Attachment 11

Mile-by-Mile Description of the Talega–Escondido/Valley–Serrano 500 kV Interconnect Project

Description of the
Talega-Escondido/Valley-Serrano 500-kV Interconnect Project

The following discussion provides detailed information on the Talega-Escondido/Valley-Serrano 500 kV Transmission line. Attachment 1 and Attachment 3 provides summary information on each tower including information on milepost location, elevation, land ownership, tower type, etc. The discussion, coupled with Figure 3.1.1-4 and the Attachments provide site specific information that can be used in conjunction impact assessment information.

The Talega-Escondido/Valley-Serrano 500 kV Interconnect Project (TE/VS Project) begins on private land approximately 2.1 miles northeast of Interstate 15 and the juncture of Indian Truck Trail/Temescal Canyon Road. The line at this point consists of single lattice tower that connects the existing Southern California Edison's Valley/Serrano Line to the proposed 500kV line beginning at Mile Post (MP) 0. At this juncture are a 500 by 500 foot pull site (hereafter referred to as Pull site 1 or PS1) and a parallel transmission line that begins at Tower 11. The parallel line will be installed approximately 250 feet northwest of the main transmission line. The pull site area will be used to pull the transmission lines from Towers 9 and 20 to Towers 1 and 11 as well as additional work space to tie in to the existing SCE line.

The twin tower lines run southwest generally following a ridgeline consisting of non-native grasses with elements of coastal sage scrub species. Construction impacts associated with Towers 1 through 9 and 11 through 20 consist of a temporary construction footprint (100 ft. x 100 ft.) and temporary access roads for each lattice tower,. The parallel line terminates at the Lee Lake Substation at Mile Post 2.1.

At MP 1.6, a 450 by 750 construction work area (CWA8) would be established at T8. Another pull site (PS 9/20) would be established at MP 1.8 to accommodate a point of inflection to the south, to align the transmission line for connection to the Lake Substation at MP 2.0. This is immediately west of the westernmost edge of Corona Lake.

The Lake Substation encompasses an area of 17.3 acres with an additional 8.1 acres of additional construction work space on private land between I15 and Temescal Canyon Road, just east of the intersection with Indian Truck Trail. A detailed discussion of the Lake Substation can be found in Section 3.6.1.4.

A single line of transmission towers extends for the remainder of the TE/VS Project from Lake Substation to Case Springs Substation. T22, located at MP 2.1, is immediately north of the northbound lanes of I-15. The transmission line crosses over I-15 at an elevation of approximately 1,200 feet above mean-sea-level (AMSL) with a 119 foot tall ELD-type tower on both sides of I15. A 650 by 3300 foot pull site (PS 23) would be established to accommodate both a point of inflection to the southwest (T23) and an increase in elevation. Access roads to T23 and T24 would be established, both to accommodate construction of the towers and to provide access for PS 23.

At MP 2.7 (T25) the TE/VS Project would enter Cleveland National Forest (CNF). The line would climb in elevation to MP 2.8 (T26) and would descend into a small valley that includes rural residences, a water tank and orchards. Small individual access roads would be constructed to reach T27, T28 and T29 to the south. The TE/VS line would continue south climbing in elevation. Towers 30 through 42 (MP 3.7 to 6.3) would be constructed by helicopter and are located within the Cleveland Nation Forest with the exception of Towers 31 and 32 These two towers are located immediately east of the Cleveland National Forest boundary in private property. A 120,000 square foot pull site (PS 32) has been established at MP 4.2. South of T32 the line runs through thick stands of chaparral.

The TE/VS line re-enters the CNF at MP 4.5 and Towers 33 through 36 would continue south. At MP 5.3 (T36) the line turns more to the southeast. At MP 5.6 (T39) the line turns south again, continuing to climb in elevation. A 200 by 600 foot pull site would be established at MP 5.6 (PS39), with another pull site at MP 6.0 (PS41). These two pull sites will contain extensive access roads along existing dirt access roads that run along the ridge line. T43 would be constructed by conventional means with an extensive access road constructed off of East Horse Thief Trail. An alternative access road may also be constructed from the east along an existing dirt access road. The TE/VS line again deflects to the southeast with helicopter construction continuing from T44 to T51 (MP 8.6).

