C.11 Visual Resources

The Visual Resources section of this EIR describes the scenic and aesthetic impacts to the landscape that are associated with the construction and operation of the Project. Visual resources were investigated based on the following criteria: (1) location of sensitive receptors in the landscape; (2) assumptions about the receptors' sensitivity to changes in the landscape; and (3) the magnitude of visual changes in the landscape that would be brought about by implementation of the Project.

To facilitate the visual resource analysis, the Study Area has been divided into two segments:

- Segment 3. Extending from Mile S3-0.0 to Mile S3-35.2, Segment 3 begins at the proposed Substation 2 site in unincorporated Kern County and travels south to Antelope Substation in the City of Lancaster (Los Angeles County). Jurisdictions traversed by Segment 3 include unincorporated Kern County and the community of Willow Springs; the Antelope Valley area of unincorporated Los Angeles County, including the communities of Antelope Acres and Del Sur; and the City of Lancaster. No federal or State lands would be crossed, and therefore no federal visual resource management systems would apply.
- Segment 2. Extending from Mile S2-0.0 to Mile S2-21.6, Segment 2 begins at Antelope Substation in the City of Lancaster and travels south to Vincent Substation in unincorporated Los Angeles County. Jurisdictions traversed by Segment 2 include the City of Lancaster; the City of Palmdale, including the Ritter Ranch and Anaverde communities; and the communities of Lakeview and Big Mountain Ridge in unincorporated Los Angeles County. No federal or State lands would be crossed, and therefore no federal visual resource management systems would apply. In addition to the proposed Project route, Segment 2 includes the following two route options:
 - Option A: Option A would deviate from the proposed Project at Mile S2-5.7, and would proceed for approximately 2.1-miles parallel to the existing utility corridor and easterly approximately 1,000-feet, through unincorporated Los Angeles County and the City of Palmdale. Option A would reconnect with the proposed Project at approximately proposed Project Mile S2-7.7.
 - **Option B:** Option B would deviate from the proposed Project at Mile S2-8.1, and would travel 3.1 miles southeast along the existing Midway-Vincent utility corridor through the Ritter Ranch and Anaverde development areas of the City of Palmdale. Option B would reconnect with the proposed Project at proposed Project Mile S2-14.9.

The study area for the visual resource analysis was defined during on-site investigations, including a tour of the proposed route with SCE and the CPUC (SCE, 2006), and on-site investigations with the Aspen team (Aspen, 2006). The study area was defined from numerous viewpoints along travel routes and at use areas from which sensitive receptors would see the Project. Accumulating the "seen areas" from each of these viewpoints into viewsheds defined the Project study area. Viewsheds would be extensive, given the long vistas that are available in the Mojave Desert and the long distances from which Sierra Pelona Ridge and Portal Ridge are visible. Also, desert vegetation provides very little vegetative screening throughout the Project area. The proposed transmission line lattice steel towers (LSTs) would range in height between 113 feet and 188 feet. The single-circuit 500-kV TSPs would be approximately 135 feet tall. Therefore, the Project would be highly visible because of its visual characteristics, the landscape setting in the high desert, and the lack of vegetative screening.

The viewpoints from which sensitive receptors would see the proposed Project and alternatives, and that define the study area viewsheds include the following travel routes and use areas:

• For Segment 3, starting at the north and proceeding southward, State Highway 58, Tehachapi Willow Springs Road, the Pacific Crest National Scenic Trail (PCT), Cameron Road, Oak Creek Road, Rosamond Boulevard,

Final EIR C.11-1 December 2006

- Gaskell Street, 100th Street West, 105th Street West, 110th Street West, Antelope Acres, Avenues A, B, C, D, E, F, G, H, I, J, and K, and scattered rural residences along the route; and
- For Segment 2, starting at the north and proceeding southeast, 110th Street West, 100th Street West, 90th Street West, 80th Street West, 70th Street West, Avenues J, K, L, M, N, P, and S, city streets in Lancaster, city streets in Palmdale, Godde Hill Road, Elizabeth Lake Road, Bouquet Canyon Road, Ritter Ranch planned residential community, future school site in Ritter Ranch (owned by the Antelope Valley Union High School District), Anaverde planned residential community, Ana Verde Mountainway Trail, Edison Road Trail, Ritter Mountainway Trail, Sierra Pelona Mountainway Trail, State Route 14 (Antelope Valley Freeway), Sierra Highway, Angeles Forest Highway, Acton/Vincent Grade Metrolink Station, and scattered rural residences along the route.

