7.1 INTRODUCTION

Consistent with CEQA requirements and CPUC Rule 17.1, this section discusses the potential significant cumulative effects of the proposed project, Segment 1 of the Antelope Transmission Project, when added to other past, present, and probable future projects in the vicinity of the proposed project. The purpose of the proposed project is to interconnect and integrate potential alternative energy projects (owned by other entities) and SCE's electrical system, as discussed in Section 2.0 of this PEA. The proposed project is not intended to supply power related to potential growth for any particular development or area.

In summary, the proposed project consists of: construction of approximately 25.6 miles of 500 kV T/L along an existing T/L corridor (including removal of the corresponding portion of the Antelope-Pole Switch 74 66 kV line) and modifications to SCE's existing Antelope and Pardee 220 kV substations. Construction of the proposed project is anticipated to occur between mid-2006 and the end of 2007.

To determine the potential for cumulative impacts associated with the proposed project, planning department staff were contacted in Los Angeles County, the USFS, Angeles National Forest, the Southern California Association of Governments (SCAG) and the cities of Santa Clarita and Lancaster. Future and pending development projects are either approved or pending approval by the local land use authority, and in some cases are already under construction in the project vicinity. For the most part, the projects are residential or commercial developments. As discussed in Section 4.10 and as shown on Figures 4.10-1 and 4.10-2, Segment 1 is proposed to be located in an existing utility corridor. As shown on Figure 3-2 and the figures in Section 4.10, this T/L corridor intersects: existing rural residential development on the southwest extent of the City of Lancaster; continues south for several miles through undeveloped portions of unincorporated Los Angeles County; then continues through the Angeles National Forest where no development is currently proposed; then through the northern Santa Clarita Valley where additional growth is expected; and finally through existing development in the Santa Clarita Valley up to the existing SCE Pardee Substation. There are no other known planned electric power-related plans or related projects proposed in the vicinity of the project area with the exception of planned wind farm development in the Tehachapi Wind Farm area (concentrated approximately 25 miles to the north of SCE's Antelope Substation), and Segments 2 and 3 of SCE's Antelope Transmission Project. Segments 2 and 3 of SCE's Antelope Transmission Project are addressed in a separate CPCN Application and PEA as required by the CPUC.

7.2 SIGNIFICANCE CRITERIA

Consistent with CEQA Section 15130, a project could have a significant cumulative impact if a change in the environment resulted from the incremental impact of the proposed project when added to other closely related past, present, and probable future projects.

7.3 ANALYSIS OF CUMULATIVE IMPACTS

This section analyzes whether the proposed project, when combined with other proposed projects in the area, would result in either short-term or long-term environmental impacts. Short-term impacts are those related primarily to project construction, and long-term impacts are those related primarily to permanent project features or operation of the project. For the proposed project, potential short-term construction impacts would include increased traffic, air emissions, noise, and soil erosion/water quality impacts. Short-term construction-related impacts are not typically considered significant under CEQA. Although not significant, potential long-term impacts would include those related to visual impacts.

7.3.1 Short-term Construction Impacts

7.3.1.1 Traffic and Transportation

As discussed in Section 5.17, construction and operation of the proposed project would not result in any potentially significant long-term traffic or transportation impacts. All of the construction would take place within an existing utility corridor. As noted above, there is existing and proposed residential and commercial development in the areas located within the City of Lancaster and the Santa Clarita Valley and the rest of the existing corridor lies within undeveloped, unincorporated Los Angeles County or the Angeles National Forest. While it is expected that the construction of some development in the Lancaster area (near the Antelope Substation), as well as area adjacent to the existing corridor in the Santa Clarita Valley (near the Pardee Substation), may occur during the same time as the construction time frame for the proposed project, the incremental contribution of SCE construction equipment using the same roadways would not constitute a considerable contribution to cumulative traffic or transportation impacts. There are no long-term traffic and transportation impacts associated with operation of the proposed project; therefore, no contribution to significant cumulative impacts would result.

7.3.1.2 Air Quality

As discussed in Section 5.4, construction and operation of the proposed project would not result in any appreciable contribution to long-term air quality emissions or potentially

significant impacts. Temporary air emissions would occur as a result of use of construction vehicles and equipment and from PM_{10} (dust) produced during grading activities. With the implementation of standard dust suppression measures to reduce PM_{10}, impacts would be less than significant. There are no long-term air quality impacts associated with operation of the proposed project; therefore, no contribution to significant cumulative impacts would result.

7.3.1.3 Noise

As discussed in Section 5.12, construction and operation of the proposed project would not result in any potentially significant noise impacts. Temporary noise would likely affect nearby residents during the construction of Segment 1 in the areas of existing residential development in southwest Lancaster and in the Santa Clarita Valley. Construction activities would be limited to daylight hours, thereby helping to minimize adverse noise effects on nearby residences. In general, those portions of the project that are within undeveloped areas in unincorporated Los Angeles County are not expected to have adverse noise impacts due to the lack of sensitive receptors. Construction activities in the Angeles National Forest, including the anticipated use of helicopters to facilitate construction in remote and/or sensitive areas, could cause short-term noise impacts to campers and hikers (e.g., near Bouquet Reservoir/Spunky Canyon).