At MP 8.8 (T52) the TE/VS line reaches the apex of the climb from the Temescal Canyon Valley. Two towers, T52 and T53 would be conventionally constructed with access roads established off North Main Divide Truck Trail. A pull site has been established at MP 8.8 (PS52). This station spans Towers 52 and 53 and would be approximately 200 by 800 feet. The line continues southeast to T55 where a pull site (PS 55) measuring 250 by 200 feet would be established. The line turns east across CNF lands, crossing over North Main Divided Truck Trail twice. T54 to T59 would require construction of access roads to allow conventional construction. These roads would be established off the existing roads in the area. At MP 10 (T57) a pull site (PS57) would be established for the crossing of Ortega Highway and to accommodate a series of points of inflection at T57 and T59. A pull site would be established at T59 (PS59).

The line would continue southeast between Ortega Highway and South Main Divide Road with construction by helicopter for T60 through T62. A 400 by 500 foot pull site would be established at MP 11.5 (PS63) immediately next to South Main Divide Road. No access road is necessary due to the close proximity of South Main Divide Road.

At T63, the aboveground 500 kV transmission line would transition to a below-ground gas insulated line (GIL). The transmission line will be installed in a GIL, oil filled line, or dielectric line between MP 11.5 and MP 13.2. This area is immediately adjacent to South Main Divide Road and would be constructed across chaparral habitat on the CNF. The line is currently designed for installation through an open-cut process on the north side of South Main Divide Road. Since pull sites have been established on either end of the GIL to transition from the aboveground transmission system to belowground and back again, no additional workspaces are required.

At MP 12.5 on the 500kV transmission line, within the GIL section, a one-mile long transmission line consisting of 5 lattice towers (Towers 3001-3005) would provide connection to the Santa Rosa substation (See Section 3.6.1.4 for a description of the substation). All towers would be constructed by helicopter and would entail temporary disturbance of up to 5,000 square feet and would result in 50 square feet of permanent disturbance associated with lattice tower footings. All of the towers associated with the substation transmission towers would be constructed on CNF lands across dense stands of chaparral.

The above-ground 500 kV transmission line would continue across the CNF at MP 13.2 (T64). A pull site at T64 (PS64) would measure 400 by 700 feet. This station would take the transition from the GIL back to aboveground transmission lines. T64, 65, and 66 would be conventionally constructed before a series of 8 towers constructed by helicopter. T67 at MP 13.7 through T74 at MP 15.4 would traverse steep, sparely vegetated chaparral across the CNF and would span a series of unnamed drainages. A 200 by 600 foot pull site (PS74) with a 1625-foot long access road originating from private land would be constructed on along a ridgeline through a dense stand of chaparral at MP 15.4. Helicopter construction will occur at T75-77. Tower T78 will be conventionally constructed and accessed by a 450 foot long road that originates from the pull site at T79.

The TE/VS line turns south at T79 with a large 1150 by 1150 foot pull site (PS 79) at MP 16.7. This pull site would be bisected by an existing road. Portions of the proposed site have been previously disturbed, although the primary vegetation type is still chaparral. Access to towers 78 through 82 would be constructed from an existing dirt Forest Service access road off South Main Divide Truck Trail. Another 800 by 1000 foot pull site (PS81) would be constructed in an area of denser chaparral at MP 17.5 to accommodate a turn to the southwest. Helicopter construction restarts at T83 through T84 before conventional construction would resume at T85. Access roads originating from private land would be constructed to T85 through T88. A 200 by 600 foot pull site would be established at T86 (PS86) to accommodate a slight bend in the line to the southwest. This pull site would be accessed off of a series of roads on private property. This area would also provide newly constructed access roads to Towers 87 and 88.