Immediately adjacent to all four substation sites, there are two-lane, paved public roads. The one-mile grid of rural roads in the Mojave Desert and Antelope Valley afford many viewing opportunities from foreground and middleground viewing distances. For most of the extents of Segment 3, generally there are vantage points within 0.5 miles of proposed transmission lines. For Segment 2, the city streets and rural roads in Antelope Valley and planned residential streets of Ritter Ranch and Anaverde also would afford many viewing opportunities from foreground and middleground viewing distances. Both Elizabeth Lake Road and Bouquet Canyon Road are included as Second Priority in the County Scenic Highways Element (County of Los Angeles, 1974).

Foreground is defined as that portion of the landscape from the viewer's vantage point to 0.5 miles away. Middleground is defined as that portion of the landscape from 0.5 miles to four miles away from the viewer. Some Project features would be visible in the background (four miles to horizon), but all background landscapes would also be seen in greater detail and from closer distances from other vantage points. Therefore for this EIR, the study area of this visual analysis will be limited to foreground and middleground viewing distances from travel routes and use areas named above.

C.11.1 Environmental Setting

The Project would begin near the Tehachapi Wind Resource Area in the Tehachapi Mountain Range west of the town of Mojave which is in the Mojave Desert. The Project would cross the Pacific Crest National Scenic Trail (PCNST or PCT) in the Tehachapi Wind Resource Area. Two new substations (No. 2 and No. 1) would be constructed in this vicinity of hundreds of wind turbine generators. The Project would proceed south from new Substation One, across the high desert plain of the Antelope Valley to the Antelope Substation, located at the western edge of the City of Lancaster, then would cross the rolling hills of Portal Ridge, across the San Andreas Rift Zone, and proceed across the steep mountains of the Sierra Pelona Ridge, and terminate at the Vincent Substation, south of the City of Palmdale and near Acton in unincorporated Los Angeles County. Such varied terrain and landscape characteristics are accompanied by many potentially sensitive viewing opportunities by residents, agricultural workers, and recreational travelers on local roads, and back-country recreationists, including hikers and equestrians. These environmental settings are described in more detail, below.

The visual resource analysis included a combination of information review, agency consultation, field reconnaissance, analysis of aerial photographs and topographic maps, on-site photography, data mapping, computerized visual simulation, and data evaluation. Observer positions were analyzed for their potential to display typical or worst-case visual effects of the Project to the scenic and aesthetic landscape. From dozens of potential observer positions, 15 locations were selected as Key Observation Positions (KOPs) for detailed analysis of the proposed Project (with Options A and B), and two additional KOPs were selected for analysis of Alternatives 1 and 4 (because of different alignments affecting different landscapes). KOPs were established

at significant viewpoints that view the Project, regardless of whether they were located on private or public lands.

At each KOP, photographs were taken with a Canon-20D digital camera equipped with the 18-55 mm zoom lens set at a "normal" focal length. When printed on 11x17 paper, each photograph appears "life-size" when held approximately 18-inches from the eye. From among the photographs taken, the best was selected to represent the view from each KOP. Computerized visual simulations were prepared using AutoCAD and 3D-Studio software to create accurate, computerized depictions showing the visual effects of the Project. In the Affected Environment section, the existing visual situation is described in detail for each of the KOPs. Using the computerized visual simulations, predicted future visual effects of the Project for each KOP are described in the Environmental Consequences section. The KOP Map is presented at the end of the Visual Resource Section (see Figure C.11-1; all figures are located at the end of this section).

Further discussion of these segments can be found in Sections C.11.1.1 and C.11.1.2, which describe the key visual characteristics of each segment and location of sensitive receptors. As Segment 3 encompasses the north area and Segment 2 encompass the south area of the proposed Project route, the Project discussion begins with Segment 3 and proceeds southward.

C.11.1.1 Geographic Areas - Segment 3 (North to South)

Starting at the north in unincorporated Kern County, Segment 3 would include construction of Substation Two and a new 9.6-mile long, 220-kV transmission line that would connect to a new substation (Substation One) through the rolling hills of the Tehachapi Wind Resource Area. Leaving Substation One, Segment 3 would include construction of a 500-kV transmission line traveling 25.6 miles south through the Mojave Desert to the existing Antelope Substation in the City of Lancaster. In order to represent the various landscape settings that the Project would traverse, six key observation positions (KOPs) were selected as representative views along the 35.2-mile portion of Segment 3. Each KOP is numbered sequentially; starting with KOP-1 at Highway 58 and ending with KOP-14 at the Vincent Substation (Segment 2) (see Figure C.11-1A/B, KOP Location Map).

