).

Within the Central Region the proposed Project traverses multiple zones and Places within the ANF, as summarized in Table 3.9-10 and shown in Figure 3.9-2. Within the ANF Segments 6 and 11 additionally fall within one-half mile of several public/special use and mixed use properties, including the: Mill Creek Summit Forest Station (Segment 6, MP 7.3); Shortcut Forest Station (Segment 6, MP 16.5); Angeles Crest Forest Station (Segment 11, MP 17.3); Los Angeles County and USDA Forest Service fire stations and maintenance yards; educational campgrounds and facilities; communication facilities; and other public and private utilities. There are several helipads mapped in the Angeles National Forest Atlas (USDA Forest Service, 2005b) that fall within an estimated two miles of Segments 6 and 11, including facilities near the Mill Creek Summit Forest Station (Segment 6, MP 7.3), Barley Flats (Segment 6, MP 16.7), the Little Gleason Forestry Plantation (Segment 11, MP 7.8), and the Monte Cristo Fire Station (Segment 6, MP 11.5). Additionally, south of the ANF boundary, the Mesa and Camp 2 Heliports are located south of Segment 11 at MP 20.

Although major utility corridors are not considered suitable uses within the Critical Biological, Back Country Non-Motorized, Existing or Recommended Wilderness or Experimental Forest zones per Table 2.1.3 (Suitable Uses Commodity and Commercial Uses, ANF) of the Forest Plan (USDA Forest Service,

2005a), the proposed transmission line upgrades associated with Segments 6 and 11 would be consistent with the designated utility corridors within which their respective ROWs fall; therefore, no impacts would occur due to construction of the proposed Project. The desired condition and program emphasis for each of the Places crossed by the proposed Project are provided in Table 3.9-9. Although the desired condition and program emphasis for each Place do not specifically address transmission lines, construction of Segments 6 and 11 would upgrade existing transmission lines and occur completely within existing designated utility corridors; consequently, construction of the proposed Project would not impact the Places that it traverses.

The proposed Project falls within one-half mile of four designated IRAs in the Central Region (in the ANF), including Strawberry Peak and Arroyo Seco (Los Angeles River) along Segment 11, and the Westfork and West Fork along (of the San Gabriel River) Segment 6 (please refer to Tables 3.9-10 and 3.9-11 as well as Figure 3.9-2). Per the 2001 Roadless Area Conservation Rule (36 Code of Federal Regulations [CFR] Part 294) and recent U.S. District Court decisions and directives, no roads may be constructed or reconstructed within these areas except for public health and safety, and the USDA Forest Service cannot authorize any road construction or reconstruction within these areas through either project-specific decisions or land management plan amendments or revisions. Therefore, the proposed Project would be prohibited from constructing or reconstructing roads within any designated IRAs and no impacts would occur.

Other Special Designation Overlays, as summarized in Table 3.9-5, that are crossed by the proposed Project include two Special Interest Areas (Aliso-Arrastre North and Middle), and one Eligible Wild and Scenic River (the San Gabriel River, West Fork [eligible for recreation only]). The suitable land uses associated with these Special Designations Overlays are generally the same as those of the zone that they are associated with unless specifically excluded; however when differences between a land use zone and a Special Designation Overly occur, the more restrictive set of suitable land uses apply (USDA Forest Service, 2005a). Although the proposed Project traverses the above-referenced Special Designation Overlays, the existing utility corridors within which Segments 6 and 11 would be placed are themselves a Special Designation Overlay, falling under the category of "Other Designations," a subcategory of "Designated Utility Corridor." Construction of Segments 6 and 11, which consists of replacement of, and upgrades to, existing transmission lines within the designated Gould-Vincent and Rio Hondo-Vincent utility corridors, would not conflict with the suitable or existing land uses of these designated utility corridors; consequently, no impacts would occur.

Within the South Region, development both within and adjacent to the proposed ROW increases substantially. Along Segment 11 (South of MP 24.5), lands directly affected by construction pre-dominantly include commercial and service uses, and industrial and mixed uses. Along Segment 7, large tracts of mixed and industrial uses are located within or immediately adjacent to the proposed ROW, and smaller areas of commercial and services and public/special use and educational facilities occur as well. West of MP 7.0, non-residential uses affected by construction of Segment 8A include industrial and mixed uses and public/special use and educational facilities. East of MP 7.0, predominant non-residential (or agricultural) land uses associated with Segments 8A, 8B, and 8C include mixed uses, commercial and service uses, and industrial uses. The South Region additionally includes two heliports and the El Monte, Chino, and Ontario International Airports, as illustrated in Figures 3.9-3h and 3.9-3i of the TRTP Map and Figure Series Volume.

Within the ROW itself, construction-related activities associated with tower erection and removal sites, staging areas, and pulling, tensioning and splicing sites would displace or disrupt non-residential land

uses. Access to these uses may be blocked or detoured, thus affecting the delivery and/or shipment of goods and services, as well as customer and employee ingress and egress. Additionally, site-specific operations would be impaired or prohibited at some locations due to the need to clear areas for construction equipment and materials. Following the completion of construction, site-specific uses may be compromised if affected areas are not restored to their pre-construction condition. Although these types of effects would occur in all three Regions, activities in the South Region would affect the greatest number of non-residential uses. In this region, particularly along Segments 7 and 11, the western-most portion of Segment 8A, and that portion of Segment 8A that traverses the City of Chino (approximately MP 25.5 though MP 29.0), there are numerous commercial and industrial uses, such as wholesale and retail nurseries, commercial and industrial parking lots, and material and truck storage and loading areas, that occur within the ROW. These disruptions and displacements of non-residential land uses would be adverse. However, as part of their land agreements, all leaseholders allow SCE access to, and use of, the ROW at their own risk, in addition to which SCE provides 30 day advance notification to all ROW leaseholders for any planned uses of the ROW.

Construction within an approximate 1,000 feet of either side of (e.g., outside of) the ROW would also result in the same types of effects as described above due to site-specific tower removal, erection, and pulling, tensioning and splicing activities, the need for temporary access roads, road detours and closures, and primary and secondary staging areas. Although the degree of these indirect effects outside of the ROW would not be expected to be as pronounced as within the ROW itself, impacts to non-residential uses in close proximity to construction zones could still be adverse at a site-specific level. Similar to activities within the ROW itself, these impacts would occur in all three regions, although the greatest number of properties affected would occur in the South Region along Segments 7 and 11 and portions of Segment 8A (approximately MP 0.0 through MP 7.0 and MP 25.5 though MP 29.0).

Construction of the proposed Whirlwind Substation would require the acquisition of approximately 102 to 113 acres of land. The proposed site is currently used for agricultural production. Assuming full acquisition of the property by SCE, construction-related impacts due to the displacement of these existing land uses would not be anticipated; no other non-residential land uses other than open space are located within one-half mile of the site. Expansion of the existing Antelope and Vincent Substations would not fall within one-half mile of uses other than agricultural operations and residential uses; therefore, no direct impacts to other non-residential uses would be expected to occur. Transportation and industrial uses are located within an estimated one-half mile of the proposed Vincent Substation expansion area. However, these uses would be more than 1,000 feet away from the proposed expansion area; consequently, indirect impacts would be less than significant. Proposed upgrades to the Mesa, Gould, and Mira Substations would occur within the confines of the substations' boundaries. However, mixed uses occur within one-half mile of the Gould Substation, while industrial, public/special use facilities, mixed uses, and commercial and services uses occur within 1,000 feet of both the Mesa and Chino Substations. Due to the proximity of proposed expansion and upgrade activities at these sites, the same types of secondary impacts to non-residential uses as described above for the proposed Project's ROW would occur and may be adverse at a site-specific scale.

Although there are no aircraft support facilities (airports, landing strips, heliports, and helipads) located within one-half mile of the proposed Project ROW, tower erection activities could temporarily affect aircraft movement within the vicinity of tower pad locations due to their height. Final tower heights would range between 65 feet and 262 feet, as summarized in Table 3.9-18. Additionally, the construction of 33 towers within the ANF could temporarily affect aircraft movement within the Central Region, as well as

those land uses (both non-residential and residential) that are in close proximity to the proposed helicopter staging areas and subject tower sites; these effects may also be adverse at a site-specific scale.

Table 3.9-18. Summary of Estimated Tower Heights By Segment[1]
North Region
Segment 10
• Erect approximately 96 new single-circuit 500-kV lattice steel towers (LSTs) (94-172 feet tall)
Segment 4
• Erect approximately 165 new transmission structures, including: ▪ 88 single-circuit 220-kV LSTs (90-120 feet tall) ▪ 77 single-circuit 500-kV LSTs (113-188 feet tall)
Segment 5
• Erect approximately 67 new single-circuit 500-kV LSTs (113-188 feet tall)
Central Region
Segment 6
• Erect approximately 138 new transmission structures (105 on NFS lands – 99 LSTs and 6 TSPs), including: ▪ 2 single-circuit 220-kV LSTs (90-120 feet tall) ▪ 26 single-circuit 500-kV tubular steel poles (TSPs) (75-200 feet tall) ▪ 106 single-circuit 500-kV LSTs (85-193 feet tall) ▪ 4 three-pole dead-end 500-kV structures (75-80 feet tall)
Segment 11 *(Estimates include the South Region)*
• Erect approximately 76 new transmission structures (59 LSTs on NFS lands), including: ▪ 2 single-circuit 220-kV poles (120 feet tall) ▪ 7 single-circuit 220-kV LSTs (120-160 feet tall) ▪ 67 single-circuit 500-kV LSTs (100-220 feet tall)
South Region
Segment 7
• Erect approximately 85 new transmission structures, including: ▪ 1 double-circuit 220-kV LST (185 feet tall) ▪ 2 double-circuit 500-kV TSPs (195-200 feet tall) ▪ 2 single-circuit 500-kV LSTs (113-175 feet tall) ▪ 79 double-circuit 500-kV LSTs (147-262 feet tall) • Erect approximately 150 new double-circuit 66-kV subtransmission Light Weight Steel Poles (LWSPs) and TSPs
Segment 8
• Erect approximately 226 new transmission structures, including: ▪ 2 single-circuit 220-kV LSTs (65-75 feet tall) ▪ 57 double-circuit 220-kV LSTs (113-180 feet tall) ▪ 3 single-circuit 500-kV LSTs (128-149 feet tall) ▪ 92 double-circuit 500-kV LSTs (147-255 feet tall) ▪ 2 single-circuit 220-kV TSPs (85-95 feet tall) ▪ 11 double-circuit 220-kV TSPs (75-115 feet tall) ▪ 5 three-pole dead-end 220-kV structures (75-110 feet tall) ▪ 4 single-circuit 500-kV TSPs (120-170 feet tall) ▪ 50 double-circuit 500-kV TSPs (150-195 feet tall) • Erect approximately 55 new double-circuit 66-kV subtransmission LWSPs

[1] The estimates provided above are preliminary and may be subject to change; they are based upon information provided in SCE's PEA, 2007.

As noted in Section 3.9.3, FAR Title 14, Part 77, establishes the standards for determining obstructions in navigable airspace, including height limitations on structures taller than 200 feet or within 20,000 feet (approximately 3.79 miles) of an airport. SCE would be required to file FAA Form 7460-1, Notice of Proposed Construction or Alteration, and Form 117–1, Notice of Progress of Construction or Alteration. The standards and notification requirements of FAR Title 14 Part 77 are intended to: (1) evaluate the effect of the construction or alteration of structures on airport operating procedures; (2) determine if the

construction or alteration would result in a potential hazard to air navigation; and, (3) identify measures to enhance safety.

Mitigation Measures for Impact L-2

L-2a **Construction plan provisions – Non-residential property owners.** SCE shall incorporate provisions into its construction plans and schedules to minimize the length of time that construction-related activities occur in areas actively used for non-residential purposes, such as commercial and service uses, industrial uses, public/special uses, and educational facilities. SCE shall ensure that all affected non-residential property owners within 300 feet of the ROW are always provided with at least one point of vehicular (passenger car and truck) and pedestrian access to their respective properties throughout all phases of construction.

Immediately following the completion of construction, SCE shall ensure that all affected non-residential properties and uses affected by construction outside of the ROW are fully restored to their pre-construction conditions.

L-2b **Aircraft flight path and safety provisions and consultations.** Prior to construction, SCE shall consult with the Federal Aviation Administration (FAA) and ensure the filing of all forms and associated specifications per the requirements of Federal Aviation Regulations (FAR) Title 14, Part 77. In addition, prior to the start of construction, SCE shall consult with all affected Airport Land Use Commissions (or their alternative process) and the FS to ensure that construction, operation, and maintenance of the Project does not conflict with local aircraft operations or associated safety provisions.

CEQA Significance Conclusion

Implementation of Mitigation Measures L-2a and L-2b, above, in conjunction with implementation of the Mitigation Measures L-1a through L-1c and the pre-construction and construction phase mitigation measures provided in Sections 3.3 (Air Quality), 3.10 (Noise), 3.13 (Traffic and Transportation), and 3.14 (Visual Resources), would reduce construction-related impacts to non-residential land uses to a level that is less than significant (Class II).

Impact L-3: Operation and maintenance of the Project would cause long-term disruption of existing and planned residential land uses.

The proposed Project would require either new ROW, or the expansion of existing ROW, along some segments. Additionally, the proposed Project would require the construction of the new Whirlwind Substation and expansion of the existing Antelope and Vincent Substations. Table 3.9-19 provides a summary of these new and expanded ROW areas and substations.

Table 3.9-19. New and Expanded ROW and Substation Sites[1]

Segment	Summary of New or Expanded ROWs and Substations
North Region	
Segment 10	• Approximately 16.8 miles of new 330-foot wide ROW.
Whirlwind Substation	• Acquisition of approximately 102 to 113 acres of land with a permanent land disturbance of approximately 65 acres.
Segment 4	• Approximately 19.6 miles of new 200-foot wide ROW adjacent to existing ROW.
Antelope Substation	• Acquisition of approximately 18 acres of land with permanent land disturbance of approximately 12 acres.
Segment 5	• No new or expanded ROW. All facilities would be located within a ROW which is 200-feet wide and 17.8 miles long.
Vincent Substation	• Acquisition of approximately 0.2 acres of land with a permanent land disturbance of approximately 18 acres.

Table 3.9-19. New and Expanded ROW and Substation Sites[1]	
Segment	Summary of New or Expanded ROWs and Substations
Central Region	
Segment 6	• No new or expanded ROW (approximately 27 miles). Existing ROW varies in width between approximately 200 and 1,090 feet.
Segment 11 (*Estimates include the South Region*)	• Approximately 3 miles of expanded ROW to maintain safe clearances from the edge of the ROW due to wire swing of the new 500-kV T/L under wind loading conditions between approximately MP 15.7 and MP 18.7 (Gould Substation). (Expansion would occur within a designated utility corridor). • Remaining facilities would be located within existing ROW (approximately 33 miles) which varies in width between approximately 200 and 1,090 feet.
South Region	
Segment 7	• No New or expanded ROW. All facilities would be located with a ROW which is approximately 15.8 miles long and varies in width between approximately 200 and 500 feet.
Segment 8	• New and expanded ROW along Segment 8A, as follows: - 1.1 miles of relocated ROW between MP 5.8 and 7.2; 240-foot wide ROW - 2.15 miles of expanded ROW between MP 11.2 and 13.3; expansion width of 100 feet (from 150-230 feet to 250-330 feet) - 0.4 miles of new 100-foot wide new ROW starting at MP 13.3 - 0.45 miles of expanded ROW between MP 34 and 34.45; expansion width of 150 feet (from 175 feet to 325 feet) • Remaining facilities along Segments 8A, 8B and 8C would be located within existing ROW which varies in width between approximately 150 and 600 feet.

[1] The estimates provided above are preliminary and may be subject to change; they are based upon information provided in SCE's PEA, 2007.

Based upon the estimates provided in Table 3.9-19, the proposed Project's new and expanded ROW, in conjunction with its substation expansion needs, would require an estimated 1,298 acres of land in the North Region, 27 acres of land in the Central Region (including all of Segment 11), and 43.4 acres of land in the South Region (with an estimated 27 acres of ROW abandoned). In addition, the proposed Project would result in the permanent disturbance of an estimated 180.6 to 244.3 acres of land, including an estimated 65.7 to 88.7 acres in the North Region, 99.3 to 134.4 acres in the Central Region, and 15.6 to 17.2 acres in the South Region (please refer to Table 3.9-16).

Within the North Region, these land estimates include 37 miles (approximately 1,167 acres) of new ROW for Segments 10 and 4, and approximately 95 acres of permanent land disturbance for the new Whirlwind Substation and expanded Antelope and Vincent Substations. Both of these proposed ROWs, as well as the proposed Whirlwind Substation site, would partially fall within the boundaries of the Willow Springs Specific Plan, a large planned residential development located along the southern boundary of Kern County, and a portion of Segment 4 between approximately MP 16.5 and 16.8 would fall immediately adjacent to existing residential properties. The new and expanded substation sites and ROWs would be purchased or leased by SCE and it is assumed that the conditions of these purchases or leases would be made in full agreement with existing property owners. Segment 5 would be located within existing ROW and thus would not preclude existing or planned residential development.

Within the Central Region, a three-mile portion of Segment 11 would require an expansion of the existing ROW to 250 feet; however, this expansion would occur within an existing designated utility corridor. No additional acreage would be needed for upgrades to the Gould Substation. Farther south along Segment 11 (south of MP 24.5) the ROW would not be expanded and its existing towers would be left in place. Along Segment 6, all proposed Project features would occur within existing ROW.

