7. Alternative 3 (West Lancaster): Impacts and Mitigation Measures

The following section describes visual resource impacts of Alternative 3, the West Lancaster Alternative, as determined by the significance criteria listed in Section 4. Mitigation measures are introduced where necessary in order to reduce significant impacts to less-than-significant levels, as possible. As described in Section 1.2.3, Alternative 3 is identical to Alternative 2 in all respects except for a 2.1-mile portion of Segment 4 in the North Area (S4 MP 14.9 to 17.9). In that area, the new 500-kV line would be located along 115th Street West (a platted, single lane dirt road), instead of following in the immediate foreground of 110th Street West (a County designated second priority scenic highway). For all other locations, Alternative 3 is identical to Alternative 2.

7.1 Direct and Indirect Effects Analysis

The significance criteria used to identify impacts to visual resources are introduced in Section 4.1 (Criteria for Determining Impact Significance). Impacts associated with this alternative are presented below under the applicable significance criterion.

Have a substantial adverse effect on the existing landscape character and visual quality of the site and its surroundings (Criterion VIS1)

Impacts associated with Criterion VIS1 for Alternative 3 would be the same as the impacts associated with the proposed Project, except for KOP-North-3 on 110th Street West, as described and simulated in Figure A-56a and A-56b (see Appendix A). Except for the 2.1 mile portion of Segment 4 that would be re-routed under this alternative, all other portions of Alternative 3 would be identical to the proposed Project (Alternative 2). The impacts and their associated mitigation measures that fall under Criterion VIS1 are summarized below. Please refer to Section 6.1 for a detailed description of these impacts, except for KOP-North-3.

Under Alternative 3 effects associated with Impact V-1 (Temporary visibility of construction activities and equipment involved with the Project would alter the landscape character and visual quality of landscape views) would be the same as for the proposed Project. Construction impacts on visual resources would result from the presence of equipment, materials, and work force at the substation sites, staging areas, pulling locations, tensioner locations, splicing locations, and along the access/ spur roads and overhead transmission line route. Construction impacts on visual resources would also result from the temporary alteration of landforms and vegetation along the utility corridor. Vehicles, heavy equipment, helicopters, materials, and workers would be visible during site clearing, grading, substation expansion and construction, structure erection, conductor stringing, cable placement, and site/ROW clean-up and restoration. Construction equipment and activities would be seen by various viewers in close proximity to the sites and utility corridor including adjacent and nearby residents and recreationists on roads and trails (including the PCT). View durations would vary from brief to extended periods. Construction of the transmission line, construction of the new Whirlwind Substation, expansion and improvements at existing Antelope, Vincent, Gould, Mesa, and Mira Loma Substations, and use of construction staging areas would result in the visual intrusion of construction vehicles, helicopters, equipment, storage materials, and workers.

Impact V-1 for Alternative 3 would require implementation of the following mitigation measure, which is fully described in Section 6.1: V-1 (Clean up staging areas, storage areas, marshalling yards, access and spur roads,

and structure locations on a regular periodic basis). With implementation of this mitigation measure, the effects of Impact V-1 under Alternative 3 would be reduced somewhat. However, temporary visibility of construction activities and equipment would remain a significant and unavoidable adverse visual impact (Class I).

Under Alternative 3 effects associated with Impact V-2 (For a landscape that currently has no transmission lines, introduction of a new transmission line in a new ROW would adversely affect landscape character and visual quality) would be the same as for the proposed Project (please see Section 6.1). As described in Section 6.1, Impact V-2 would occur for all of Segment 10 and a portion of Segment 8A. Additionally, under Alternative 3, a portion of Segment 4 (S4 MP 14.9 to 17.9) would be constructed in a new ROW where there is no existing transmission line. Therefore, the existing natural-appearing landscape character would be modified to an industrial character by the presence of Alternative 3 (West Lancaster).