The TE/VS Line again bends sharply south at T89/90 at MP 19.8 with a large 1100 by 1200 foot pull site (PS89). PS89 is at South Mail Divide Truck Trail and close to the CNF boundary. The line continues south along the CNF border, spanning Los Alamos Creek at MP 20.1. Conventional construction will be used to install T91 to T94 before turning to the southwest at MP 20.8 (T94). A large pull site and general staging area (PS93 and PS94) measuring 700 by 2,200 feet is located immediately west of Maisel Avenue/Via Serrano. Vegetation along this segment of the transmission line is sparse chaparral.

At MP 21.2, helicopter construction techniques are employed for T95-98 (MP 21.2 - 21.8). The transmission line again spans Los Alamos Creek and a tributary to the creek between Towers 94 and 97. There is a point of inflection at MP 21.9 (T99) and a 200 by 600 foot pull site (PS99) is present with access off a newly constructed road off of Alta Cresta Circle. The road would cross private land as well as CNF lands. Helicopter construction methods will be used for T100 and 101 (MP 22.2 through 22.4). Standard construction methods are used for T102 through 105 with

access roads constructed to the four towers off private land as accessed from Calle Paramo. This area consists of sparse chaparral and extensive bedrock outcrops.

Helicopter construction resumes at MP 23.6 through 23.7 for T106 and 107. T108 through 111 are accessed by newly constructed roads across CNF lands in areas of chaparral surrounded by non-native grasslands. The transmission line spans Tenaja Canyon Creek between Towers 108 and 109 (MP 24.5). A 200 by 600 foot pull site would be located at MP 24.9 and is located in dense chaparral. Access roads for T109 to T111 will be within non-native grasslands with sparse stands of chaparral and isolated Engelmann Oaks. A population of Orcutt's brodiaea, a plant species of concern, is known to occur in the grassland area associated with this area.

Tower 112 at MP 25.1 will be accessed by helicopter. At MP 25.3 (T113) the TE/VS Line turns south. A 700 by 800 foot pull site in dense chaparral (PS113) will be accessed by a long access road constructed off of an existing private road. Towers 114 through 116 are also accessed through newly constructed roads across the CNF. Tower 117 will be constructed by helicopter.

At T118 the line turns more southeasterly. A small pull site (PS118) measuring 200 by 600 feet would be necessary. It would be accessed from Cold Springs Road. Tower 119 at MP 26.6 would be accessed from the east, off Cold Springs Road on a newly constructed 1,500-foot long road. T120 will be construction conventionally with an access road originating from Margarita Road. The line continues to MP 27.1 where another point of inflection at T121 would require a pull site measuring 610 by 650 feet (PS121). The line would again turn more southerly. In addition to PS121, a secondary staging area (SA)is proposed along Tenaja Truck Trail (SA 121). It would measure 1400 by 1950 feet. SA 121 is located in an area of non-native grassland, bounded by oaks and chaparral. Access to SA 121 would be from Tenaja Truck Trail. This location has also been established as a major helicopter refueling area. Access from SA 121 would also extend to T121 through 124 by newly constructed roads along the CNF boundary from MP 27.1 to 27.8.

Towers 125 through 129 would be constructing using helicopters across an area of steep chaparral-covered slopes. A secondary staging area would be placed at a private airstrip approximately 3,200 feet west of T126. SA 126 would measure 200 by 1500 feet and would be another helicopter refueling location. This area contains a known population of thread-leaved brodiaea, a federally listed endangered plant. SA 126 would be accessed from existing roads.

At MP 29.2, T130 would require a pull site (PS130). Measuring 400 by 450 feet and in dense chaparral, it would be used to assist in the turning of the line to the west. The access road will originate from an existing fire break. T131 would be conventionally constructed with access by an existing access road. T132 would be constructed by helicopter, with T133 and 134 constructed conventionally with short access road connections from the existing Forest Service road. Towers 135, 136 and 137 would be constructed by helicopter. The end of the TE/VS 500kV transmission line terminates at T138. The tower is located within the Cleveland National Forest, adjacent to the eastern boundary of Camp Pendleton and connects directly to the Case Springs Substation for the connection into the Talega-Escondido 230 kV Line Talega, at MP 31.3.