Within the South Region, an estimated 43.4 acres of new or expanded ROW would be needed, and approximately 1.1 miles of 200-foot wide ROW, or roughly 27 acres, would be abandoned (starting at

MP 5.8). Along Segment 7, no new ROW or expanded ROW would be needed. Along Segment 8A, four areas of expanded, new or relocated ROW would be needed, as summarized in Table 3.9-19. No expansion or new ROW would be required for Segments 8B and 8C. Although Segments 7 and 8 would traverse, or immediately flank, several large and small planned residential developments/communities, as outlined in Tables 3.9-8 and 3.9-9, SCE would purchase in full, or otherwise acquire the necessary leases or easements for construction, operation and maintenance of these ROWs. No additional acreage would be required for proposed upgrades to the Mesa and Mira Loma Substations.

With the exception of the substation expansions, it is unknown how much new and expanded ROW acreage would be leased and how much would be purchased in full by SCE. However, regardless of whether these lands are made available by lease, easement, or purchase, SCE's required acquisition of the rights to construct and operate the proposed Project with affected private property owners, in conjunction with its acquisition of the regulatory approvals required for new and expanded ROWs and substation sites, would inherently allow for the preclusion of either future residential development or the expansion of existing residential development.

CEQA Significance Conclusion

The proposed Project's preclusion of, and incompatibility with, current and future residential land uses both within proposed new and expanded ROWs, and adjacent to existing ROWs, would be considered adverse but less than significant (Class III). Therefore, no mitigation measures are required.

Impact L-4: Operation and maintenance of the Project would cause long-term disruption of existing and planned non-residential land uses.

As addressed in Section 3.9.2.2, the proposed Project would directly traverse, or fall within one-half mile of lands used for a variety of purposes other than residential, agricultural, or recreational development. Additionally, the proposed Project falls within one-half mile of properties under the ownership or management of State and federal agencies, as well as multiple proposed and existing SEAs. Please refer to Section 3.4 (Biological Resources) for a discussion of short- and long-term impacts related to SEAs, HCPs, and NCCPs.

Segment 10 includes lands used for electrical power generation, mining and utilities (primarily the Los Angeles Aqueduct, which is operated by the Los Angeles Department of Water and Power [LADWP]), and additionally falls within one-half mile of lands managed by the CSLC. The majority of Segments 10 and 4 within Kern County are designated for resource management, residential, and agricultural uses, although some lands traversed by and within one-half mile of Segment 4 near the Skyotee Ranch landing strip are designated Light Industrial. The centerline of Segment 4's ROW also falls within an estimated two miles of the Skyotee Ranch landing strip, and two comparatively small tracts of land used for transportation-communication-utilities (near MP 7) and industrial purposes (near MP 10) also occur within one-half mile of Segment 4. Along Segment 4 the proposed ROW directly traverses a relatively large tract of land designated for mixed urban uses, as well as comparatively smaller tracts of land designated for industrial uses within western Palmdale; it additionally falls within one-half mile of the Antelope Valley California Poppy Reserve near MP 13, which is managed by the State Department of Parks and Recreation. Portions on Segment 5 additionally fall within one-half mile of lands under the jurisdiction of the BLM. Along its crossing of State Highway 14, Segment 5 falls within close proximity to a variety of land uses, including commercial and transportation, communication and utility uses. Existing and planned land uses surrounding the new Whirlwind Substation and proposed expansion areas of the Antelope and Vincent Substations are residential and agricultural.

Within the Central Region the proposed Project would be placed entirely within an existing, designated utility corridor. Additionally, the proposed Project would replace and upgrade existing transmission lines, and would not incrementally add to the number of transmission lines that are currently located within these corridors. Consequently, operation and maintenance of Segments 6 and 11 within the ANF would effectively result in the same activities that occur under existing conditions, and no impacts related to the long-term disruption of existing or planned non-residential land uses would be anticipated to occur.

The South Region contains the greatest number of non-residential land uses directly within and adjacent to the proposed Project's existing, new, relocated, and expanded ROWs, including non-residential uses surrounding its existing substations. As outlined in Table 3.9-19, within the South Region new, expanded or relocated ROW would only occur along Segment 8A within lands designated Other Institutions, Open Not Developable and Residential. In addition to the above, and as summarized under Impact L-2, the proposed Project falls within an estimated four miles of several airports and helipads, and also traverses through lands under the ownership of the DoD at Segment 8A, approximately MP 15.2.

Segments 4, 5, 6, and 7, and the majority of Segments 11 and 8, would be placed either in existing ROWs or adjacent to existing utility ROWs. While the new or replacement towers along these ROWs would increase the bulk of the existing transmission line corridors, they would not permanently preclude existing or planned non-residential land uses or significantly change the character or use of the areas surrounding these ROWs. Segment 10 would require the permanent placement of a new transmission line ROW and the acquisition or lease of an estimated 681 acres of land. However, the northern portion of Segment 10 is used and planned for industrial and power generation facilities; thus, the proposed Project along this segment would not be anticipated to result in significant conflicts with, preclusions of, or changes to existing and planned non-residential uses. The majority of the remainder of Segment 10 consists of existing and planned residential, agricultural and open space (resource management) uses. Potential impacts associated with existing and planned residential uses are addressed above, under Impact L-3. Placement of the proposed Project within areas of Segment 10 which are designated for open space and resource management may limit some activities at some tower-specific locations; however, these limitations would not be anticipated to substantially affect existing and planned non-residential land uses with implementation of Mitigation Measure L-4.

Construction of the proposed Whirlwind Substation and expansion of the Antelope and Vincent Substations would permanently preclude existing and future planned residential uses, as addressed under Impact L-3, above. However, no impacts to non-residential land uses would be anticipated to occur due to the location of these substations either immediately adjacent to existing substation sites, or existing utility infrastructure. Upgrades to the existing Gould, Mesa and Mira Loma Substations would remain within the existing boundaries of these sites and would not be anticipated to permanently affect non-residential land uses.

As noted above, non-residential lands within one-half one mile of the proposed Project fall under the jurisdiction of several State and federal agencies including the CSLC, Department of Water Resources, California Department of Parks and Recreation, BLM, and DoD. Additionally, several airports, heliports and landing strips regulated by the FAA and Airport Land Use Commissions (or their respective alternative processes) are located within 3.79 miles of some elements of the proposed Project. The proposed Project would also traverse numerous local (county and city) jurisdictions. However, no significant preclusions of, or restrictions to, the management and uses of these lands would be anticipated with implementation of Mitigation Measure L-4.

Mitigation Measure for Impact L-4

L-4 **Consult with federal, State, and local agencies.** Prior to construction, SCE shall consult with all federal, State, and local agencies, including local agency consortiums, having jurisdiction over lands within one-half mile of the Project's ROW and ancillary facilities to ensure that no permanent restrictions or preclusions of their land management practices occur. The SCE shall additionally ensure that a liaison to these agencies is available for the operational life of the Project to address and reconcile any future potential conflicts with land management practices.

CEQA Significance Conclusion

Implementation of Mitigation Measure L-4 would reduce long-term operational and maintenance impacts of the proposed Project to a level of less than significant (Class II).

Conflict with any applicable federal, State, or local land use plans, goals, or policies (Criterion LU2)

The NEPA Regulations require that an Environmental Impact Statement (EIS) contain a discussion of the possible conflicts between a proposed action and the objectives of federal, regional, State, local, and, if applicable, Native American nation (reservation) land use plans, policies and controls (Title 40 of the Code of Federal Regulations [CFR] Part 1502.16[c]). The NEPA Regulations further state that to better integrate an EIS into State or local planning processes, the EIS must discuss any inconsistency of a proposed action with any approved State or local plans and laws. If an inconsistency is identified, the EIS must provide an evaluation of the extent to which the inconsistency can be reconciled (Title 40 CFR Part 1506.2[d]). The CEQA Guidelines (Title 14 of the California Code of Regulations [CCR] Sections 15000 *et seq*.) do not specifically require that a policy analysis be completed for a proposed project or its alternatives. However, Appendix G of the CEQA Guidelines, which contains the State model format for the environmental analysis of an Initial Study, contains an item under the land use and planning assessment that requires the identification of any conflicts that could occur between a proposed project and applicable land use plans, policies and regulations adopted for the purpose of avoiding or mitigating an environmental effect. While a proposed project (or action) may be approved even though an inconsistency with applicable land use plans, policies and goals may occur, both CEQA an NEPA require that the evaluation be made for consideration by decision makers.

Impact L-5: Construction, operation or maintenance of the Project would conflict with relevant federal, State, or local land use plans, goals, or policies.

As outlined in Section 3.9.2.2, the proposed Project traverses multiple jurisdictions, all of which have adopted plans related to land use planning, development, and management. As a preliminary step toward identifying those plans which contain policies and goals specific to the development, operation and maintenance of transmission lines and their associated substations, a policy screening analysis was conducted. Nearly forty plans were reviewed as part of the screening process, the results of which are contained in the proposed Project's Policy Screening Report (Aspen Environmental Group, 2008). Of the various policies, goals and objectives identified in the Policy Screening Report for detailed evaluation, seventeen were directly related to land use and the construction, operation and maintenance of transmission lines. Table 3.9-20 provides the consistency analysis for these seventeen policies, goals and objectives. With the exception of the management goals related to the ANF land use zones, which are summarized in Table 3.9-4, the full text to these policies, goals and objectives is provided in Table 3.9-23.

Table 3.9-20. Consistency with Applicable Land Use Plans and Policies – Proposed Project

Agency	Plan/Policy	Consistency	Explanation
USDA Forest Service, Pacific Southwest Region	Land Management Plan: Angeles National Forest (2005)		
	National Strategic Plan Goal 4 - Help meet energy resource needs	Yes	The Project would utilize existing utility corridors within the ANF to deliver electricity from new wind farms in Eastern Kern County to the Los Angeles Basin. As no new utility corridors would be created on ANF lands, the proposed Project would not conflict with this policy.
	Forest Goal 4.1b - Support use of renewable resources	Yes	The purpose of the proposed Project is to provide the facilities to interconnect and integrate new wind generation in the Tehachapi Wind Resource Area. With wind energy identified in the proponent's purpose and need, the proposed Project is consistent with this policy that encourages the development of alternative energy sources.
	Forest Goal 7.1 - Minimize the land area needed to support growing public needs	Yes	This goal states that facilities supporting urban infrastructure needs should be clustered on existing sites or designated corridors, minimizing the number of acres encumbered by Special Use Authorizations (SUAs). As it traverses ANF lands, Segment 11 would occur entirely within the designated Vincent Gould Utility Corridor, and Segment 6 would occur entirely within the designated Vincent Rio Hondo Utility Corridor. In addition, the proposed Project would remove existing LSTs for the Vincent-Pardee No. 1, the Pardee-Eagle Rock, the Vincent-Rio Hondo No. 2, and the Antelope-Mesa transmission lines in order to further minimize the land area needed to support utility infrastructure.
	Developed Areas Interface (DAI) Land Use Zone	Yes	Segment 11 of the proposed Project would traverse a DAI land use zones. As described in Tables 2.1.2 and 2.1.3 of the Land Management Plan, the DAI land use zone permits major utility corridors within designated areas and is also considered suitable for authorized motorized use. Segment 11 would be located entirely within the existing Vincent Gould Utility Corridor, and consequently would be consistent with this land use zone.
	Back Country (BC) Land Use Zone	Yes	Segments 11 and 6 would traverse BC land use zones. As described in Tables 2.1.2 and 2.1.3 of the Land Management Plan, the BC land use zone permits major utility corridors within designated areas and is also considered suitable for authorized motorized use. Segments 11 and 6 would be located entirely within the existing Vincent Gould and Vincent Rio Hondo utility corridors, respectively, and would be consistent with this land use zone.
	Back Country Motorized Use Restricted (BCMUR) Land Use Zone	Yes	Segments 11 and 6 would traverse BCMUR land use zones. As described in Tables 2.1.2 and 2.1.3 of the Land Management Plan, the BCMUR land use zone permits major utility corridors within designated areas and is also considered suitable for authorized motorized use. Segments 11 and 6 would be located entirely within the existing Vincent Gould and Vincent Rio Hondo utility corridors, respectively, and would be consistent with this land use zone.
	Back Country Non-Motorized (BCNM) Land Use Zone	Yes, with USDA Forest Service approval	Segment 6 would be located within the existing Vincent Rio Hondo Utility Corridor that either traverses, or is located adjacent to a BCNM land use zone. Segment 6 would not require the expansion of the existing ROW; consequently, the proposed Project would not conflict with this zoning designation. As described in Table 2.1.2 of the Land Management Plan, authorized motorized use may be permitted only with an exception by the USDA Forest Service. With USDA Forest Service approval, any construction-related activities that may occur within the BCNM zone would be consistent with this designation.
	Critical Biological Area Zone	Yes	Segment 6 would cross Alder Creek of the Upper Big Tujunga Critical Biological Area. However, no project-related activities would occur within Alder Creek itself; all other project-related work would be adjacent to, but not within this zone. The crossing of Alder Creek and project-related work adjacent to Big Tujunga Creek would not alter the biological functionality of this Critical Biological Area, as outlined in Section 3.4 (Biological Resources). Therefore, the proposed Project would be consistent with this land use zone.

Table 3.9-20. Consistency with Applicable Land Use Plans and Policies – Proposed Project			
Agency	Plan/Policy	Consistency	Explanation
	Lands 2 - Non-Recreation Special Use Authorizations	Yes	Segments 11 and 6 fall within the designated Vincent Gould and Vincent Rio Hondo utility corridors, respectively. In order to further minimize the land area needed to support utility infrastructure, the proposed Project would remove existing LSTs for the Vincent-Pardee No. 1, the Pardee-Eagle Rock, the Vincent-Rio Hondo No. 2, and the Antelope-Mesa transmission lines. As such, the proposed Project would not conflict with this policy.
Kern County	County of Kern General Plan (March 13, 2007)		
	Appendix B: Rural Community Development Guidelines and Requirements (Land Use) - Compatibility of industrial development within a rural community	Yes	According to the Kern County Eastern Section and Central Section Maps from the Land Use, Open Space, and Conservation Element, the proposed Project route would not fall within any areas designated as Rural Community. However, this Land Use analysis considers the proposed Project's short- and long-term impacts on residential uses, including rural residential uses, and has identified mitigation measures to reduce potentially significant impacts to a level of less than significant. With full implementation of these mitigation measures, the proposed Project would be consistent with this policy. Please refer to Section 3.14 (Visual Resources) for more information on the assessment of light, glare and facility screening.
Los Angeles County	County of Los Angeles General Plan (January 1993)		
	General Goals and Policies 1) Policy 23 - Ensure compatible development in non-urban areas 2) Goal: Conservation of resources and environmental protection.	Yes	Segment 4 would be located across rural portions of northern Los Angeles County, and would require the construction of a new ROW parallel to an existing ROW. However, as the proposed Project would locate the new transmission line in this area adjacent to existing utility infrastructure, it would not introduce a new land use that is inconsistent with existing surroundings. Additionally, this Land Use analysis considers the proposed Project's short- and long-term impacts on residential uses, including rural residential uses, and has identified mitigation measures to reduce potentially significant impacts to a level of less than significant. With full implementation of these mitigation measures, the proposed Project would be consistent with this policy.
	Land Use (Quality, Compatible Design) 1) Policy 14 - Ensure project design is compatible with natural and manmade environment. 2) Goal: To encourage high quality design in all development projects, compatible with, and sensitive to, the natural and manmade environment	Yes	Segments 5, 6, 7, 11, and 8 would be constructed primarily within existing ROWs, while Segment 4 would be constructed in a new ROW that is parallel to an existing transmission line. As new utility infrastructure would be located either within or immediately adjacent to existing industrial land uses (e.g., transmission lines and substations), the proposed Project would be compatible with its surrounding environment. Additionally, Sections 3.8 (Hydrology and Water Quality), 3.7 (Geology, Soils, and Paleontology), 3.16 (Wildfire Prevention and Suppression), and 3.6 Environmental Contamination and Hazards) all provide the APMs and additional mitigation measures necessary to reduce potential impacts related to severe hazard areas, such as flood prone areas, active fault zones, steep hillsides, landslide areas and fire hazards to the maximum extent feasible. With full implementation of these APMs and mitigation measures, the proposed Project would be consistent with this policy.
City of Chino Hills	City of Chino Hills General Plan, adopted September 1994		
	Parks, Recreation and Open Space, Policy 1-18: Require 100-ft. perimeter around developed areas adjacent to open space.	Yes	The proposed Project would include new or expanded ROW along Segments 10 and 4; however, in these areas the transmission line itself would not be within 100 feet of any existing or designated parks, recreational areas, or open space areas. Approximately three miles of expanded ROW north of the Gould Substation would be required along Segment 11 in the ANF; however, this expanded ROW would be located within an existing utility corridor. A ROW relocation would be required along Segment 8A between approximately MP 5.9 and 7; however, the re-routed transmission line would be placed within an existing ROW. Segment 8A would additionally require expanded ROW between

Table 3.9-20. Consistency with Applicable Land Use Plans and Policies – Proposed Project			
Agency	Plan/Policy	Consistency	Explanation
			approximately MP 11.5 and 13.6 and a new 0.4 mile ROW west of Fullerton Road; existing land uses within both of these areas include open space/undeveloped and open space/recreation. However, in these areas the transmission line would be placed immediately adjacent to existing ROWs, and the width and set backs of the new and expanded ROWs would provide a 100-foot buffer between the transmission line itself and existing and designated land uses. Segment 8A would also require expanded ROW immediately west of the Mira Loma Substation; however, no existing or designated open space areas or parks are located within 100 feet of this area. Therefore, the proposed Project would be consistent with this policy.
Puente Hills Landfill Native Habitat Preservation Authority	Resource Management Plan (June 2007)		
	Goal Use-2, Protect varied resources and promote an enjoyable and safe environment for visitors.	Yes	The proposed Project would include new and expanded ROW along Segment 8A within the proposed Sycamore-Turnbull Canyons SEA and Powder Canyon-Puente Hills SEA. However, from approximately MP 9 to MP 11.5 existing LSTs would be replaced with LWSPs (tubular steel poles), which would reduce their visual bulk and improve existing visual resource conditions. The new and expanded ROWs would be placed immediately adjacent to existing ROWs, and would provide the set-back needed to protect the public and provide a safe environment. Additionally, all resource-specific impacts associated with the proposed Project have been mitigated, as needed, to the maximum extent feasible. Therefore, the proposed Project would be consistent with this policy.
City of Chino	City of Chino General Plan (Land Use Element amended October 1981; Circulation Element amended February 1992)		
	Circulation Element (Aviation) Goal G3-7 - Land uses in Chino Airport area should fulfill goals and policies of General Plan and Chino Airport Master Plan	Yes	The Project would traverse the Chino Airport Referral Area "C" as designated in the Chino Airport Comprehensive Land Use Plan (San Bernardino County Airport Land Use Commission, 1991). Utilities are considered a "normally acceptable" land use within this referral area (Chino ALUCP, Figure III-9). As described in Section 3.9.3., SCE would be required to file FAA Form 7460-1 (Notice of Proposed Construction or Alteration) and Form 117–1 (Notice of Progress of Construction or Alteration) in order to evaluate the Project's effect on airports and to identify measures to enhance Project safety. Implementation of Mitigation Measures L-2b and L-4 would also ensure that the Project would not conflict with airport or aircraft operations.
	Eucalyptus Business Park Specific Plan (adopted December 18, 1990, revised October 2000)		
	Land Use Element, Objective 2d - Underground utility lines where feasible or provide appropriate landscape buffers	Yes	Within the vicinity of the Eucalyptus Business Park Specific Plan, a portion of the area's existing LSTs would be replaced with LWSPs (tubular steel poles) and approximately 9,500 linear feet of transmission line would be relocated underground. Additionally implementation of the proposed Project would require compliance with all of the mitigation measures outlined in Section 3.14 (Visual Resources) to integrate proposed Project features with its surrounding area and provide appropriate buffers and screening. With full implementation of these design features and the mitigation measures outlined in Section 3.14, the proposed Project would be consistent with this policy.