Implementation of APM AES-6 (Transmission Lines - Transmission Structures Set Back from Major Roadways) and APM AES-7 (Transmission Lines - Avoid Structures in Middle of Lines of Sight) will be especially important in several locations, if Alternative 3 is adopted. For instance, APM AES-6 and AES-7 would be implemented at the Segment 4 crossing of 110th Street West, and at any of the Alternative 4 routes crossing over roads in and/or near Chino Hills State Park, the crossing of Highway 57, Carbon Canyon Road, etc. APMs are a commitment by the Applicant (SCE) and are considered part of the proposed Project. SCE has agreed that where conditions permit, transmission structures will be set back from the crossings of major roadways, and to the extent feasible, the final locations of transmission structures will be adjusted to avoid locations that place the structures in the middle of the line of sight from streets and other important views.

Following is a KOP description of relevant to Impact V-2 under Alternative 3.

KOP-North-5 – 110th Street at Silverwind Way (Segment 4 – Alternative 3)

KOP-North-5 was established by the visual analyst on 110th Street near its intersection to Silverwind Way, a private road. At this location, 110th Street is a Priority 2 County Scenic Highway. This view is looking northwest across the Antelope Valley toward the Tehachapi Mountains in the background. This location was selected to generally characterize the existing landscape in the North Area in the location of SCE's proposed Project and also the West Lancaster Alternative. See Figure A-56b in Appendix A for a simulation of Alternative 3 prepared by the visual analysts, as seen from KOP-North-5.

Overall Visual Change: high. The new 500-kV line would be parallel to 115th Street West (instead of 110th Street West, as in Alternative 2). It would create high visual contrast, high dominance, and high view/skyline blockage for the single structure located immediately adjacent to 110th Street, as depicted above. The overall visual change would be high.

Mitigation Measure for Impact V-2

V-2a Use tubular steel poles instead of lattice steel towers in designated areas (Alternative 3)

For Alternative 3, use the same mileposts as the recommendations for Alternative 2, shown for mitigation measure V-2a in Tables 6-5, 6-6, and 6-7.

V-2b Treat surfaces with appropriate colors, textures, and finishes (Alternative 3)

For Alternative 3, use the same mileposts as the recommendations for Alternative 2, shown for mitigation measure V-2b in Tables 6-5, 6-6, and 6-7.

V-2d **At road crossings, structures should be offset so that they are equidistant on each side of the road where feasible.** To the extent practical, in locations designated by the CPUC and the FS (for NFS lands), SCE shall relocate new transmission line structures at road crossings so that conductors are approximately mid-span at the road and structures are kept away from the roadway as far as possible. V-2d is compatible and complementary to APM AES-6 (Transmission Structures Set Back from Major Roadways).

In order to minimize visual impacts from the location of new structures near road crossings, such as 110th Street West, APM AES-6 and APM AES-7 are recommended. The following additional mitigation measures are proposed for Impact V-2 for Alternative 3, which are fully described in Section 6.1: V-2a (Use tubular steel poles instead of lattice steel towers in designated areas); V-2b (Treat surfaces with appropriate colors, textures, and finishes); and V-2c (Establish permanent screen). With implementation of the mitigation measures listed above, in addition to Mitigation Measure V-1 (Clean up staging areas, storage areas, marshalling yards, access and spur roads, and structure locations on a regular periodic basis), the effects of Impact V-2 of Alternative 3 would be somewhat reduced. However, the presence of new transmission line structures, conductors, access and spur roads, and new rights of way in landscapes that currently have no transmission line facilities would remain a significant and unavoidable adverse visual impact (Class I).

Under Alternative 3 the effects of Impact V-3 (For a landscape with an existing transmission line, increased structure size and new materials would result in adverse visual effects) would be the same as for the proposed Project (please see Section 6.1). As described in Section 6.1, Impact V-3 would occur throughout the entire Study Area because of increased structure heights and widths, as compared to existing structures and facilities.

The effects of Impact V-3 for Alternative 3 would require implementation of the following mitigation measures, which are fully described in Section 6.1: V-2a (Use tubular steel poles instead of lattice steel towers in designated areas); V-2b (Treat surfaces with appropriate colors, textures, and finishes); V-3a (Match spans of existing transmission structures); and V-3b (On NFS lands, provide restoration/ compensation for impacts to landscape and visual quality). In addition, the effects of Impact V-3 of Alternative 3 would be somewhat reduced with implementation of Mitigation Measures V-1, V-2c, and V-2d, V-4b, and V-4d. However, the presence of newer, taller, wider transmission line structures, new conductors, newly constructed or re-opened access and spur roads, and enlarged substations would remain a significant adverse visual impact (Class I).