KOP-1 - Highway 58 and Jameson Street

KOP-1 was established on Jameson Street, which parallels State Highway 58 near the small town of Monolith (see Figure C.11-2A – Existing Visual Condition as seen from KOP-1). Substation Two would be located in the flat agricultural fields along Jameson Street, approximately 0.5 miles south of Highway 58, making this a foreground viewing distance to the substation. This substation would be near an existing substation and the existing GE Wind Energy maintenance facility. Located behind the proposed substation site are approximately 100 wind turbine generators on the skyline. The proposed Project would create a new 220-kV transmission line heading south across these hills to Oak Creek Road. The line would follow and be parallel to an existing 66-kV transmission line that goes over the hill near the center of the photograph. The line also would be parallel to, and approximately 0.75 miles to 1.25 miles east of the Tehachapi Willow Springs Road, the closest location for sensitive receptors. The Project would be partially screened by topography, and where visible, would be seen from this road at a middleground viewing distance with a landform backdrop. This proposed 220-kV line would require 1.7 miles of completely new ROW and 7.9 miles of new ROW next to an existing 66-kV line with wooden H-frame poles. The Project transmission line would cross over the Tehachapi Willow Springs Road at approximately Mile S3-3.8 and Mile S3-4.5. Figure C.11-2A is representative of existing conditions seen at middleground viewing distances from Mile S3-0.0 to Mile S3-3.0.

Final EIR C.11-3 December 2006

Visual Quality: moderate. The primary focal points of this landscape are the white turbines with their spinning rotors and the rounded landforms of the rolling hills, drawing viewers' attention to the skyline. Secondary focal points in this landscape are the grass covered hillsides with large patches of evergreen shrubs. The flat plain of the valley floor, on which the substation would be located, is covered with grass and scattered clumps of sagebrush. Perceptual factors affecting landscape aesthetics and visual quality include variables such as viewing angle, time of day, atmospheric conditions, and motion. Researchers determined in the 1960s-70s that motion is one of the strongest visual attributes in a landscape, because the landscape is mostly static, and any motion attracts and holds the viewer's attention. The human eye can detect motion in the landscape from a very long distance (USDA, 1973). Motion of large spinning rotors on wind turbine generators is an example of this perceptual factor. The motion of spinning rotors on existing wind turbine generators raises the visual quality of this industrial character landscape from a low category to a low-to-moderate rating.

Viewer Concern: moderate. Residents and visitors enjoy the predominantly natural setting with distant, panoramic sightlines to the Tehachapi Wind Energy Area. Area residents can be expected to have low-to-moderate concern for visual impacts from wind energy features since they are subject to these views on a daily basis. Some travelers on Highway 58 have high concern for visual resources, but most are traveling through the area to other, more scenic destinations. Overall, viewer concern is estimated to be moderate.

Viewer Exposure: high for the substation, moderate for the transmission line. Because there is no landscape screening by landforms or vegetation, Substation Two would be highly visible in the foreground from KOP-1. The transmission line would be partially screened by topography and seen from middleground distances. The number of viewers on Highway 58 would be high; on the Tehachapi Willow Springs Road, the number of viewers would be moderate; on Jameson Street, the number of viewers would be low. For all of these viewers, the duration of view would be brief because of the speed of travel.

Overall Visual Sensitivity: moderate-to-high for the substation, moderate for the transmission line. For visitors and residents traveling on Highway 58, and from KOP-1 specifically, the moderate visual quality, moderate viewer concern, and high viewer exposure lead to a moderate-to-high overall visual sensitivity of the visual setting and viewing characteristics of Substation Two. For the transmission line from Mile S3-0.0 to S3-3.0, the moderate visual quality, low-to-moderate viewer concern, and moderate viewer exposure lead to a moderate overall visual sensitivity of the visual setting and viewing characteristics.

KOP-2 - Pacific Crest National Scenic Trail and Trailhead

KOP- 2 was established at the trailhead to the PCT. Starting at approximately Mile S3-3.0, the Project would be seen in detail at foreground viewing distances from the Tehachapi Willow Springs Road. The 220-kV line would cross over the PCT and the existing PCT trailhead parking lot at approximately Mile S3-4.5 (see Figure C.11-3A – Existing Visual Condition as seen from KOP-2).