Table 3.9-20. Consistency with Applicable Land Use Plans and Policies – Proposed Project			
Agency	Plan/Policy	Consistency	Explanation
	East Chino Specific Plan (September 2002)		
	Land Use (Industrial) Policy 3 - Use of setbacks and screenings in buffering residences from industrial uses	Yes	Within the City of Chino Segments 8A, 8B and 8C of the proposed Project would be constructed within existing ROW and would utilize the setbacks and screening that are currently in place. Within the City of Chino the proposed Project would also include the same LST replacements and transmission line undergrounding as described above for the Eucalyptus Business Park Specific Plan. Additionally, implementation of the proposed Project would require compliance with all of the mitigation measures outlined in Section 3.14 (Visual Resources) to integrate proposed Project features with its surrounding area and provide appropriate buffers and screening. With full implementation of these design features and the mitigation measures outlined in Section 3.14, the proposed Project would be consistent with this policy.
City of Ontario	City of Ontario General Plan (adopted September 15, 1992)		
	Community Development Element, Policy 3.2 - Require buffers between incompatible land uses	Yes	Within the City of Ontario, Segments 8A and 8B and the majority of Segment 8C would be constructed within existing ROW and would utilize the same setbacks and screening that are currently in place. While Segment 8C would be require expanded ROW west of the Mira Loma Substation, existing land uses are agricultural, which is considered a compatible land use with transmission lines. Although this portion of Segment 8C is designated residential and is planned for futures residential development, the expanded ROW would utilize the same types of setbacks as Segments 8A and 8B. Additionally, implementation of the proposed Project would require compliance with all of the mitigation measures outlined in Section 3.14 (Visual Resources) to integrate proposed Project features with its surrounding area and provide appropriate buffers and screening. Therefore, the proposed Project would be consistent with this policy.

Forest Service Plans and Policies. Table 3.9-20 provides the analysis of the proposed Project's consistency with the USDA Forest Service's Land Management Plan for the ANF. As outlined in Section 3.9.2.2, within the ANF the proposed Project would traverse the following zones: Back Country Motorized Use Restricted; Back Country Non-Motorized; Back Country; Developed Area Interface; and, Critical Biological Area (Upper Big Tujunga Critical Biological Area). The proposed Project would additionally traverse the Aliso-Arrastre North and Middle Special Interest Areas, the San Gabriel River (West Fork) (an Eligible Wild and Scenic River for recreation), and the Soledad Front Country, Angeles High Country, Angeles Uplands West, Front Country, San Gabriel Canyon, and Big Tujunga Canyon Places. Although construction of the proposed Project would cause short-term impacts to these zones, Special Designation Overlays, and Places, all activities within the ANF would occur within designated utility corridors.

In addition to the above, as part of the proposed Project's approval, and prior to construction, the USDA Forest Service would issue a Special Use Easement, which would involve amending the 2005 ANF Land Management Plan, as necessary, to insure consistency with the USDA Forest Service's management direction for affected areas within the ANF. It is currently anticipated that three amendments would be required for the proposed Project to allow for its inconsistencies with the Land Management Plan's Scenic Integrity Objectives, Pacific Crest Trail Scenic Standards, and Riparian Conservation Area (RCA) Standards for those RCAs adversely impacted by the proposed Project. The USDA Forest Service would also issue temporary Special Use Permits, as needed, for construction-related activities which would be located outside of the proposed ROW widths to ensure compliance with USDA Forest Service plans and policies. Please refer to Section 2.2.14 (Alternative 2 – Forest Plan Amendments) for a discussion of the

required Land Management Plan amendments. Section 3.4 (Biological Resources) and Section 3.14 (Visual Resources) provide additional detail for why these amendments would be necessary.

Following construction, temporary pulling, tensioning and splicing sites, staging areas and access or spur roads would be closed and restored per the requirements of the USDA Forest Service and the applicable mitigation measures specified in Sections 3.4 (Biological Resources), 3.7 (Geology, Soils, and Paleontology), 3.8 (Hydrology and Water Quality), and 3.14 (Visual Resources), and new or existing access and spur roads would be maintained in accordance with the USDA Forest Service's approval. Therefore, the proposed Project would be consistent with the USDA Forest Service land use policies listed in Table 3.9-20 and no impacts would occur.

Local Plans and Policies. Table 3.9-20 presents the proposed Project's consistency with the local land use plans and policies as they relate to transmission lines and associated facilities. Although implementation of the proposed Project would require both new and expanded ROWs and substation sites, these features would not conflict with either the land use plans and policies outlined in Table 3.9-20, or the other land use and management plans and policies presented in the Policy Screening Report. Additionally, as required by the CPUC's General Order No. 131-D, Section XIV B, the CPUC has consulted with all affected agencies regarding land use matters, and implementation of Mitigation Measures L-2b and L-4 would require SCE to further coordinate with applicable agencies to ensure that no conflicts with their respective land use plans and policies occur.

CEQA Significance Conclusion

As part of the proposed Project's approval, and prior to construction, the USDA Forest Service would issue a Special Use Easement, which would involve amending the 2005 ANF Land Management Plan, as necessary, to insure consistency with the USDA Forest Service's management direction for affected areas within the ANF. As such, the proposed Project would be consistent with the USDA Forest Service land use policies. In addition, implementation of Mitigation Measures L-2b and L-4 would require SCE to further coordinate with applicable agencies to ensure that no conflicts with their respective land use plans and policies occur. Therefore, impacts related to potential conflicts with applicable land use plans, goals, or policies would be mitigated to a level of less than significant (Class II).

3.9.6.2 Cumulative Effects Analysis

Geographic Extent

Land uses directly affected by the proposed Project would include those which are located either adjacent to the proposed Project, currently sited in one of its new or expanded ROWs, or currently sited in one of the new or expanded substation sites. Some land uses that are situated along temporary access roads may be indirectly affected. In order to determine whether affected land uses would be cumulatively impacted by other past or reasonably foreseeable future projects, the geographic extent for the land use cumulative effects analysis includes projects that have been identified within one-half mile of the proposed Project and its alternatives, which is consistent with the Land Use Study Area that was used to identify existing land uses and General Plan land use designations for the proposed Project and its alternatives (please refer to Section 3.9.2); consequently, this study area sufficiently encompasses any residential and non-residential land uses that may be cumulatively affected by the proposed Project and its alternatives.

Existing Cumulative Conditions

Any past project or activity that would preclude the use, or disturb or diminish the function of a particular land use within one-half mile of the proposed Project and its alternatives would contribute to the cumulative condition of the cumulative study area. The following is a description of the existing cumulative conditions, which includes a summary of the Project's regional setting as described in Section 3.9.2.

North Region. The North Region can be characterized by large expanses of undeveloped open space and agriculture with encroaching residential development. In the northern-most portion of the study area, established land uses include mining operations and existing wind energy generation facilities. In the Los Angeles County portion of the North Region, several large tracts of undeveloped land have been planned for future development. Specific development sites include the rapidly growing cities of Palmdale and Lancaster, which have recently experienced a surge of residential, commercial, business, and industrial development.

Central Region. Located primarily within the ANF, the Central Region consists of undeveloped lands that are used for recreation and natural resource management. Non-recreational uses within this region include some rural residential, commodity, and commercial uses. Past projects and activities within the Central Region generally pertain to the management of roads, recreational uses, fuels (e.g., vegetation), and non-recreation special uses (e.g., national forest access, telecommunication sites, utility corridors). Approximately twelve utility corridors have been designated within the ANF, which include the 18.5-mile Vincent Gould and the 25.3-mile Vincent Rio Hondo corridors.

South Region. The South Region consists of a variety of land uses that range from agricultural and undeveloped open space areas to intensively developed residential, commercial and industrial uses. Numerous tracts of land planned for development or redevelopment are also located within this region. The thirty-three incorporated cities that are located in the Los Angeles County portion of this region, and the six incorporated cities located in the San Bernardino portion, have planned for and integrated utility uses within their development (e.g., transmission line ROWs and associated substations).

Reasonably Foreseeable Future Projects and Changes

The land use cumulative effects analysis utilizes the list approach to determine the potential cumulative effects of the proposed Project. Tables in Chapter 2 of the Draft EIR/EIS note the present and probable future projects within a geographic area, which includes the one-half mile radius of the Land Use Study Area. Any proposed or future project that would potentially preclude the use of, disturb, or diminish the function of a particular land use within this study area may contribute to a cumulative effect.

North Region. In the North Region of the Land Use Study Area, the following energy infrastructure projects have been proposed:

- **Tehachapi Wind Resource Area.** A report is being prepared that will serve as a programmatic analysis for the development of 4,500 MW of wind power in the Tehachapi Mountains of Kern County. The analysis will evaluate the environmental impacts of future wind development, including projects such as the PdV/Manzana Wind Energy Project and the Alta Wind Energy Project.
- **PdV/Manzana Wind Energy Project.** This project would construct a maximum of 300 wind turbines on a 6,435-acre site in the Willow Springs area of Kern County, and would interconnect to the proposed Project's Cottonwind Substation.
- **Alta Wind Energy Center.** This project would have a generation capacity of 1,500 MW, and the viability of the project would depend on the approval of Antelope Transmission Project Segments 1-3 and possibly Segment

10 of the proposed Project. The first couple hundred MW of the Alta project would be built concurrently with the proposed Project in order to allow the Alta project to come on-line as soon as possible.

- **Antelope Transmission Project Segments 1-3.** This project would construct a 25.6-mile 500-kV transmission line between Antelope and Pardee Substations, a 17.8-mile 500-kV transmission line between Antelope and Vincent Substations, a 26.1-mile 500-kV transmission line between Antelope Substation and proposed Substation 1 (in the Mojave Area), and a 9.4-mile 220-kV transmission line between proposed Substation 1 and proposed Substation 2 (in the Monolith Area). The project would traverse the ANF, and would affect existing and planned residential areas that include the cities of Lancaster and Palmdale.

Additional projects include residential development projects that have been proposed in the North Region, specifically within and in close proximity to the cities of Lancaster and Palmdale. In the city of Lancaster, approximately 9,798 single-family lots may be constructed across 4,500 acres. As many as 3,715 single-family lots may also be constructed within the City of Palmdale.

Central Region. Table 2.9-6 in this EIR/EIS lists planned and proposed projects on NFS lands, which include the Los Angeles River District, San Gabriel River Ranger District, and the Santa Clara/Mojave Rivers District of the ANF. However, no specific projects in the Central Region have been identified that would contribute to a cumulative impact on residential or non-residential land uses.

South Region. The cities that are traversed by the proposed Project within San Bernardino and Los Angeles counties have consistently experienced population growth between the years 2000 and 2005, and it is anticipated that the South Region will continue to be characterized by rapid growth. Between the years 2000 and 2030, it is expected that population will increase anywhere between 2.5 percent to 186.5 percent. Table 2.9-4 in this EIR/EIS describes the projects that have been planned or are proposed in the general vicinity of Alternative 2, and the following is a list of those that have been identified within one-half mile of the route. Given the estimated schedule for these projects and their location relative to the Project route, none of the projects listed below are anticipated to contribute to a cumulative impact on residential or non-residential land uses.

Altadena (Los Angeles County)

- Project 85257 (3 single-family lots)

East San Gabriel (Los Angeles County)

- Project TR061866 (10 attached condominiums/townhomes)
- Project TR062863 (21-unit condominium complex)
- Project (TR065808 (19 condominium units)

City of Temple City

- School: 8-classroom preschool at 6529 Rosemead Blvd.
- School: 7-classroom preschool at 6515 Rosemead Blvd.

San Gabriel (Los Angeles County)

- Project R2005-01996 (28 senior apartments)

City of Rosemead

- Mixed-Use: 15 condominiums at 8479 E. Garvey
- Hubert Trieu (6 single-family residential units)
- Ivan Ho (8 single-family residential units)
- Bill Lau (12 single-family residential units)
- Tom Lee (13 single-family residential units)
- Union Pacific Funding (8 single-family residential units)

- Sierra Eagle, LLC (6 single-family residential units)
- Peter and Brenda Jong (8 single-family residential units)

City of Duarte

- Attalla Ranch Project (15-lot residential subdivision)

Los Angeles County

- Aera Master Planned Community (2,935-acre community that includes 3,600 residential units)

Cumulative Impact Analysis

As described in Section 3.9.6.1, land use impacts associated with the proposed Project would result from: a preclusion, disruption, or division of planned and permitted land uses; short- or long-term conflicts with surrounding land uses; or, inconsistencies with federal, State or local land use policies or regulations. Potential land use impacts that would arise from either construction, operational or maintenance activities would be cumulatively considerable if they combined with similar effects of other projects.

Impact L-1 (Construction of the Project would temporarily disrupt, displace or preclude existing residential land uses) and Impact L-2 (Construction of the Project would temporarily disrupt, displace or preclude existing non-residential land uses) would not contribute to a cumulatively considerable effect. No projects would be constructed at the same time as the proposed Project that would affect the residential or non-residential land uses within 1,000 feet of the proposed Project's construction-related activities. Impact L-1 and Impact L-2 are temporary in nature and would not continue beyond the construction period. As such, Impacts L-1 and L-2 would not potentially combine with the effects of future projects following Project construction (No Impact).

Impact L-3 (Operation and maintenance of the Project would cause long-term disruption of existing and planned residential land uses) would create an incremental effect that is cumulatively considerable. As discussed in Section 3.9.6.1, portions of the proposed Project Segments 10 and 4 and the proposed Whirlwind Substation would be constructed within the planned residential development boundaries of the Willow Springs Specific Plan. Segments 4 and 5 would also abut existing or planned residential properties in Los Angeles County. Other energy projects have been proposed that would affect these same land uses. The proposed PdV/Manzana Wind Energy Project would occupy 6,435 acres in the Willow Springs area, which may preclude future residential development. The proposed Antelope Transmission Project Segments 1 through 3 would be constructed parallel to the proposed Project through the existing and future residential communities of Ritter Ranch and Anaverde (City of Palmdale). However, prior to construction of proposed Project Segments 10 and 4, SCE would be required to acquire regulatory approvals for new and expanded ROWs and substation sites, as well as the rights to construct and operate the proposed Project with affected private property owners. In addition, Segment 5 would be located within existing ROW and would not preclude residential development. Given that SCE would purchase or lease new and expanded substation sites and ROWs in full agreement with existing property owners, the Project's incremental contribution to the cumulative impact would be less than significant (Class III).

Impact L-4 (Operation and maintenance of the Project would cause long-term disruption of existing and planned non-residential land uses) would create an incremental effect that is cumulatively considerable. Non-residential land uses within one-half mile of the proposed Project would include mining, utilities, resource management, transportation, and light industrial uses (please refer to the discussion in Section 3.9.6.1). These land uses are under the jurisdiction of several State and federal agencies that include the California SLC, California DWR, California Department of Parks and Recreation, BLM, and DoD. A number of county and city jurisdictions would also be traversed by the proposed Project. As described

above for Impact L-3, other energy projects have been proposed within one-half mile of the proposed Project. The PdV/Manzana Wind Energy Project and the Alta Wind Energy Center may conflict with existing or proposed non-residential land uses in Kern County. The impacts of these projects in combination with the proposed Project would result in a potentially significant cumulative effect on non-residential land uses. However, Mitigation Measure L-4 would reduce the incremental effect of the proposed Project. This mitigation measures would allow the affected agencies to address and reconcile any future potential conflicts that the proposed Project may pose to the management and use of non-residential lands. With implementation of Mitigation Measure L-4 the proposed Project's cumulative impact would be less than significant (Class II).

Impact L-5 (Construction, operation or maintenance of the Project would conflict with applicable federal, State or local land use plans, goals, or policies) would not contribute to a cumulatively considerable effect (Class III). The proposed Project would be consistent with USDA Forest Service land use policies and local land use plans and policies as they relate to transmission lines and associated facilities (please refer to Table 3.9-20 and Section 3.9.6.1), and would be authorized by the USDA Forest Service through it permitting and Forest Plan amendment prior to construction. Additionally, the SCE would be required to implement Mitigation Measures L-2b and L-4 to avoid conflicts with any applicable federal, State or local land use plans, goals, or policies that would be cumulatively considerable.