Under Alternative 3 the effects of Impact V-4 (Vegetative clearing and/or earthwork associated with road improvements and pulling/splicing locations would adversely affect landscape character and visual quality) would be the same as for the proposed Project (please see Section 6.1). As described in Section 6.1, Impact V-4 would occur throughout the entire Study Area. Impact V-4 for Alternative 3 would require implementation of the following mitigation measures, which are fully described in Section 6.1: V-4a (Construct, operate, and maintain the Project with existing access and spur roads where feasible); V-4b (Slope-round and re-contour in areas as prescribed); and V-4c (Avoid locating new roads in bedrock on NFS lands); and V-4d (Dispose of excavated materials as prescribed). However, the visual impacts associated with Alternative 3 throughout the Study Area would remain significant and adverse (Class I).

Locations where the Senior Visual Analyst recommends to the CPUC implementation of these various mitigation measures can be found in Tables 6-5 through 6-9. No further visual impacts would be introduced by Alternative 3 under Criterion VIS1. No further impacts would be introduced by Alternative 3 under Criterion VIS1.

Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area (Criterion VIS2)

Impacts associated with Criterion VIS2 for Alternative 3 would be the same as for the proposed Project. Although this alternative would introduce a re-route along Segment 4, the re-route would not alter the location or sources of light at the substations. Under Alternative 3 the effects associated with Impact V-5 (New metal surfaces associated with transmission infrastructure would potentially reflect sunlight and produce glint and glare in certain lighting conditions) would be exactly the same for the proposed Project (Alternative 2), as described in Section 6.1.

Alternative 3 would require implementation of the following mitigation measure, which is fully described in Section 6.1: V-2b (Treat surfaces with appropriate colors, textures, and finishes). Implementation of this measure would reduce adverse visual effects to a level of less than significant (Class II).

Substantially damage scenic resources within a scenic highway viewshed or a national scenic trail viewshed (including, but not limited to, trees, rock outcroppings, and historic buildings) (Criterion VIS3)

Under Alternative 3 the impacts associated with Criterion VIS3 would be the same as for the proposed Project. Although this alternative would introduce a re-route along Segment 4, the re-route would not encounter or impact any scenic highway or scenic trail viewsheds.

Under Alternative 3 the effects associated with Impact V-6 (The Project would contribute to the long-term loss or degradation of a scenic highway viewshed or a scenic trail viewshed) would be exactly the same as the proposed Project. Alternative 3 would traverse the PCT in the following three locations: Segment 4 MP 2.7 (North Area); Segment 11 MP 7.6 (Center Area); and, Segment 6 MP 7.3 (Center Area). Alternative 3 would cross over the Angeles Crest Scenic Byway (SR 2) in four different locations (at approximately S11 MP 16.0, 17.7, and 18.4 for Segment 11 and at S6 MP 16.8 for Segment 6). Alternative 3 would cross over the Silver Moccasin Trailhead at Shortcut Saddle at S6 MP 16.7. Portions of Segment 6 Alternative 3 would be visible from West Fork San Gabriel River National Scenic Bikeway. The State has designated portions of the Orange Freeway (State Highway 57) as "Eligible" to become a State Scenic Highway where it traverses largely undeveloped hills between Brea and Diamond Bar, and Alternative 3 would cross State Highway 57 in this vicinity. Colima Road, Hacienda Road, and Harbor Boulevard are proposed as scenic corridors in the most recent update to the County of Los Angeles General Plan and Alternative 3 would be visible from these highways. Los Angeles County has designated several other roads as Priority Two Scenic Highways, also indicating a high sensitivity for scenic integrity of landscapes. Portions of Interstate 210 (I-210) and State Highways 39 and 57 are either designated as, or eligible for, State Scenic Highway status and portions of Alternative 3 would also be visible from these roadways.

Impact V-6 for Alternative 3 would require implementation of Mitigation Measure V-3b (On NFS lands, provide restoration/compensation for impacts to landscape character and visual quality), which is fully described in Section 6.1. With implementation of this mitigation measure, the effects of Impact V-6 would be reduced to a level of less than significant (Class II).