Taken into consideration with other proposed development in or near the Lancaster area and the Santa Clarita Valley, the incremental contribution of noise from construction and operation of the proposed project would not be cumulatively considerable.

7.3.1.4 Soil Erosion/Water Quality

As discussed in Section 5.7, construction of the proposed project is expected to result in short-term increases in soil erosion and potential water quality impacts due to grading activities associated with construction (expansion) at the Antelope Substation, and T/L construction (and removal activities along the existing Antelope-Pole Switch 74 66 kV line). Implementation of soil erosion/water quality protection measures to be specified in the Construction SWPPP, as well as applicant-proposed restoration measures for disturbed areas, would be expected to limit project-specific and potential cumulative impacts to levels of insignificance.

7.3.2 Long-Term Impacts

7.3.2.1 Aesthetics

As discussed in Section 5.2, construction and operation of the proposed project would be expected to result in adverse impacts to visual resources, but these impacts would be less than significant. The proposed project would result in an incremental increase in the scale and magnitude of existing visual impacts (e.g., towers and conductors) due to the replacement of the existing 66 kV facilities with 500 kV facilities. The 500 kV facilities would be built along an existing T/L corridor where the natural landscape has been modified for many years before the current residences and other development were present. There are no known similar projects proposed in the project area that could impact visual resources, but expanding residential development in the Santa Clarita area could expose more residences to views of the T/L. Because the proposed project would use an existing SCE transmission line R-O-W, replacing the 66 kV line with a 500 kV line would result in a lower impact than a 500 kV line along a new R-O-W.

7.4 ALTERNATIVES

7.4.1 Alternative 1

Alternative 1 would involve construction of a new 500 kV T/L between the existing SCE Antelope and Pardee substations on a different R-O-W than the proposed 500 kV T/L route (refer to Figures 3-1 and 3-2). Cumulative impacts due to construction and operation of Alternative 1 would be expected to be similar to those associated with the proposed route, but Alternative 1 would potentially result in greater short-term and long-term (e.g., visual) effects on the community of Green Valley due to the addition of a third major T/L to the existing LADWP T/L corridor west of this community.

7.4.2 Alternative 2

Alternative 2 would involve the use of single-circuit (versus the proposed double-circuit) 500 kV T/L towers between Haskell Canyon and the Pardee Substation (refer to Figure 3-2, mile 20.5 – 25.6) and would have cumulative impacts that are similar to the proposed project.

7.5 OTHER PROJECTS

7.5.1 Antelope Transmission Project – Segments 2 and 3

Construction and operation of Segment 1 of the proposed Antelope Transmission Project, together with Segments 2 (Antelope to Vincent) and 3 (Antelope to Substations One and

Two) (refer to Figure 7-1), would result in greater short-term (e.g., noise, traffic, air quality, soil erosion) and long-term (e.g., visual/aesthetic) effects than Segment 1 alone. Cumulative effects would be greatest in the vicinity of the existing SCE Antelope Substation (western Lancaster) where all three T/L segments originate. Construction of Segment 1 would begin first followed by Segments 2 and 3. Implementation of Segment 1 would facilitate and accommodate the construction of Segments 2 and 3. Refer to the separate CPCN Application and PEA for Segments 2 and 3 for more information about impacts associated with Segments 2 and 3.

7.5.2 Generation Tie-Lines

Construction of the Antelope Transmission Project would result in the construction of generation tie-lines from various wind generation sites to the closest corresponding substation. This would result in greater short-term (e.g., noise, traffic, air quality, soil erosion) and long-term (e.g., visual/aesthetic) cumulative effects in the vicinity of the Antelope Substation where all the generation tie-lines would originate.

7.5.3 Wind Farms

The purpose and need for the Antelope Transmission Project is to facilitate development of renewable resources in northern Los Angeles and Kern counties. Consequently, construction of the Antelope Transmission Project would facilitate construction of numerous wind generation sites throughout northern Los Angeles and Kern counties. This would likely result in greater short-term (e.g., noise, traffic, air quality, soil erosion) and long-term (e.g., visual/ aesthetic) cumulative effects throughout northern Los Angeles and Kern counties.

7.5.4 SCE-PG&E System Intertie

A comprehensive transmission development plan for phased expansion of transmission capability in the Tehachapi area is currently in progress as part of a collaborative study effort as ordered by the CPUC (Ordering Paragraph No. 4 of Decision 04-06-010). Additional transmission facilities beyond the Antelope Transmission Project (Segments 1, 2, and 3) that are identified as part of this comprehensive transmission development plan would result in greater short-term (e.g., noise, traffic, air quality, soil erosion) and long-term (e.g., visual/ aesthetic) cumulative effects throughout Los Angeles, Kern, Tulare, and Fresno counties, and possibly other counties north of Fresno.