Mitigation to Reduce the Project's Contribution to Significant Cumulative Effects

As discussed in Section 3.9.6.1, Impact L-1 (Construction of the Project would temporarily disrupt, displace or preclude existing residential land uses), Impact L-2 (Construction of the Project would temporarily disrupt, displace or preclude existing non-residential land uses), and Impact L-5 (Construction, operation or maintenance of the Project would conflict with applicable federal, State or local land use plans, goals, or policies) would not contribute to a long-term cumulatively considerable effect. Impact L-3 (Operation and maintenance of the Project would cause long-term disruption of existing and planned residential land uses) would create an incremental effect that, in combination with other energy projects, would result in a less-than-significant cumulative impact (Class III). Therefore, no mitigation measures are necessary to reduce the incremental effects of Impacts L-1, L-2, L-3, and L-5.

Impact L-4 (Operation and maintenance of the Project would cause long-term disruption of existing and planned non-residential land uses) would contribute to an incremental effect that, in combination with other energy projects, would create a potentially significant cumulative impact on non-residential land uses (Class II). However, Mitigation Measure L-4 would reduce the incremental effect of the Project to less than significant (Class II).

3.9.7 Alternative 3: West Lancaster Alternative

The following section provides an evaluation of the potential land use impacts associated with Alternative 3, the West Lancaster Alternative, as described in Section 3.9.2.3. This evaluation is based upon the same land use impact criteria and assessment methodology that were used for the evaluation of the proposed Project, as outlined in Sections 3.9.4.

3.9.7.1 Direct and Indirect Effects Analysis

Preclude a permitted land use, or create a disturbance that would diminish the function of a particular land use (Criterion LU1)

As discussed in Section 3.9.6.1, Project construction would temporarily disrupt, displace, or preclude existing residential land uses (Impact L-1). At a localized scale, construction-related impacts associated with the rural homes situated along the east and west sides of 100th Street between Avenues I and J would be substantially reduced under Alternative 3. Re-routing along this portion of Segment 4 would shift the majority of transmission line construction to the west of these residences by a distance of approximately one-half mile. Therefore, the intensity of construction-related effects on these residential properties would be displaced. However, all other residential properties affected by this alternative in the North, Central and South Regions would remain the same as those described in Section 3.9.6.1 for the proposed Project. Due to the proximity of residential uses to construction-related activities, in conjunction with the intensity of the workforce and equipment needed and the duration of construction itself, impacts to residential uses would be considered adverse. With implementation of Mitigation Measures L-1a through L-1c, as provided in Section 3.9.6.1, in conjunction with implementation of the pre-construction and construction phase mitigation measures provided in Sections 3.3 (Air Quality), 3.10 (Noise), and 3.13 (Traffic and Transportation), construction-related impacts to residential land uses would be adverse but mitigable to a level that is less than significant (Class II).

Construction of Alternative 3 would temporarily disrupt, displace, or preclude existing non-residential land uses (Impact L-2). Non-residential land uses within one-half mile of Alternative 3 include agriculture and a local motocross or off-road vehicle track which is approximately 4.5 acres in size. The motocross or off-road vehicle track is located approximately the same distance (an estimated 0.3 mile) from the Alternative 3 ROW that it is from the proposed Project ROW; therefore, construction-related impacts to this facility would be the same. Construction-related impacts on agriculture for Alternative 3 are addressed in Section 3.2 (Agricultural Resources). All other construction-related impacts associated with non-residential uses in the North, Center and South Region would be the same for Alternative 3 as described for the Proposed Project (Section 3.9.6.1). These impacts would be considered adverse. However, with implementation of Mitigation Measures L-2a and L-2b, in conjunction with implementation of the Mitigation Measures L-1a through L-1c and the pre-construction and construction phase mitigation measures provided in Sections 3.3 (Air Quality), 3.10 (Noise), and 3.13 (Traffic and Transportation), construction-related impacts to non-residential land uses would be mitigated to a level that is less than significant (Class II).

As discussed in Section 3.9.6.1, operation and maintenance of the Project would have the potential to create long-term disruptions to existing and planned residential land uses (Impact L-3). Implementation of Alternative 3 would require the placement of a new 200-foot wide ROW, and increase the total length of proposed Segment 4 by approximately 0.4 mile. The increased length of Segment 4 would not appreciably change the total land area required for implementation of the proposed Project. No other ROW reductions or modifications within the North, Central or South Regions would occur under Alternative 3. Consequently, as with the proposed Project, impacts related to the preclusion or incompatibility with existing and future planned residential development would be adverse but less than significant (Class III) and no mitigation measures are required. It is noted, however, that the proposed Project's long-term impacts to those existing residents located along the east and west sides of 100th Street between Avenues I and J would be substantially reduced under Alternative 3.

Operation and maintenance of Alternative 3 would potentially cause long-term disruption of existing and planned non-residential land uses (Impact L-4). As outlined in Section 3.9.2.3, non-residential land uses within one-half mile of Alternative 3 include agriculture and a local motocross or off-road vehicle track. Following construction, no permanent disruptions to the existing operations of the motocross or off-road vehicle track would be anticipated to occur. Please refer to Section 3.2 (Agricultural Resources) for a discussion of this alternative's effects on agricultural uses. Other than the re-route associated with proposed Segment 4, no other ROW modifications in the North, Central, or South Region would occur. Therefore, the same long-term impacts to existing and planned non-residential land uses that have been identified for the proposed Project, as addressed in Section 3.9.6.1, would occur under Alternative 3. With implementation of Mitigation Measure L-4 no significant preclusions of, or restrictions to, the management and uses of non-residential lands would be anticipated to occur. Impacts would be adverse but mitigable to a level that is less than significant (Class II).

Conflict with any applicable federal, State, or local land use plans, goals, or policies (Criterion LU2)

As discussed in Section 3.9.6.1, the Project would potentially conflict with relevant federal, State, or local land use plans, goals, or policies (Impact L-5). Under Alternative 3, the same land use plans, goals and policies which are outlined for the proposed Project and summarized in Table 3.9-20 would apply. As required by the CPUC's General Order No. 131-D, Section XIV B, the CPUC has consulted with all affected agencies regarding land use matters, and implementation of Mitigation Measures L-2b and L-4 would require SCE to further coordinate with applicable agencies to ensure that no conflicts with their respective land use plans and policies occur. Therefore, impacts related to potential conflicts with applicable land use plans, goals, or policies would be mitigated to a level of less than significant (Class II).

3.9.7.2 Cumulative Effects Analysis

Geographic Extent

Implementation of Alternative 3 would increase the total length of proposed Segment by approximately 0.4 mile. However, this minor re-route would remain within the one-half mile radius that was established as both the Land Use Study Area and the cumulative study area identified for the proposed Project. No other ROW reductions or modifications within the North, Central, or South Regions would occur under Alternative 3. As such, the geographic extent for Alternative 3 would be identical to Alternative 2 (please refer to Section 3.9.6.2).

Existing Cumulative Conditions

The existing cumulative conditions for Alternative 3 would be identical to Alternative 2, as described in Section 3.9.6.2.

Reasonably Foreseeable Future Projects and Changes

Reasonably foreseeable future projects and changes for Alternative 3 would be identical to Alternative 2, as described in Section 3.9.6.2.

Cumulative Impact Analysis

Impacts associated with Alternative 3 would be similar to the proposed Project (Alternative 2). As such, the description in Section 3.9.6.2 of the cumulative impacts from construction, operation and maintenance of Alternative 2 would apply to Alternative 3. The following is a summary of the Alternative 3 cumulative impacts.

No projects would be constructed at the same time as Alternative 3 that would affect the residential (Impact L-1) or non-residential (Impact L-2) land uses within 1,000 feet of construction-related activities. Consequently, Impact L-1 (Construction of the Project would temporarily disrupt, displace or preclude existing residential land uses) and Impact L-2 (Construction of the Project would temporarily disrupt, displace or preclude existing non-residential land uses) from Alternative 3 would not contribute to a cumulatively considerable effect (No Impact).

As the majority of the Alternative 3 route is identical to Alternative 2, this alternative would create an incremental effect on the long-term disruption of existing and planned residential land uses that is cumulatively considerable (Impact L-3). The same energy projects that would affect land uses along the Alternative 2 route (PdV Wind Energy Project and Antelope Transmission Project Segments 1-3) would also contribute to a cumulative effect under Alternative 3. As discussed in Section 3.9.6.1, SCE would purchase or lease any new and expanded substation sites and ROWs in full agreement with existing property owners. Consequently, the alternative's incremental contribution to the cumulative impact would be less than significant (Class III).

The Alternative 3 route would traverse the same jurisdictions as Alternative 2 and would similarly affect non-residential land uses along the route (Impact L-4). As described for Alternative 2, the PdV Wind Energy Project and the Alta Wind Energy Center may conflict with non-residential land uses in Kern County. While the impacts of these projects in combination with Alternative 3 would result in a potentially significant cumulative effect, Mitigation Measure L-4 would reduce the incremental effect of the alternative to less than significant (Class II).

Alternative 3 traverses the same jurisdictions as Alternative 2, and as such, would be subject to the land use plans, goals, and policies that are applicable to Alternative 2 (Impact L-5). Alternative 3 would be consistent with USDA Forest Service policies and local land use plans and policies as they relate to transmission lines, and would be authorized by the USDA Forest Service through its permitting and Forest Plan amendment processes prior to construction. The SCE would also be required to implement Mitigation Measures L-2b and L-4 to avoid conflicts that would be cumulatively considerable (Class III).

Mitigation to Reduce the Project's Contribution to Significant Cumulative Effects

As discussed in Section 3.9.6.2, no mitigation measures are recommended to reduce the incremental effects of Impacts L-1, L-2, L-3, and L-5. Impact L-4 (Operation and maintenance of the Project would cause long-term disruption of existing and planned non-residential land uses) would contribute to an incremental effect from Alternative 3 that, in combination with other energy projects, would create a potentially significant cumulative impact on non-residential land uses (Class II). However, Mitigation Measure L-4 would reduce this cumulative impact to a level of less than significant.

3.9.8 Alternative 4: Chino Hills Route Alternatives

The following section provides an evaluation of the potential land use impacts associated with Alternative 4, the Chino Hills Route Alternatives. This evaluation is based upon the same land use impact criteria and

assessment methodology that were used for the evaluation of the proposed Project, as outlined in Section 3.9.4. Under all of the routing options of Alternative 4, no changes to the land use-related impacts associated with the proposed Project would occur in the North or Central Regions; consequently, the following discussion is focused on land use-related impacts in the South Region as they relate to proposed Segments 8A, 8B and 8C.

3.9.8.1 Direct and Indirect Effects Analysis

Preclude a permitted land use, or create a disturbance that would diminish the function of a particular land use (Criterion LU1)

As discussed in Section 3.9.6.1 for the proposed Project, construction of Alternative 4 would temporarily disrupt, displace, or preclude existing residential land uses (Impact L-1). Under Routes A through D, no construction-related activities would occur along either MP 19.2 though MP 35.2 of proposed Segment 8A, MP 0.0 through MP 6.8 of proposed Segment 8B, or MP 0.0 through MP 6.4 of proposed Segment 8C. As illustrated in Sheet 9 of 9 of Figures A-1 and A-2, all of these proposed segments traverse large tracts of land that include either existing or planned residential uses. Therefore, under the Alternative 4 routes, there would be a significant decrease in the temporary construction-related impacts to residential uses within the cities of Chino Hills, Chino and Ontario.

The following describes the effects of Impact L-1 associated with each of the Alternative 4 routes:

- **Route A:** Under Route A, existing residential uses occur west and north of Chino Hills State Park, as summarized in Table 3.9-13. In this area the transmission line would be placed in an existing ROW, which would be widened by an estimated 150 feet. During construction, residents within an estimated one-half mile of the ROW would be subject to the same types of direct and indirect effects as described for the proposed Project, as outlined in Section 3.9.6.1. However, with implementation of Mitigation Measures L-1a through L-1c (please refer to Section 3.9.6.1), in conjunction with implementation of the pre-construction and construction phase mitigation measures provided in Sections 3.3 (Air Quality), 3.10 (Noise), and 3.13 (Traffic and Transportation), construction-related impacts to residential land uses would be adverse but mitigable to a level of less than significant (Class II).
- **Route B:** This route would maintain the same ROW as Route A west and north of Chino Hills State Park, and, therefore, would temporarily affect residential land uses. However, with implementation of Mitigation Measures L-1a through L-1c, as provided in Section 3.9.6.1, in conjunction with implementation of the pre-construction and construction phase mitigation measures provided in Sections 3.3 (Air Quality), 3.10 (Noise), and 3.13 (Traffic and Transportation), construction-related impacts to residential land uses (Impact L-1) would be adverse but mitigable to a level of less than significant (Class II).
- **Route C:** This route would follow the same ROW as Routes A and B through Los Angeles and Orange Counties, which includes residential uses, as described above. Route C would additionally include a new ROW and switching station north of Chino Hills State Parks in the City of Chino Hills; rural residential land uses occur within one-half mile of this area and would also be affected by construction-related activities. As with Routes A and B, with implementation of Mitigation Measures L-1a through L-1c (please refer to Section 3.9.6.1), in conjunction with implementation of the pre-construction and construction phase mitigation measures provided in Sections 3.3 (Air Quality), 3.10 (Noise), and 3.13 (Traffic and Transportation), construction-related impacts to residential land uses (Impact L-1) would be adverse but mitigable to a level of less than significant (Class II).
- **Route D:** This route would follow the same ROW as Route C leading up to Chino Hills State Park and thus would affect residential land uses within an estimated one-half mile of construction zones. Route D would additionally affect existing residential areas within the City of Chino Hills which are located north of Chino Hills State Park along Ferree Street, Woodview Road, south of Soquel Canyon Parkway and west of Butterfield Ranch Road. In comparison to Routes A through C, construction of Route D would affect the greatest number of residents during construction. However, with implementation of Mitigation Measures L-1a

through L-1c (please refer to Section 3.9.6.1), in conjunction with implementation of the pre-construction and construction phase mitigation measures provided in Sections 3.3 (Air Quality), 3.10 (Noise), and 3.13 (Traffic and Transportation), construction-related impacts to residential land uses (Impact L-1) would be adverse but mitigable to a level of less than significant (Class II).

Construction of Alternative 4 would temporarily disrupt, displace, or preclude existing non-residential land uses (Impact L-2). The following describes the effects of this impact associated with each of the Alternative 4 routes:

- **Routes A and D:** These routes would traverse non-residential lands used for grazing, Chino Hills State Park, and open space (undeveloped) lands east of the Park. Please refer to Sections 3.2 (Agricultural Resources) and 3.15 (Wilderness and Recreation) for an assessment of the construction-related impacts associated with these subject areas. During construction, these two alternatives would temporarily disrupt, displace or preclude operational and maintenance activities within the Park; the duration of these impacts would be anticipated to be the greatest for Route A due to the need to construct a new switching station. The Chino Hills State Park General Plan allows for patrol and utility company vehicles and motorized equipment on designated Park roads and trails within the Core Habitat and Natural Open Space Zones. Utility company vehicles and motorized equipment are also allowed on designated Park roads and trails in the Recreation and Operations Zone. However, the Chino Hills State Park General Plan does not expressly provide any goals, policies or other management directives that would permit the construction of new or expanded utilities within the Park's boundaries, and additionally states that existing transmission lines within the Park are in conflict with its uses and management activities. Consequently, it is anticipated that the California Department of Parks and Recreation would consider construction of Routes A and D a significant impact to both the Park itself and its management and maintenance operations. Although implementation of Mitigation Measures L-1a through L-1c and L-2a and L-2b, in conjunction with the mitigation measures provided in Sections 3.3 (Air Quality), 3.4 (Biological Resources), 3.10 (Noise), 3.13 (Traffic and Transportation), and 3.15 (Wilderness and Recreation), would lessen construction-related impacts within the Park, it is not anticipated that these mitigation measures would reduce impacts to a level of less than significant. Construction-related impacts to non-residential uses within the Park would be significant and unavoidable (Class I).

  Under Route A no other non-residential land uses would be affected. Under Route D the transmission line ROW, a switching station, and an all-weather access road for the switching station would be located east of the Park. Although this area is currently undeveloped, it was previously used as a military weapons testing site and is considered a hazardous waste site. However, assuming that all required environmental clearances (e.g., completion of necessary hazardous materials testing, remediation work, etc.) could be obtained for construction, operation and maintenance within this area, and with implementation of Mitigation Measures L-2a and L-2b impacts to non-residential uses east of the Park would be reduced to a level of less than significant.
- **Route B:** In comparison to Routes A and D, Route B would traverse the greatest distance of land within Chino Hills State Park. Construction-related impacts to non-residential uses within the Park would be significant and unavoidable (Class I).
- **Route C:** Potential construction-related impacts to non-residential land uses east of the Route C switching station location would be identical to Route D. Although Route B traverses the greatest distance within the Park and Route A would involve a new switching station within the Park, it would be anticipated that construction-related activities associated with Route C would be of a similar or perhaps greater duration than Routes A and B because it would involve the dismantling and re-construction (re-routing) of three existing transmission lines within the Park. Consequently, temporary impacts due to construction within the Park would be equal to or potentially greater than Alternatives A, B and D. As addressed under Routes A, B and D, construction-related impacts to non-residential uses within the Park under Route C would be significant and unavoidable (Class I).

In comparison to the proposed Project, no other changes under these routing options would occur within the South Region. With implementation of Mitigation Measures L-2a and L-2b, as outlined in Section 3.9.6.1, in conjunction with implementation of the Mitigation Measures L-1a through L-1c and the pre-construction and construction phase mitigation measures provided in Sections 3.3 (Air Quality), 3.10

(Noise), and 3.13 (Traffic and Transportation), construction-related impacts to non-residential land uses would be reduced to a level of less than significant (Class II).