Conflict with applicable adopted city, county, State, or federal plans, policies, regulations, or standards applicable to the protection and management of visual quality in the landscape (Criterion VIS4)

Impacts associated with Criterion VIS4 for Alternative 3 would be identical to the proposed Project. Although this alternative would introduce a re-route along Segment 4, the re-route would not encounter or impact any different adopted city, county, State, or federal management plans for visual or scenic resources. Therefore, the federal, State and local laws, regulations and standards presented in Tables C-1, C-2, and C-3 of Appendix C would apply.

In the North Area, there are no established Visual Resource Management Plans or Visual Resource Conservation Plans. In the Center Area, the majority of Segments 6 and 11 are situated within areas of natural-appearing landscapes designated with High Scenic Integrity Objective (SIO) as dictated by the Forest Plan (see Table 2-4). Existing access and spur roads currently do not meet the Natural-Appearing Desired Condition or High SIO, and re-opening or reconstructing them to higher road maintenance standards would adversely impact visual resources and further degrade existing conditions; additionally the Forest Plan's Desired Condition and High Scenic Integrity Objective would not be met. Construction and operation of new, taller, wider single-circuit 500-kV transmission lines would also adversely impact visual resources and further degrade existing conditions, and would not meet the Desired Condition or established High Scenic Integrity Objectives. Consequently Project-specific amendments to the 2005 Forest Plan would be required for Forest Plan Standards S9 and S10 for Alternative 3, which is described in Table 2-5. Implementation of Mitigation Measure V-3b (On NFS lands, provide restoration/compensation for impacts to landscape character and visual quality) is also recommended to minimize impacts. In the South Area, Alternative 3 would cross lands administered by the Puente Hills Landfill Habitat Preservation Authority (PHLHPA). Alternative 3 would conflict with Goal Visual-1 and Objective Visual-1.2 of the Puente Hills Landfill Native Habitat Preservation Authority Resource Management Plan (see Appendix C).

Alternative 3 would be inconsistent with Standards S9 and S10 of the Forest Plan, and thus would require a Project-specific amendment. Alternative 3 would also conflict with Goal Visual-1 and Objective Visual-1.2 of the Puente Hills Landfill Native Habitat Preservation Authority Resource Management Plan. As such, Impact V-7 would be significant and unavoidable (Class I).

7.2 Cumulative Effects Analysis

This section addresses potential cumulative visual effects that would occur as a result of implementation of Alternative 3 (West Lancaster Alternative). This alternative consists of a re-route of the proposed transmission line just north of the Antelope Substation, which would add approximately 0.4 mile to the length of proposed Segment 4. The remainder of this alternative (north and south of the re-route) would be identical to that of the proposed Project and would, therefore, result in identical impacts. Based on the substantial similarity of Alternative 3 to the proposed Project, this alternative's contribution to cumulative visual impacts would also be identical to that of the proposed Project.

7.2.1 Geographic Extent

Alternative 3 only differs from the proposed Project for a very small portion of the proposed route along Segment 4; therefore, the geographic extent of the cumulative analysis for Alternative 3 is exactly the same as that for Alternative 2 and would include all of the North, Center, and South Areas.

7.2.2 Existing Cumulative Conditions

The existing cumulative conditions for Alternative 3 are exactly the same as for Alternative 2, as described in Section 6.2.2.

7.2.3 Reasonably Foreseeable Future Projects and Changes

Reasonably foreseeable future projects and changes to the cumulative scenario for Alternative 3 would be exactly the same as Alternative 2, described in Section 6.2.3.

7.2.4 Cumulative Impact Analysis

Impacts associated with Alternative 3 would be cumulatively considerable if they would have the potential to combine with similar impacts of other past, present, or reasonably foreseeable projects. The minor re-route of the proposed Project transmission line associated with Alternative 3 would not affect the proposed Project's contribution to cumulative impacts. Therefore, cumulative impacts of Alternative 3 would be exactly the same as cumulative impacts for Alternative 2, as described in detail in Section 6.2.4.

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

Mitigation measures introduced for Alternative 3 in Section 7.1 (Direct and Indirect Effects Analysis) would help to reduce this alternative's incremental contribution to cumulative impacts. However, no additional mitigation measures have been identified that would reduce cumulative impacts to a less-than-significant level for visual resources. Cumulative impacts would be significant and unavoidable (Class I).