As illustrated on Sheet 9 of 9 of Figures A-1 and A-2, between MP 19.2 and MP 35.2 of proposed Segment 8A, MP 0.0 through MP 6.8 of proposed Segment 8B, and MP 0.0 through MP 6.4 of proposed Segment 8C, there are multiple tracts of land which are used for non-residential purposes such as commercial and retail services and general, light and heavy industry. Under Routes A through D no construction along these portions of the proposed Project's ROW would occur; therefore, implementation of any of these alternatives would significantly decrease construction-related impacts to non-residential uses within the cities of Chino Hills, Chino and Ontario.

As discussed in Section 3.9.6.1, operation and maintenance of the Project would have the potential to create long-term disruptions to existing and planned residential land uses (Impact L-3). The following describes the effects of this impact associated with each of the Alternative 4 routes:

- **Routes A and B:** Outside of the boundaries of Chino Hills State Park, Routes A and B would be placed in an existing ROW which would be widened by approximately 150 feet. Additionally, Route B would require an estimated four to twelve acres of land for a new switching station, as well as an all-weather access road for the switching station, in an area which is designated for low density residential development. Therefore, future residential uses within the widened ROW west and north of Chino Hills State Park, and within and surrounding the Route B switching station would be permanently precluded. Although Routes A and B would significantly reduce long-term disruptions of existing and planned residential uses between MP 19.2 though MP 35.2 of proposed Segment 8A, MP 0.0 through MP 6.8 of proposed Segment 8B, and MP 0.0 through MP 6.4 of proposed Segment 8C, the same long-term effects on residential uses would occur west of MP 19.2 of Segment 8A and along all other portions of the proposed Project in the South, Central and North Regions. As outlined in Section 3.9.6.1 for the proposed Project, restrictions of, and incompatibility with, current and future residential land uses within and adjacent to proposed new and expanded ROWs and substation expansion areas, would be adverse but less than significant (Class III).
- **Routes C and D:** In comparison to Routes A and B, Routes C and D would affect a greater number of residents in the vicinity of Ferree Street, Woodview Road, and areas south of Soquel Canyon Parkway and west of Butterfield Ranch Road (Impact L-3). Additionally, Routes C and D would require an estimated four to twelve acres of land for a new switching station, as well an all-weather access road for their respective switching stations, in areas which are designated as either Agriculture/ Ranches (Route C) or Low Density Residential (Route D). As with Routes A and B, these two routes would reduce long-term impacts with existing and planned residential land uses along proposed Segments 8B and 8C, and east of MP 19.2 of proposed Segment 8A. However, the same impacts as described for the proposed Project would occur along all other segments of Alternative 4. These impacts would be adverse but less than significant (Class III).

Operation and maintenance of Alternative 4 would potentially cause long-term disruption of existing and planned non-residential land uses (Impact L-4). The following describes the effects of this impact associated with each of the Alternative 4 routes:

- **Route A:** This route would require the expansion of approximately 2.3 miles of ROW within Chino Hills State Park by 150 feet. Route A would additionally require the permanent use of between four to 12 acres of land within the Park for a new switching station, as well as the construction of an all-weather road for the switching station. With the addition of these features, Route A would expand transmission line facilities within the Park by an estimated 42 to 54 acres. This loss of land would be anticipated to cause long-term conflicts with, and disruptions of, existing uses and operations within the Park. Additionally, the placement of these features would be anticipated to conflict with the Park's management of affected Natural Open Space and Core Habitat Zones. These impacts would be significant and unavoidable (Class I). No mitigation measures have been identified that would reduce these impacts to a level of less than significant.

  As addressed above under Impact L-2, Route A would also traverse lands which are currently used for grazing. Please refer to Section 3.2 (Agricultural Resources) for an analysis of the long-term effects on this

use which would occur under Route A. No other non-residential land uses occur within one-half mile of Route A, therefore, no other long-term disruptions specific to this would occur.

- **Route B:** Under Route B, approximately 4.3 miles of existing ROW would be widened by an estimated 150 feet in Chino Hills State Park. The expansion would equal approximately 84 acres of new transmission line ROW within the Park. Although the new transmission line would not be expected to fully preclude or disrupt exiting uses of the Park, the reduction in land would be anticipated conflict with the long-term management of affected portions of the Park's Natural Open Space, Core Habitat, Historic and Recreation and Operations zones. These long-term conflicts would be significant and unavoidable (Class I). No mitigation measures have been identified that would reduce these impact to a level of less than significant.

  As with Route A, Route B would also traverse lands which are currently used for grazing west of the Park and opens space (undeveloped land) east of the Park. Please refer to the Section 3.2 (Agricultural Resources) for an analysis of the long-term effects of Route B on grazing. As noted under Impact L-2, above, east of the Park Route B would involve the construction, operation and maintenance of a transmission line, switching station, and all-weather access road for the switching station on property which was previously used as a military weapons testing site and is considered a hazardous waste site. However, assuming that all required environmental clearances for could be obtained for construction, operation and maintenance within this area (e.g., completion of necessary hazardous materials testing, remediation work, etc.) long-term impacts to non-residential uses east of the Park would be less than significant. No other non-residential land uses occur within one-half mile of Route B.

- **Route C:** Implementation of Route C would result in the construction of approximately 3.3 miles of new ROW through Chino Hills State Park; 1.6 miles of this ROW would be 330 feet in width and 1.7 miles would be 480 feet in width. Implementation of Route C would additionally involve construction of an all-weather access road traversing through the Park to a new switching station located along the Park's western boundary. During construction an estimated 152.5 acres would be temporarily disturbed within the Park. However, Route C would additionally remove and restore approximately 6.9 miles of existing ROW within the Park. It has been estimated that approximately 141.5 acres of land within the Park would be restored. Per the mitigation measures specified in Sections 3.4 (Biological Resources) and 3.14 (Visual Resources), these lands would be fully restored following transmission line removal. These restored lands would also be located within the Park's Core Habitat and Natural Open Space zones. Although the new and re-routed transmission lines would not be expected to fully preclude or disrupt exiting uses of the Park, they would be anticipated conflict with the long-term management of affected portions of the Park's Natural Open Space and Core Habitat zones. These long-term conflicts would be significant and unavoidable (Class I). No mitigation measures have been identified that would reduce these impacts to a level of less than significant. It is noted, however, that the net gain in restored lands under this routing option would be preferable to the net losses that would occur under Routes A, B and D.

  The total permanent land disturbance associated with Route C is estimated to be 243 to 332 acres. Impacts to non-residential land uses west of the Park, including a new switching station and an all-weather access road to the station, would involve lands used for grazing. Please refer to Section 3.2 (Agricultural Resources) for a discussion of these impacts.

- **Route D:** Under Route D approximately 1.4 miles of expanded transmission line ROW would be placed within the Chino Hills State Park, traversing the Park's Recreation and Operations and Natural Open Space zones, equaling approximately 26 acres. As with the other routes, Route D would not be expected to fully preclude or disrupt exiting uses of the Park; however, it would be anticipated to conflict with the long-term management of affected portions of the Park's Recreation and Operations and Natural Open Space zones. These long-term conflicts would be significant and unavoidable (Class I). No mitigation measures have been identified that would reduce these impacts to a level of less than significant. Impacts to other non-residential uses outside of the Park would be the same as those addressed under Route B.

In comparison to the proposed Project, no other changes under Routes A through D would occur in the South Region. Under the Alternative 4 routes, no new transmission lines would be constructed along proposed Segments 8B and 8C, or east of MP 19.2 of proposed Segment 8A. Therefore, Routes A through D would significantly decrease any long-term impacts to non-residential uses within the cities of Chino Hills, Chino and Ontario. All other long-term non-residential uses (with the exception of proposed

Segments 8B and 8C, and lands east of MP 19.2 along proposed Segment 8A), would be the same as described in Section 3.9.6.1.

Conflict with any applicable federal, State, or local land use plans, goals, or policies (Criterion LU2)

As discussed in Section 3.9.6.1, the Project would potentially conflict with relevant federal, State, or local land use plans, goals, or policies (Impact L-5). Alternative 4 would be located within the same jurisdictions as the proposed Project along Segments 4, 5, 6, 7, 10 and 11. However, under Alternative 4 lands under the jurisdiction of Orange County and the City of Brea would be traversed, and no jurisdictions associated with proposed Segments 8B and 8C or east of MP 19.2 of proposed Segment 8A would be affected. Therefore, the land use plans and policies associated with the cities of Chino and Ontario, as provided in Table 3.9-20, would not apply. Table 3.9-21 provides the consistency analysis for applicable goals of the Chino Hills State Park General Plan; the full text to these goals is provided in Table 3.9-23. As outlined in the Policy Screening Report, no policies, goals or objectives associated with the General Plans for Orange County and the City of Brea were identified for further evaluation; Alternative 4 would not conflict with either one of these planning documents.

Table 3.9-21. Consistency with Applicable Land Use Plans and Policies – Alternative 4

Agency	Plan/ Goal	Consistent?	Explanation
California Department of Parks and Recreation	Chino Hills State Park General Plan, February 1999		
	Natural Resources, Buffers	No	Alternative 4 would require the expansion of existing ROW or the creation of new ROW through the CHSP. Additionally, Route A would require a new switching station within the Park, while Routes B through C would require a new switching station immediately adjacent to the Park. The purpose of this goal is to protect the Park from manmade features which conflict with the Park's natural setting, uses and resources. The construction, operation and maintenance of either a new transmission line or switching station within or adjacent to the Park would not be consistent with this goal.
	Aesthetic Resources	No	Alternative 4 would require either the expansion of an existing ROW or the creation of new ROW through the CHSP. Additionally, Route A would require a new switching station within the Park. As outlined in Section 3.14 (Visual Resources), impacts within the Park would be significant and unavoidable (Class I). Additionally, as noted in this Land Use analysis operation and maintenance of Alternative 4 would be anticipated to create significant and unavoidable conflicts with the Park's management. Alternative 4 would not be consistent with this guideline, which is intended to reduce existing transmission line features within the Park and discourage any new transmission lines.

California Department of Parks and Recreation Plans and Policies. Table 3.9-21 provides the goals of the Chino Hills State Park General Plan that would be applicable to Alternative 4. Table 3.9-23, located at the end of this section, provides the full language of these goals, as well as their implicated policies and implementing guidelines. As outlined in Table 3.9-21, implementation of Alternative 4 would not be consistent with the Chino Hills State Park General Plan. In order to achieve consistency, the Chino Hills State Park General Plan would require amendment; the amendment would subsequently require approval by the State Parks and Recreation Commission. Because the CPUC's General Order No. 131-D, Section XIC B does not apply to State agencies with jurisdiction over facilities constructed for public utilities, consistency with the Chino Hills State Park General Plan is required. Therefore, the existing inconsistency between Alternative 4 and the Chino Hills State Park General Plan would be considered significant and unavoidable impact (Class I). Although implementation of Mitigation Measure L-4 would apply to this impact, it would not, in itself, reduce this effect to a level of less than significant. No other

mitigation measures have been identified that would reduce this General Plan inconsistency to a level of less than significant.

Local Plans and Policies. As noted above, through the Policy Screening Report evaluation process, no policies, goals or objectives associated with the General Plans for Orange County and the City of Brea were identified for further evaluation; Alternative 4 would not conflict with either of these planning documents. In the South Region, the remainder of Alternative 4's ROW and its associated facilities would be identical to the proposed Project. Table 3.9-20 presents the proposed Project consistency with the land use plans within the South Region. As outlined in Table 3.9-20, no conflicts with the land use and management plans and policies associated with the South Region would occur under Alternative 4. Additionally, as required by the CPUC's General Order No. 131-D, Section XIV B, the CPUC has consulted with Orange County and the City of Brea regarding implementation of Alternative 4, and Mitigation Measures L-2b and L-4 would require SCE to further coordinate with applicable agencies to ensure that no conflicts with their respective land use plans and policies occur. Therefore, impacts related to conflicts with applicable land use plans, goals, or policies would be mitigated to a level of less than significant (Class II).

3.9.8.2 Cumulative Effects Analysis

Geographic Extent

Alternative 4 would be identical to the proposed Project (Alternative 2) in the North and Central Regions of the Land Use Study Area, and as such would utilize the same geographic extent for cumulative effects in these regions. In the South Region, Alternative 4 would diverge from Alternative 2 in southeastern Los Angeles County, and would traverse land uses under the jurisdiction of CHSP, Los Angeles County, Orange County, and the cities of Brea and Chino Hills. The cities of Chino and Ontario that are traversed by the proposed Project would not be affected by Alternative 4. The geographic extent for Alternative 4 would include land uses and projects within one-half mile of the route as it diverges from Alternative 2 at Segment 8A MP 19.2 until its termination point. Please refer to Section 3.9.2.4 for a description of Routes A through D of Alternative 4.

Existing Cumulative Conditions

In the North and Central Regions, the existing cumulative conditions for Alternative 4 would be identical to the conditions described for Alternative 2 (please refer to Section 3.9.6.2).

As discussed for Alternative 2 (the proposed Project), the South Region consists of a variety of land uses that range from agricultural and undeveloped open space areas to intensively developed residential, commercial and industrial uses. The incorporated cities and unincorporated county areas that are affected by Alternative 4 have planned for, and integrated utility uses within their development plans (e.g., transmission ROWs and related substations). Utility easements and access roads have also been designated within the CHSP for the operation and maintenance of transmission lines, gas lines, and water pipelines.

Reasonably Foreseeable Future Projects and Changes

No reasonably foreseeable future projects have been identified along Routes A through D of Alternative 4 that were not already described in Section 3.9.6.2. Please refer to Section 3.9.6.2 for a discussion of future projects in the vicinity of Alternative 2 and Alternative 4.

Cumulative Impact Analysis

Under Alternative 4, the cumulative effects associated with Impacts L-1 and L-3 would be identical to Alternative 2, while the effects of Impacts L-2, L-4 and L-5 would be greater. The following is a summary of the Alternative 4 cumulative impacts that describes the similarities and differences between it and the proposed Project.

No projects would be constructed at the same time as Routes A through D of Alternative 4 that would affect the residential (Impact L-1) land uses within 1,000 feet of construction-related activities. Consequently, Impact L-1 (Construction of the Project would temporarily disrupt, displace or preclude existing residential land uses) would not contribute to a cumulatively considerable effect.

In the North and Central Regions, Alternative 4 is identical to Alternative 2 (the proposed Project). Consequently, this alternative would create an incremental effect on the long-term disruption of existing and planned residential land uses that is cumulatively considerable (Impact L-3). Other energy projects such as the PdV Wind Energy Project and the Antelope Transmission Project Segments 1 through 3 would contribute to a cumulative effect under Alternative 4. However, as discussed in Section 3.9.6.1, SCE would avoid a conflict with existing or planned residential uses through the purchase or lease of any new and expanded substation sites and ROWs in full agreement with existing property owners. Consequently, this alternative's incremental contribution to the long-term disruption of existing and planned residential uses would be less than significant (Class III).

Under Alternative 4, short- and long-term impacts to non-residential land uses (Impacts L-2 and L-4) would be identical to Alternative 2 in the North and Central Regions. The incremental effects of Alternative 4 would combine with the effects of the PdV Wind Energy Project and the Alta Wind Energy Center to impact non-residential land uses in Kern County. However, in the South Region, construction of Routes A through D through the CHSP would conflict with existing uses and operations of CHSP, including the management of affected Natural Open Space and Core Habitat Zones (Impact L-2). Additionally, Routes A through D would permanently disturb between an estimated 185 to 265 acres of land. Consequently, construction, operation and maintenance of Alternative 4, Routes A through D, in combination with other proposed energy projects, would result in a significant and unavoidable cumulative impact to non-residential uses (Impacts L-2 and L-4) (Class I). No mitigation measures have been identified that would reduce Alternative 4's incremental contribution to these cumulative impacts.

Alternative 4 traverses the same jurisdictions as Alternative 2 in the North and Central Region. While Alternative 4, Routes A through D, would avoid the cities of Chino and Ontario that are traversed by Alternative 2, the plans and policies from the following additional jurisdictions would be applicable to this alternative: the CHSP; Orange County; the City of Brea; and, the City of Chino Hills. As discussed in Section 3.9.8.1, Routes A through D would conflict with the Chino Hills State Park General Plan, and an amendment would be required by the State Parks and Recreation Commission to achieve consistency (Impact L-5). Additionally, the expansion of existing ROW or the creation of new ROW within the CHSP may facilitate the siting of future transmission lines within the Park, which would further conflict with the following goals and guidelines of the CHSP General Plan: (1) to protect the Park from manmade features, to reduce existing transmission line features within the Park; and, (2) to discourage any new transmission lines (please refer to Table 3.9-21). Consequently, the incremental effect of Alternative 4, in combination with potential future transmission projects, would result in a significant and unavoidable cumulative impact related to consistency with applicable federal, State or local land use plans, goals, or policies

(Impact L-5) (Class I). No mitigation measures have been identified that would reduce the severity of this impact.

Mitigation to Reduce the Project's Contribution to Significant Cumulative Effects

As discussed in Section 3.9.6.2, Impact L-1 (Construction of the proposed Project would temporarily disrupt, displace or preclude existing residential land uses) would not contribute to a cumulatively considerable effect. Impact L-3 (Operation and maintenance of the Project would cause long-term disruption of existing and planned residential land uses) would create an incremental effect that, in combination with other energy projects, would result in a less-than-significant cumulative impact (Class III). No mitigation measures are recommended to reduce the incremental effects of Impacts L-1 and L-3.

Impacts L-2 (Construction of the Project would temporarily disrupt, displace or preclude existing non-residential land uses), L-4 (Operation and maintenance of the Project would cause long-term disruption of existing and planned non-residential land uses), and L-5 (Construction, operation or maintenance of the Project would conflict with applicable federal, State or local land use plans, goals, or policies) would potentially combine with the effects of other projects to create a significant and unavoidable impact (Class I). No mitigation measures have been identified that would reduce Alternative 4's incremental contribution to these cumulative impacts.

3.9.9 Alternative 5: Partial Underground Alternative

The following section provides an evaluation of the potential land use impacts associated with Alternative 5, the Partial Underground Alternative, as described in Section 3.9.2.5. This evaluation is premised on the same impact criteria and methodology that were applied to the proposed Project, as outlined in Section 3.9.4. Under this alternative, no changes to the impact analysis associated with the proposed Project would occur in the North or Central Regions. Additionally, no changes to the impact analysis associated with the South Region's Segments 7, 8B, 8C and 11 would occur, nor would there be any changes to the impact analysis for the majority of Segment 8A. Consequently, the following discussion is focused on the land use-related impacts associated with Segment 8A between MPs 21.9 to 25.8, where the transmission line would be placed underground.

3.9.9.1 Direct and Indirect Effects Analysis

Preclude a permitted land use, or create a disturbance that would diminish the function of a particular land use (Criterion LU1)

As discussed in Section 3.9.6.1, Project construction would temporarily disrupt, displace, or preclude existing residential land uses (Impact L-1). Under Alternative 5 existing residential uses occur within 1,000 feet of the ROW along its entire length. However, construction-related activities would be limited to the Western and Eastern Transition Stations, the three above-ground ventilation structures, a marshalling yard, and an electrical component assembly area located at the Eastern Transition Station. During construction residents within an estimated one-half mile of these sites would be subject to the same types of direct and indirect effects as described in Section 3.9.6.1for the proposed Project. With implementation of Mitigation Measures L-1a through L-1c (please refer to Section 3.9.6.1) and the pre-construction and construction phase mitigation measures provided in Sections 3.3 (Air Quality), 3.10 (Noise), and 3.13 (Traffic and Transportation), construction-related impacts to residential land uses would be adverse but mitigable to a level of less than significant (Class II).

Construction of Alternative 5 would temporarily disrupt, displace, or preclude existing non-residential land uses (Impact L-2). The majority of land uses adjacent to MPs 21.9 to 25.8 of Segment 8A include open space/undeveloped areas, parks and recreational facilities, and single family residential homes. However, east of approximately MP 25.3 there are commercial and services uses adjacent to both sides of the ROW. To accommodate the Eastern Transition Station, the existing ROW north of an existing flood control channel would need to be expanded by 100 feet, for a total ROW width of 250 feet. The expanded ROW and construction of the Eastern Transition Station would require the removal of a commercial car wash, a retail business, and a portion of a parking lot. Although it is assumed that SCE would make all efforts to purchase the property needed for construction of the Eastern Transition Station, it is feasible that the owner (or owners) of both the property and the affected businesses would not agree to, or be willing to negotiate, SCE's proposed acquisition agreement (or agreements). Under this scenario, implementation of Alternative 5 would likely require that the CPUC exercise eminent domain. Eminent domain allows for the take of private property by a government agency either for its own purpose, or for delegation to a third party for the purpose of a public use, need or benefit. The take of the property and businesses affected by Alternative 5 through eminent domain would be considered an unavoidable and significant impact (Class I).

Other non-residential uses affected by construction Alternative 5 would be the same as described in Section 3.9.6.1 for the proposed Project. With implementation of implementation of Mitigation Measures L-1a through L-1c and L-2a and L-2b, in conjunction with the pre-construction and construction-phase mitigation measures provided in Sections 3.3 (Air Quality), 3.10 (Noise), and 3.13 (Traffic and Transportation), construction-related impacts to non-residential uses would be reduced to a level of less than significant.

As discussed in Section 3.9.6.1, operation and maintenance of the Project would have the potential to create long-term disruptions to existing and planned residential land uses (Impact L-3). Operational and maintenance activities associated with Alternative 5 would primarily occur underground, with access to the transmission line occurring at the two transition stations. The Western Transition Station would be located within the boundaries of Pine Valley Estates, and approximately three-tenths of a mile west of the boundary of the Pine Valley Estates Development. The Pine Valley Estates Development is a residential project that is currently under construction. However, the station would be predominantly located within the boundaries of existing ROW in an area that is undeveloped and is expected to remain largely as undeveloped; thus, its operation and maintenance would not be expected to substantially disrupt or displace existing or planned residential uses. The three above-ground ventilation structures would be placed within existing ROW; consequently, their operation and maintenance would not disrupt or displace existing or planned residential uses. Although the Eastern Transition Station would be located near existing residential homes, the site is currently fully developed with non-residential land uses; therefore, its operation and maintenance would not be anticipated to substantially disrupt or displace any existing or planned residential land uses. Restrictions or disruptions of existing and planned residential land uses due to the operation and maintenance of Alternative 5 would be similar to the proposed Project; as outlined in Section 3.9.6.1, these impacts would be adverse but less than significant (Class III).

Operation and maintenance of Alternative 5 would potentially cause long-term disruption of existing and planned non-residential land uses (Impact L-4). As addressed under Impact L-2, above, operation and maintenance of Alternative 5 would require the permanent removal of two existing commercial and services uses, including a car wash and retail store. Additionally, a portion of a parking area for commercial and services uses would be removed. The permanent removal of these uses would be

considered a significant and unavoidable impact (Class I) if the properties are taken through the CPUC's exercise of eminent domain. Other non-residential uses affected by construction Alternative 5 would be the same as described in Section 3.9.6.1 for the proposed Project. Implementation of Mitigation Measure L-4, as outlined in Section 3.9.6.1, would reduce the long-term operational and maintenance impacts on non-residential uses to a level of less than significant.

Conflict with any applicable federal, State, or local land use plans, goals, or policies (Criterion LU2)

As discussed in Section 3.9.6.1, the Project would potentially conflict with relevant federal, State, or local land use plans, goals, or policies (Impact L-5). Under Alternative 5, the same land use plans, goals and policies which are outlined in Section 3.9.6.1 and Table 3.9-20 for the proposed Project would apply. As required by the CPUC's General Order No. 131-D, Section XIV B, the CPUC has consulted with all affected agencies regarding land use matters, and implementation of Mitigation Measures L-2b and L-4 would require SCE to further coordinate with applicable agencies to ensure that no conflicts with their respective land use plans and policies occur. Therefore, impacts related to potential conflicts with applicable land use plans, goals, or policies would be mitigated to a level of less than significant (Class II).

3.9.9.2 Cumulative Effects Analysis

Geographic Extent

Alternative 5 would be identical to the proposed Project (Alternative 2) in the North and Central Regions of the Land Use Study Area, and as such would utilize the same geographic extent for cumulative effects in these regions. In the South Region, Alternative 5 would also be identical to the proposed Project except that the transmission line would be undergrounded between MPs 21.9 to 25.8 along Segment 8A. Therefore, the geographic extent for cumulative effects in the South Region would also be the same as for the proposed Project. Please refer to Section 3.9.6.2 for the cumulative effects geographic extent for both the proposed Project and Alternative 5.

Existing Cumulative Conditions

The existing cumulative conditions for Alternative 5 would be identical to the conditions described for the proposed Project; please refer to Section 3.9.6.2 for a discussion of these conditions.

Reasonably Foreseeable Future Projects and Changes

Please refer to Section 3.9.6.2 for a discussion of future projects in the vicinity of Alternative 5, which are identical to the proposed Project.

Cumulative Impact Analysis

Under Alternative 5, the cumulative effects associated with Impacts L-1, L-3 and L-5 would be identical to the proposed Project, while the effects of Impacts L-2 and L-4 would be greater. The following is a summary of the Alternative 5 cumulative impacts that describes the similarities and differences between it and the proposed Project.

No projects would be constructed at the same time as Alternative 5 that would affect the residential (Impact L-1) land uses within 1,000 feet of construction-related activities. Consequently, Impact L-1

(Construction of the Project would temporarily disrupt, displace or preclude existing residential land uses) would not contribute to a cumulatively considerable effect (No Impact).

In the North and Central Regions, Alternative 5 is identical to the proposed Project. Consequently, this alternative would create an incremental effect on the long-term disruption of existing and planned residential land uses that is cumulatively considerable (Impact L-3). Other energy projects such as the PdV Wind Energy Project and the Antelope Transmission Project Segments 1 through 3 would contribute to a cumulative effect under Alternative 5. However, as discussed in Section 3.9.6.1, SCE would avoid a conflict with existing or planned residential uses through the purchase or lease of any new and expanded substation sites and ROWs in full agreement with existing property owners. Consequently, this alternative's incremental contribution to the long-term disruption of existing and planned residential uses would be less than significant (Class III).

Under Alternative 5, short- and long-term impacts to non-residential land uses (Impacts L-2 and L-4) would be identical to Alternative 2 in the North and Central Regions. The incremental effects of Alternative 5 would combine with the effects of the PdV Wind Energy Project and the Alta Wind Energy Center to impact non-residential land uses in Kern County. However, in the South Region, along Segment 8A, construction of Alternative 5 could require the take of commercial and services uses via eminent domain. If eminent domain is required for construction, operation and maintenance of this alternative, it would result in a significant and unavoidable cumulative impact to non-residential uses (Impacts L-2 and L-4) (Class I). No mitigation measures have been identified that would reduce Alternative 5's incremental contribution to these cumulative impacts.

Alternative 5 traverses the same jurisdictions as the proposed Project in all three Regions, and, as such, would be subject to the same land use plans, goals and policies that are applicable to the proposed Project (Impact L-5). Alternative 5 would be consistent with USDA Forest Service polices and local land use plans and policies as they related to transmission lines and associated facilities; thus, it would not create a conflict that would be cumulatively considerable (Class III).

Mitigation to Reduce the Project's Contribution to Significant Cumulative Effects

As described for the proposed Project in Section 3.9.6.2, Alternative 5 would not contribute to a cumulative significant effect related to the temporary disruption, displacement or preclusions of existing residential land uses (Impact L-1) Impact L-3 (Operation and maintenance of the Project would cause long-term disruption of existing and planned residential land uses) would create an incremental effect that, in combination with other energy projects, would result in a less than significant cumulative impact (Class III). As addressed in Section 3.9.9.1, the construction, operation and maintenance of Alternative 5 would not result in any impacts related to conflicts with relevant federal, State or local land use plans, goals or policies (Impact L-5); consequently it would not contribute to any significant cumulative impacts. Based upon the above, no mitigation measures are required or recommended to reduce the incremental effects of Impacts L-1, L-3 and L-5.

Impacts L-2 (Construction of the Project would temporarily disrupt, displace or preclude existing non-residential land uses) and L-4 (Operation and maintenance of the Project would cause long-term disruption of existing and planned non-residential land uses) would potentially combine with the effects of other projects to create a significant and unavoidable impact (Class I). No mitigation measures have been identified that would reduce Alternative 5's incremental contribution to these cumulative impacts.

3.9.10 Alternative 6: Maximum Helicopter Construction in the ANF Alternative

3.9.10.1 Direct and Indirect Effects Analysis

Preclude a permitted land use, or create a disturbance that would diminish the function of a particular land use (Criterion LU1)

As addressed in Section 3.9.2.6, two of the helicopter staging areas (Sites #1 and 2) are within one-half mile of existing residential land uses. Several rural residential homes within a private in-holding of the ANF are located northwest of Site #1, which is adjacent to MP 3.0 of Segment 6; the closest of these homes to the western boundary of the staging area is approximately 0.3 mile away. Several rural residential homes are also located west and southeast of Site #2; these homes are also located within a private in-holding of the ANF. The closest homes are located an estimated 800 to 950 feet from the western boundary of the site; rural residential homes located southeast of the site are an estimated 0.3 mile away or more. As discussed in Section 3.9.6.1, Project construction would temporarily disrupt existing residential land uses (Impact L-1), and residents located within an estimated one-half mile of these two sites would be subject to the same types of direct and indirect effects as described in Section 3.9.6.1for the proposed Project. These residents, and other residents located within two and one-half miles of Sites 1 and 2, would also be subjected to increased noise levels and air quality emissions for the duration of Project construction. Please refer to Sections 3.10 (Noise) and 3.3 (Air Quality) for an assessment of noise and air quality effects of helicopter construction within the ANF. However, construction-related disruptions to residential land uses would be temporary in nature, and, with implementation of Mitigation Measures L-1a through L-1c, impacts would be mitigated to a level of less than significant (Class II). Outside of the ANF, all other temporary residential land use impacts associated with Alternative 6 would be the same as described for the proposed Project, as outlined in Section 3.9.6.1.

As outlined in Table 3.9-14, four of the helicopter staging areas (Sites #1, 2, 7 and 10) either include, or are within one-half mile of, non-residential land uses including agriculture (Sites #1 and 2) and existing and/or abandoned public and special use facilities (Sites #7 and 10). As with the disruptions to residential land uses (Impact L-1), construction of Alternative 6 would temporarily disrupt non-residential land uses (Impact L-2). Agricultural uses associated with Sites #1 and 2 predominantly include horse ranching and livestock. The public and special use facilities associated with Site #7 include an existing helipad and unoccupied structures and facilities associated with a former U.S. Air Force missile site; the public and special use facilities associated with Site #10 include an abandoned USDA Forest Service overlook. As with the proposed Project, construction of Alternative 6 could temporarily disrupt or diminish the use of these existing non-residential land uses by blocking or partially blocking access. Additionally, site-specific operations could be impaired or prohibited due to the need to clear areas for construction equipment and materials, including pulling and tensioning sites. Following the completion of construction, site-specific uses may be compromised if affected areas are not restored to their pre-construction condition. The non-residential land uses associated with, and/or within one-half mile of the helicopter staging areas, as well as other non-residential land uses located within two and one-half miles of the staging areas (for tower construction), would also be subjected to increased noise levels and air quality emissions for the duration of Project construction (please refer to Sections 3.10 [Noise] and 3.3 [Air Quality] for an assessment of noise and air quality effects of helicopter construction). Although these construction-related disruptions would be adverse, they would be temporary in nature, and, with implementation of Mitigation Measure

L-2a in conjunction with Mitigation Measures L-1a through L-1c, impacts would be would be mitigated to a level of less than significant (Class II). Although the use of Site #7 would likely require the demolition of at least one structure, all structures removed from this helicopter staging area are currently abandoned; consequently, no temporary or permanent impacts associated with their displacement would be anticipated to occur. Please refer to Section 3.15 (Wilderness and Recreation) for an assessment of potential impacts associated with recreational and wilderness uses within the ANF. Outside of the ANF, all other temporary non-residential land use impacts associated with Alternative 6 would be the same as described for the proposed Project, as discussed in Section 3.9.6.1.

As noted above, one helicopter staging area (Site #7) includes an existing Los Angeles County Sherriff Department's helipad. Additionally, implementation of Alternative 6 would involve thousands of helicopter overflights, landings and takeoffs, both within the helicopter staging areas and along the ROWs of Segments 6 and 11 for construction of the 119 tower locations (please refer to Section 2.6.2, Alternative 6 Construction). Construction-related activities associated with Alternative 6 could conflict with the Los Angeles County Sherriff Department's helicopter flight activities, including both routine operations and emergency response efforts. Additionally, FAA Advisory Circular (AC 91-36 C), prohibits the landing of helicopters within the boundaries of ANF lands, and "Visual Flight Rules (VFR) Flight Near Noise Sensitive Areas," requires that all aircraft maintain a minimum altitude of 2,000 feet above the surface of lands designated as Wilderness Area, with the land surface considered to be "the highest terrain within 2,000 feet laterally of the route of flight, or the uppermost rim of a canyon or valley." Temporary conflicts with the helicopter activities of the Los Angeles County Sherriff Department and the FAA's AC 91-36 C would be adverse. However, with implementation of Mitigation Measure L-2b, an exemption for the FAA's AC 91-36 C may be feasible, and, with additional consultation with the Los Angeles County Sherriff Department, mechanisms and protocols to avoid potential conflicts with its helicopter operations would be expected to be identified and agreed upon. Impacts would therefore be anticipated to be mitigable to a level of less than significant (Class II).

Operations and maintenance of Alternative 6 would involve periodic inspections, approximately once per year, via helicopter and/or truck. In comparison to the proposed Project, Alternative 6 would likely result in a greater number of helicopter inspections due to the number of towers that would not be accessible by truck. However, the long-term operation and maintenance of Alternative 6 would not differ substantially from either existing conditions or the proposed Project, as addressed in Section 3.9.6.1. Therefore, Alternative 6's preclusion of, or incompatibility with, current and future residential land uses (Impact L-3) would be considered adverse but less than significant (Class III). Outside of the ANF, all other long-term residential land use impacts associated with Alternative 6 would be the same as described for the proposed Project, as discussed in Section 3.9.6.1.

Within the ANF, Alternative 6 would reduce the miles of new and/or upgraded roads by approximately 14 miles in comparison to the proposed Project. As such, construction of Segment 6 would result in approximately five acres of permanent disturbance (plus or minus a 20 percent range of four to six acres), and construction of Segment 11 would result in approximately eight acres of permanent disturbance (plus or minus a 20 percent range of six to ten acres). Within the ANF, Alternative 6's reduction in permanent land disturbances, in comparison to the proposed Project, would reduce potential long-term disruptions with existing and planned non-residential land uses (Impact L-4). However, conflicts between the use of helicopters for operations and maintenance and the Los Angeles County Sherriff Department's routine and emergency helicopter operations within the ANF could occur. Additionally, operations and maintenance of Alternative 6 may periodically conflict with, or otherwise impede, other operations within the ANF,

such as ranger stations, fire stations, and private and public communication and utility facilities. Although the adversity of these conflicts would vary on a case-by case basis, implementation of Mitigation Measure L-2a would be anticipated to reduce the long-term impacts associated with non-residential land uses to a level of less than significant (Class II). Outside of the ANF, all other temporary non-residential land use impacts associated with Alternative 6 would be the same as described for the proposed Project, as discussed in Section 3.9.6.1.

Conflict with any applicable federal, State, or local land use plans, goals, or policies (Criterion LU2)

Under Alternative 6, the same land use plans, goals and policies which are outlined in Section 3.9.6.1 and Table 3.9-20 for the proposed Project would apply. As required by the CPUC's General Order No. 131-D, Section XIV B, the CPUC has consulted with all affected agencies regarding land use matters, and implementation of Mitigation Measures L-2b and L-4 would require SCE to further coordinate with applicable agencies to ensure that no conflicts with their respective land use plans and policies occur. Similarly, implementation of Mitigation Measures L-2b and L-4 would be anticipated to minimize or avoid potential conflicts with the Los Angeles County Sherriff Department's routine and emergency response helicopter provisions and policies, as well as with the FAA's AC 91-36 C. Therefore, impacts related to potential conflicts with applicable land use plans, goals, or policies would be mitigated to a level of less than significant (Class II).

3.9.10.2 Cumulative Effects Analysis

Geographic Extent

Implementation of Alternative 6 would be identical to Alternative 2 (the proposed Project), except that approximately 119 towers within the ANF would be constructed by helicopter, which would require the use of ten temporary helicopter staging areas. Seven of the ten helicopter staging areas are located within the established Land Use Study Area. The remaining three staging areas (Sites #3, 4 and 7) are located an estimated and 0.85 mile to 1.8 miles from the centerline of the Project's ROW, which fall outside to the defined the Land Use Study Area (which is within one-half mile of the Project's ROW and its associated new and expanded substations). Site #3 is located approximately 0.85 mile from the centerline of Segment 6 and 1.6 miles from the centerline of Segment 11, Site #7 is located an estimated 1.8 miles from the centerline of Segment 6, and Site #4 is located approximately 1.6 miles west of the centerline of Segment 11. As addressed in Section 3.9.6.2 (Cumulative Effects Analysis for the proposed Project), within the ANF no specific projects have been identified that would contribute to a cumulative impact on residential or non-residential land uses. As such, the geographic extent for cumulative effects analysis of Alternative 6 is considered to be identical to Alternative 2 (please refer to Section 3.9.6.2).

Existing Cumulative Conditions

The existing cumulative conditions for Alternative 6 would be identical to Alternative 2, as described in Section 3.9.6.2.

Reasonably Foreseeable Future Projects and Changes

Reasonably foreseeable future projects and changes for Alternative 6 would be identical to Alternative 2, as described in Section 3.9.6.2.

Cumulative Impact Analysis

Impacts associated with Alternative 6 would be similar to the proposed Project (Alternative 2). As such, the description in Section 3.9.6.2 of the cumulative impacts from construction, operation and maintenance of Alternative 2 would apply to Alternative 6. The following is a summary of the Alternative 6 cumulative impacts.

No projects would be constructed at the same time as Alternative 6 that would affect the residential (Impact L-1) or non-residential (Impact L-2) land uses within 1,000 feet of construction-related activities. Consequently, Impact L-1 (Construction of the Project would temporarily disrupt, displace or preclude existing residential land uses) and Impact L-2 (Construction of the Project would temporarily disrupt, displace or preclude existing non-residential land uses) from Alternative 6 would not contribute to a cumulatively considerable effect (No Impact).

As the Alternative 6 route is identical to Alternative 2, Alternative 6 would create an incremental effect on the long-term disruption of existing and planned residential land uses that is cumulatively considerable (Impact L-3). The same energy projects that would affect land uses along the Alternative 2 route (PdV Wind Energy Project and Antelope Transmission Project Segments 1-3) would also contribute to a cumulative effect under Alternative 6. As discussed in Section 3.9.6.1, SCE would purchase or lease any new and expanded substation sites and ROWs in full agreement with existing property owners. Consequently, Alternative 6's incremental contribution to the cumulative impact would be less than significant (Class III).

The Alternative 6 route would traverse the same jurisdictions as Alternative 2, and would similarly affect non-residential land uses along the route (Impact L-4). As described for Alternative 2, the PdV Wind Energy Project and the Alta Wind Energy Center may conflict with non-residential land uses in Kern County. While the impacts of these projects in combination with Alternative 6 would result in a potentially significant cumulative effect (Class II), Mitigation Measure L-4 would reduce the incremental effect of the alternative to less than significant (Class II).

Alternative 6 traverses the same jurisdictions as Alternative 2, and as such, would be subject to the land use plans, goals, and policies that are applicable to Alternative 2 (Impact L-5). Alternative 6 would be consistent with USDA Forest Service policies and local land use plans and policies as they relate to transmission lines, and would be authorized by the USDA Forest Service through its permitting and Forest Plan amendment processes prior to construction. The SCE would also be required to implement Mitigation Measures L-2b and L-4 to avoid other land use-related regulatory or policy conflicts that would be cumulatively considerable (Class III).

Mitigation to Reduce the Project's Contribution to Significant Cumulative Effects

As discussed in Section 3.9.6.2, no mitigation measures are recommended to reduce the incremental effects of Impacts L-1, L-2, L-3, and L-5. Impact L-4 (Operation and maintenance of the Project would cause long-term disruption of existing and planned non-residential land uses) would contribute to an incremental effect from Alternative 6 that, in combination with other energy projects, would create a potentially significant cumulative impact on non-residential land uses (Class II). However, Mitigation Measure L-4 would reduce this cumulative impact to a level of less than significant.

3.9.11 Alternative 7: 66-kV Subtransmission Alternative

3.9.11.1 Direct and Indirect Effects Analysis

Preclude a permitted land use, or create a disturbance that would diminish the function of a particular land use (Criterion LU1)

As addressed in Section 3.9.6.1, construction of the Project would result in short-term disruptions, displacements or preclusions of existing residential and non-residential land uses (Impacts L-1 and L-2). Along the Duck Farm 66-kV Underground Re-Route residential homes are located less than 1,000 feet from the proposed underground ROW. Along the Whittier Narrows 66-kV Underground Re-Route residential land uses fall within 1,000 feet of the ROW along Farmer Avenue (located northwest of Durfee Avenue), and within one-half mile of the ROW within a neighborhood that is bound by Lexington Gallitan Road, Farmer Avenue, Fawcett Avenue, and Andrews Street; this neighborhood is also located northwest of Durfee Avenue. Existing residential land uses within 400 to 1,000 feet of the Whittier Narrows 66-kV Overhead Re-Route are located along Hazel Avenue and Darlington Street, which are north-northwest of Segment 7 MP 14.3 and Segment 8 MP 2.2; existing residential land uses are also located within one-quarter to one-half mile of the ROW in a neighborhood flanked by Highway 19 to the west, the San Gabriel River Parkway to the east and Kruse Road to the north. This area is located south-southwest of Segment 8A between MP 3 and MP 4. Existing non-residential land uses associated with the Whittier Narrows 66-kV Underground Re-Route and Whittier Narrows 66-kV Overhead Re-Route are outlined in Section 3.9.2.7; Table 3.9-12 summarizes the non-residential land uses of the Duck Farm 66-kV Underground Re-Route.

Although construction of the Duck Farm 66-kV Underground Re-Route would result in additional temporary land disturbances, this subtransmission line would remain within the same existing utility ROW of the proposed Project. Additionally, the duration of construction-related activities along this re-route would not be anticipated to be appreciably different from the proposed Project. Consequently, construction-related impacts of this underground re-route would be the same as for the proposed Project (please refer to Section 3.9.6.1). Construction of the Whittier Narrows 66-kV Underground Re-Route would also result in additional temporary land disturbances, and, in comparison to the proposed Project, would result in new construction-related impacts to existing land uses along and adjacent to Peck and Durfee Roads. However, with implementation of Mitigation Measures L-1a, L-1b, L-1c, L-2a and L-2b, these temporary impacts to residential and non-residential land uses would be considered less than significant (Class II). In comparison to the proposed Project, construction of the Whittier Narrows 66-kV Overhead Re-Route would also result in new temporary impacts to those land uses located along, and adjacent to, San Gabriel Boulevard/Durfee Avenue, Siphon Road and the San Gabriel River crossing. This re-route would also require approximately 1,200 linear feet of new ROW for the San Gabriel River crossing. However, assuming that SCE is able to secure the land needed for the new ROW, construction related disturbances along this re-route would be anticipated to be the same as for the proposed Project, and, with implementation of Mitigation Measures L-1a, L-1b, L-1c, L-2a and L-2b, short-term impacts to residential and non-residential land uses would be considered less than significant (Class II). All other construction-related impacts to residential and non-residential land uses (Impacts L-1 and L-2) in the North, Central and South Regions would be the same as for the proposed Project.

Operation and maintenance of the Duck Farm 66-kV Underground Re-Route would occur within the same ROW as the proposed Project, and would not be anticipated to require additional activities that could increase long-term preclusions of, disturbances to, or incompatibilities with existing and planned

residential land uses (Impact L-3). Similarly, operation and maintenance of the Whittier Narrows 66-kV Underground Re-Route and Whittier Narrows 66-kV Overhead Re-Route would not be anticipated to appreciably add to any long-term preclusions of, disturbances to, or incompatibilities with residential land uses (Impact L-3). Impacts would be considered adverse but not significant (Class III). Additionally, it is noted that the partial removal (e.g., undergrounding) of the existing Hondo-Amador-Jose-Mesa 66-kV and Jose-Mesa 66-kV subtransmission lines would likely be considered a beneficial impact to those residents that are adjacent to their respective ROWs. All other long-term impacts to existing and planned residential land uses (Impact L-3) in the North, Central and South Regions would be the same as for the proposed Project, as addressed in Section 3.9.6.1.

As addressed in Section 3.9.2.7 and Table 3.9-12, the ROWs associated with Alternative 7 would directly traverse, or be in close proximity to, several non-residential land uses. However, operation and maintenance of this alternative would be identical to the proposed Project. Consequently, Alternative 7 would not be expected to either substantially increase or add to long-term effects on existing and planned non-residential land uses in comparison to the proposed Project (Impact L-4). With implementation of Mitigation Measure L-4, impacts would be considered less than significant (Class II). As with the discussion for the long-term effects on residential land uses, above, the partial undergrounding of the existing Hondo-Amador-Jose-Mesa 66-kV and Jose-Mesa 66-kV subtransmission lines would likely be considered a net benefit to the non-residential land uses that are adjacent to their respective ROWs. All other long-term impacts to existing and planned residential land uses (Impact L-3) in the North, Central and South Regions would be the same as for the proposed Project (please refer to Section 3.9.6.1).

Conflict with any applicable federal, State, or local land use plans, goals, or policies (Criterion LU2)

As discussed in Section 3.9.6.1, the proposed Project would potentially conflict with relevant federal, State, or local land use plans, goals, or policies (Impact L-5). Under Alternative 7, the same land use plans, goals and policies that are outlined for the proposed Project and summarized in Table 3.9-20 would apply. As required by the CPUC's General Order No. 131-D, Section XIV B, the CPUC has consulted with all affected agencies regarding land use matters, and implementation of Mitigation Measures L-2b and L-4 would require SCE to further coordinate with applicable agencies to ensure that no conflicts with their respective land use plans and policies occur. Therefore, impacts related to potential conflicts with applicable land use plans, goals, or policies would be mitigated to a level of less than significant (Class II).

3.9.11.2 Cumulative Effects Analysis

Geographic Extent

Implementation of Alternative 7 would be identical to the proposed Project, except that portions of the existing Hondo-Amador-Jose-Mesa 66-kV and Jose-Mesa 66-kV subtransmission lines would be placed underground (with a 3,300 linear foot re-routing of a segment of the Jose-Mesa 66-kV subtransmission line to the northeast), and portions of the existing Mesa-Narrows 66-kV and Walnut-Hillgen-Industry-Mesa-Reno 66-kV subtransmission lines would be re-routed to the southwest. However, none of the attributes associated with Alternative 7 would deviate more than an estimated 2,250 linear feet from the proposed Project's ROWs (Segments 7 and 8A). As such, the geographic extent for the cumulative effects analysis of Alternative 7 is considered to be identical to the proposed Project (please refer to Section 3.9.6.2).

Existing Cumulative Conditions

The existing cumulative conditions for Alternative 7 would be identical to the proposed Project, as described in Section 3.9.6.2.

Reasonably Foreseeable Future Projects and Changes

Reasonably foreseeable future projects and changes for Alternative 7 would be identical to the proposed Project, as described in Section 3.9.6.2.

Cumulative Impact Analysis

No projects would be constructed at the same time as Alternative 7 that would affect the residential (Impact L-1) or non-residential (Impact L-2) land uses within 1,000 feet of construction-related activities. Consequently, Impact L-1 (Construction of the Project would temporarily disrupt, displace or preclude existing residential land uses) and Impact L-2 (Construction of the Project would temporarily disrupt, displace or preclude existing non-residential land uses) from Alternative 7 would not contribute to a cumulatively considerable effect (No Impact).

As the majority of the Alternative 7 route is identical to the proposed Project (Alternative 2), this alternative would create an incremental effect on the long-term disruption of existing and planned residential land uses that is cumulatively considerable (Impact L-3). The same energy projects that would affect land uses along the Alternative 2 route (PdV Wind Energy Project and Antelope Transmission Project Segments 1-3) would also contribute to a cumulative effect under Alternative 7. As discussed in Section 3.9.6.1, SCE would purchase or lease any new and expanded substation sites and ROWs in full agreement with existing property owners. Consequently, the alternative's incremental contribution to the cumulative impact would be less than significant (Class III).

Alternative 7 would traverse the same jurisdictions as the proposed Project and would similarly affect non-residential land uses along the route (Impact L-4). As described for Alternative 2 (the proposed Project), the PdV Wind Energy Project and the Alta Wind Energy Center may conflict with non-residential land uses in Kern County. While the impacts of these projects in combination with Alternative 7 would result in a potentially significant cumulative effect (Class II), Mitigation Measure L-4 would reduce the incremental effect of the alternative to less than significant (Class II).

Alternative 7 traverses the same jurisdictions as the proposed Project, and as such, would be subject to the same land use plans, goals, and policies that are applicable to the proposed Project (Impact L-5). Alternative 7 would be consistent with USDA Forest Service policies and local land use plans and policies as they relate to transmission lines, and would be authorized by the USDA Forest Service through its permitting and Forest Plan amendment processes prior to construction. The SCE would also be required to implement Mitigation Measures L-2b and L-4 to avoid conflicts that would be cumulatively considerable (Class III).

Mitigation to Reduce the Project's Contribution to Significant Cumulative Effects

As discussed in Section 3.9.6.2, no mitigation measures are recommended to reduce the incremental effects of Impacts L-1, L-2, L-3, and L-5. Impact L-4 (Operation and maintenance of the Project would cause long-term disruption of existing and planned non-residential land uses) would contribute to an incremental effect from Alternative 7 that, in combination with other energy projects, would create a potentially significant cumulative impact on non-residential land uses (Class II). However, Mitigation Measure L-4 would reduce this cumulative impact to a level of less than significant.

3.9.12 Impact Significance Summary

Table 3.9-22 summarizes the direct and indirect environmental impacts of the proposed Project (Alternative 2) and the other alternatives on Land Use. The direct and indirect effects of the Project and alternatives have been fully described in Sections 3.9.6 through 3.9.11 above. Alternative 1 (No Project/No Action) impacts are fully described in Section 3.9.5; however, since no potential future project information is available an impact significance level for Alternative 1 is not included in the table below.

Table 3.9-22. Summary of Impacts and Mitigation Measures – Land Use

Impact	Impact Significance								Mitigation Measures
	Alt. 1+	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	NFS Lands*	
L-1: Construction of the Project would temporarily disrupt, displace, or preclude existing residential land uses.	N/A	Class II	Class II	Class II	Class II	Class II	Class II	Yes	L-1a: Construction liaison – Property owners. L-1b: Advance notification of construction - Property owners. L-1c: Quarterly construction updates - Property owners.
L-2: Construction of the Project would temporarily disrupt, displace, or preclude existing non-residential land uses.	N/A	Class II	Class II	Class I	Class I	Class II	Class II	Yes	L-2a: Construction plan provisions – Non-residential property. L-2b: Aircraft flight path and safety provisions and consultations.
L-3: Operation and maintenance of the Project would cause long-term disruption of existing and planned residential land uses.	N/A	Class III	Class III	Class III	Class III	Class III	Class III	Yes	None recommended.
L-4: Operation and maintenance of the Project would cause long-term disruption of existing and planned non-residential land uses.	N/A	Class II	Class II	Class I	Class I	Class II	Class II	Yes	L-4: Consult with federal, State and local agencies.
L-5: Construction, operation or maintenance of the Project would conflict with relevant federal, State, or local land use plans, goals, or policies.	N/A	Class II	Class II	Class I	Class II	Class II	Class II	Yes	L-2b: (see Impact L-2) L-4: (see Impact L-4)

N/A = Not Available.

* Indicates whether this impact is applicable to the portion of the Project on National Forest System lands. However, no Class I impact would occur under Alternatives 2 through 7 on National Forest System lands.

+ Potential projects would likely traverse the same geographic regions as either the proposed Project or Alternatives 3 through 7, and subsequently introduce similar types of impacts

Table 3.9-23. Applicable Policies, Goals, and Objectives

Agency	Plan/Policy	Text
USDA Forest Service, Pacific Southwest Region	Land Management Plan: Angeles National Forest (2005)	
	National Strategic Plan Goal 4 - Help meet energy resource needs	Consider opportunities for energy development and the supporting infrastructure on forests and grasslands to help meet the nation's energy needs: - Work with other agencies to identify and designate corridors for energy facilities, improve permit application processing efficiency, and establish appropriate land tenure (including transferability clauses) in easements and other authorizations to provide for long-term project viability.
	Forest Goal 4.1b - Support use of renewable resources	Administer Renewable Energy Resource developments while protecting ecosystem health.
	Forest Goal 7.1 - Minimize land area needed to support growing public needs	Retain natural areas as a core for a regional network while focusing the built environment into the minimum land area needed to support growing public needs.
	Developed Areas Interface (DAI) Land Use Zone	(Summarized in Table 3.9-4)
	Back Country (BC) Land Use Zone	(Summarized in Table 3.9-4)
	Back Country Motorized Use Restricted (BCMUR) Land Use Zone	(Summarized in Table 3.9-4)
	Back Country Non-Motorized (BCNM) Land Use Zone	(Summarized in Table 3.9-4)
	Lands 2 - Non-Recreation Special Use Authorizations (SUAs)	Optimize utilization of encumbered NFS land and efficiently administer SUAs: - Work with SUA holders to better administer NFS land and reduce administrative cost. - Require SUAs to maximize opportunities to co-locate facilities and minimize encumbrance of NFS land.
Kern County	County of Kern General Plan (March 13, 2007)	
	Appendix B: Rural Community Development Guidelines and Requirements (Land Use) - Compatibility of industrial development within rural community	Heavy industrial use would not appear compatible with the intent and purpose of the rural community designation. Development Standards: 1. All industrial development should be reviewed pursuant to accepted community scale, architecture, and compatibility with surrounding uses. 2. Industrial light and glare shall comply with the established community light and glare standards. 3. Outside storage should be appropriately screened on all sides.
Los Angeles County	County of Los Angeles General Plan (January 1993)	
	General Goals and Policies, Policy 23 - Ensure compatible development in non-urban areas	Ensure that development in non-urban areas is compatible with rural lifestyles, does not necessitate the expansion of urban service systems, and does not cause significant negative environmental impacts or subject people and property to serious hazards.
	Land Use (Quality, Compatible Design) Policy 14 - Ensure project design is compatible with natural and manmade environment	Direct urban development and revitalization efforts to protect natural and man-made amenities and to avoid severe hazard areas, such as flood prone areas, active fault zones, steep hillsides, landslide areas and fire hazards.

Table 3.9-23. Applicable Policies, Goals, and Objectives		
Agency	Plan/Policy	Text
City of Chino Hills	City of Chino Hills General Plan, adopted September 1994	
	Parks, Recreation and Open Space, Policy 1-18: Require 100-ft. perimeter around developed areas adjacent to open space.	Continue to require 100 foot perimeter around developed areas adjacent to open space.
City of Chino	Eucalyptus Business Park Specific Plan (adopted December 18, 1990, revised October 2000)	
	Land Use Element, Objective 2d (Industrial) - Integrate SCE Easement	Integrate the SCE easement and San Antonio Creek Channel into the Eucalyptus Business Park Specific Plan area as an area amenity. (i) Provide for "wind row" style planting of tall vertical trees parallel to SCE easements to reduce the visual prominence of transmission towers. (iii) Provide trail connections along the SCE easements and San Antonio Creek Channel. (iv) Encourage crop production and horticultural activities within the SCE easement.
	Land Use Element 2d (Visual Image and Development Character) – Encourage undergrounding of utility lines	Create enriched, stimulating retail, office, industrial, and recreational environments, intermixed within a cohesive entity. (iii) Wherever feasible, utility lines shall be placed underground, including undergrounding of existing utility lines. Where it is not possible to underground utility lines, appropriate landscape buffers shall be provided.
City of Chino	East Chino Specific Plan (September 2002)	
	Land Use Policy 3 (Industrial) Use of setbacks and screenings in buffering residences from industrial uses	Light industrial areas shall be an appropriate buffer between residential uses and general industrial uses so long as adequate setbacks and screening are provided.
City of Ontario	City of Ontario General Plan (adopted September 15, 1992)	
	Community Development Element, Policy 3.2 - Require buffers between incompatible land uses	Require adequate buffering between potentially incompatible land uses, especially between residential development and industrial uses.
Puente Hills Landfill Native Habitat Preservation Authority	Resource Management Plan (June 2007)	
	Goal Use-2	Enforce protection of the varied resources and promote an enjoyable and safe environment for visitors.
California State Parks	Chino Hills State Park General Plan, February 1999	
	Natural Resources, Buffers	*Implicated Policy*: Land uses outside park boundaries can cause significant impacts on parklands. Possible impacts include exotic plant infestations, chemical pollution, predation and competition from domestic pets, wildfire, artificial light and noise, and loss of foraging or nesting habitat. Buffers, such as dedicated open space and agricultural lands, are low-intensive-use areas between the park's boundary and adjacent developments that help to separate conflicting land uses and protect natural habitats from destructive impacts. Goal: Establish, maintain, and protect buffers adjacent to Chino Hills State Park.
		Goal: Establish, maintain, and protect buffers adjacent to Chino Hills State Park.
		Implementing Guidelines: - The Department will work with adjacent landowners, neighbors, and local jurisdictions to provide for necessary buffers adjacent to park boundaries. - The Department will assist local jurisdictions in the development of plant palettes for proposed projects in the vicinity of the park.

Table 3.9-23. Applicable Policies, Goals, and Objectives		
Agency	Plan/Policy	Text
	Aesthetic Resources	*Implicated Policy*: Visitors to Chino Hills State Park enjoy many aesthetic qualities inherent to the park's natural conditions. Some of these include open space, sounds of nature, and scenic views. Impacts to aesthetic qualities are, at times, created by developments, activities, or land uses, within or outside the park, that are incompatible with these qualities.
		Goal: Protect scenic features from man-made intrusions and preserve the visitor's experience of the natural landscape by minimizing adverse impacts to aesthetic resources.
		Implementing Guidelines: - Unnecessary structures such as interior fences and signs will be removed. The Department will work with utility companies to remove electric lines that are no longer used and are not considered historic resources. - The Department will work to reduce the negative impacts of utility easements in the park. All utility companies will be encouraged to reduce the impacts by consolidating easements into fewer or smaller corridors, or by placing the equipment underground. The Department will work with utility companies to remove unnecessary utility roads and reduce road widths, and will discourage any new easements within the park unless mitigated to benefit park resources. - Ridgeline and knoll developments outside the park that adversely affect significant views will be discouraged. The Department will work with park neighbors and local government to review and plan adjacent developments in a manner that protects views. - Tranquility and the sounds associated with the park's natural resources will be preserved. Unnatural sounds that adversely affect park resources, values, or visitors' enjoyment will be prevented or minimized. - The Department will cooperate with park neighbors and local government agencies to minimize the intrusion of artificial light into the night scene, recognizing that darkness and the night sky play significant roles in the overall visitor experience. Artificial outdoor lighting within the park will be limited to basic safety requirements and shielded when and where possible.

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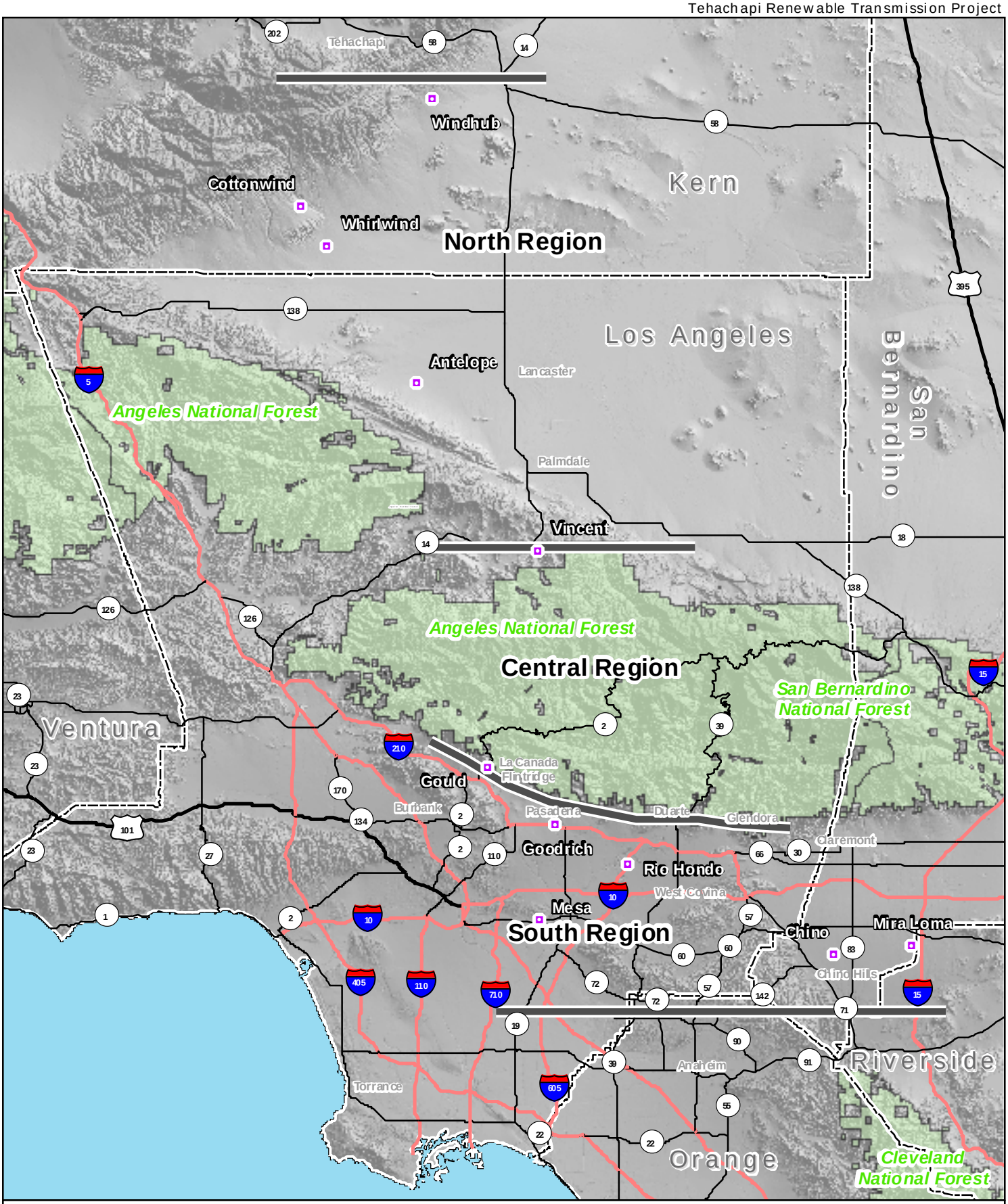

Aspen Environmental Group

SCE, 2007,
USDA Forest Service, 2007

Figure 3.9-1

Land Use Study Area

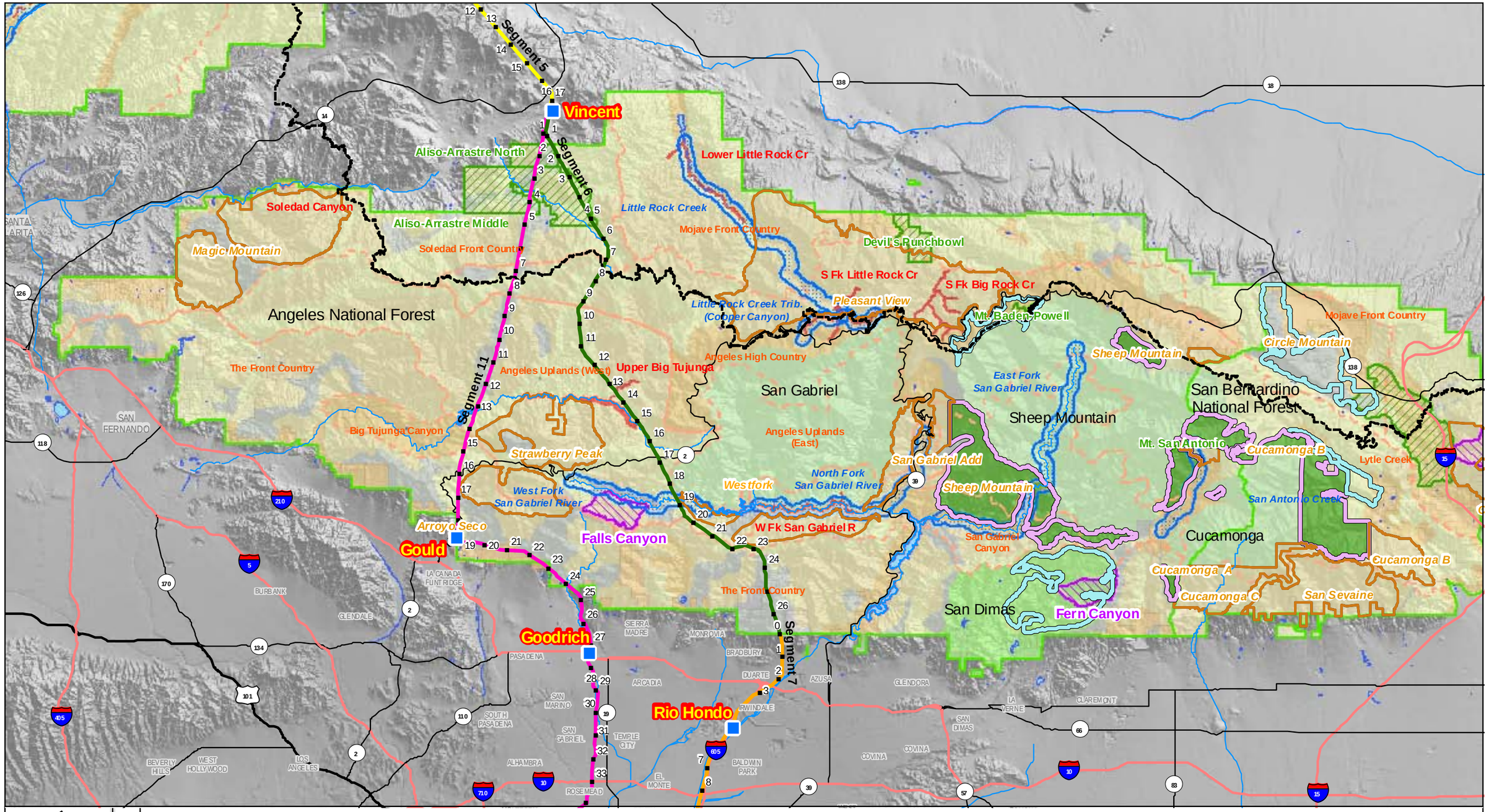

Figure 3.9-2

Angeles National Forest Land Use Zones, Places, and Roadless Areas

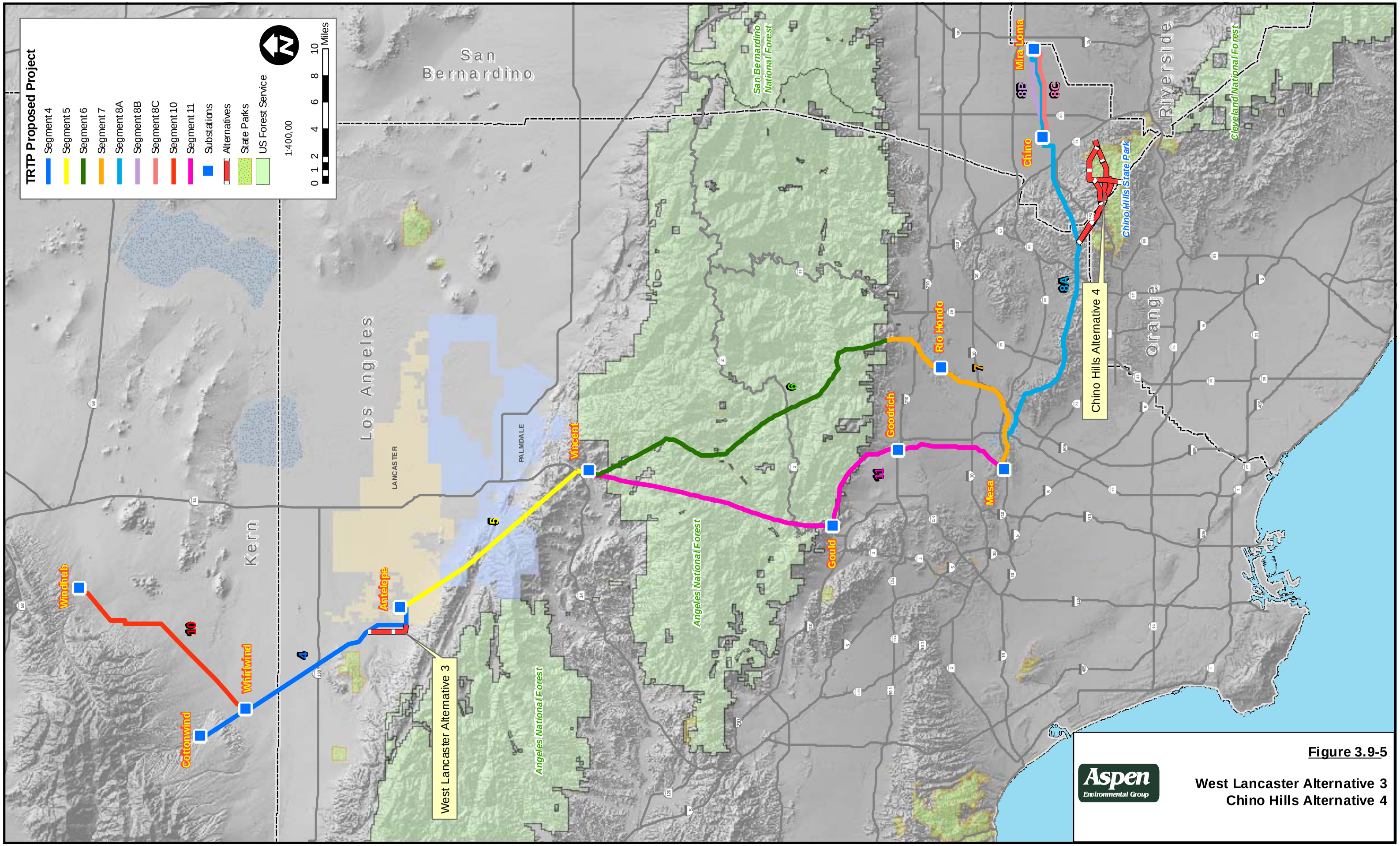

Figure 3.9-5

West Lancaster Alternative 3
Chino Hills Alternative 4