Visual Quality: moderate. The primary focal points in this landscape are the large, white wind turbine generators that occupy the skyline to the southwest. Secondary focal points are the grassy, rolling hills with large patches of riparian vegetation in Oak Creek Canyon. The landscape is located at the junction of the Mojave Desert and Tehachapi Mountains, resulting in a moderate rating for visual variety. The motion of spinning rotors on existing wind turbine generators adds visual interest, but detracts from the natural appearing landscape character and changes it to an industrial character landscape, resulting in a moderate rating overall. This view is looking southwest toward the point where the transmission line would turn and then head east along Oak Creek Canyon, following an existing wooden pole, H-frame, 66-kV transmission line toward proposed Substation One. From approximately Mile S3-3.0 to Substation One at Mile S3-9.6 and beyond to

Mile S3-9.9, the Project would be seen in the foreground of Oak Creek Road. Figure C.11-3A is representative of existing conditions seen at foreground viewing distances from Mile S3-3.0 to Mile S3-9.9.

Viewer Concern: high on PCT, low-to-moderate on roads. People hiking and riding horses on the PCT can be expected to have high concern for scenery and visual resources. Travelers on roads can be expected to have low-to-moderate concern for scenery, as explained for KOP-1.

Viewer Exposure: moderate-to-high on PCT, moderate on roads. Because there is no landscape screening by landforms or vegetation, the 220-kV transmission line would be highly visible in the foreground from the PCT and the Trailhead at KOP-2. For PCT users, the duration of view would be extended because of the pedestrian speed of travel, but the number of users is low. The transmission line would be adjacent to the roads and would be in the foreground. The number of viewers on the Tehachapi Willow Springs Road would be moderate, and on Oak Creek Road, the number of viewers would be low-to-moderate. For all of these viewers, the duration of view would be brief because of the speed of travel.

Overall Visual Sensitivity: moderate-to-high for the PCT, low-to-moderate for the roads. For PCT users in general, and from KOP-2 specifically, the low-to-moderate visual quality, high viewer concern, and moderate-to-high viewer exposure lead to a moderate-to-high overall visual sensitivity of the visual setting and viewing characteristics. For the transmission line from Mile S3-3.0 to S3-9.9, the low-to-moderate visual quality, low-to-moderate viewer concern, and moderate viewer exposure lead to a low-to-moderate overall visual sensitivity of the visual setting and viewing characteristics.

KOP-3 – Oak Creek Road

KOP-3 was established on Oak Creek Road looking west at the site of Substation One. Substation One would be located approximately 200 feet south of Oak Creek Road on a relatively flat desert plain of the Mojave Desert, and approximately one mile east of the Cal Cement Substation access road. At this location, the desert appears flat, but is actually gently sloping, northwest to southeast. Looking west along Oak Creek Road, the Tehachapi Wind Resource Area is to the north (right) and the undeveloped Mojave Desert is on the south (left) side of the road (see Figure C.11-4A – Existing Visual Condition as seen from KOP-3). SubstationOne would be a 500/220/66-kV facility. The site of Substation One is approximately one mile away from this vantage point, a middleground viewing distance. Figure C.11-4A is representative of existing conditions seen at foreground and middleground viewing distances near Mile S3-9.6.

Visual Quality: low. The primary focal points in this landscape are the numerous rows of large, white wind turbine generators that occupy the skyline to the north. The axial view created by Oak Creek Road leads the viewers' eye to secondary focal points – angular landforms of Tehachapi Mountains visible on the skyline. The motion of spinning rotors on existing wind turbine generators adds visual interest, but detracts from the natural appearing landscape character and changes it to an industrial character landscape, resulting in a low visual quality rating.

Viewer Concern: low. Travelers on this road may be concerned with visual resources, but most are traveling through the area to other, more scenic destinations. Overall, viewer concern is estimated to be low.

Viewer Exposure: moderate-to-high. Because there is no landscape screening by landforms or vegetation, the 220-kV and 500-kV transmission lines, and Substation One would be highly visible in the middleground and foreground from Oak Creek Road. The number of viewers would be low-to-moderate. For all of these viewers, the duration of view would be brief because of the speed of travel and viewer exposure therefore would be moderate-to-high.

Final EIR C.11-5 December 2006

Overall Visual Sensitivity: low-to-moderate. For viewers on Oak Creek Road in general, and from KOP-3 specifically, the low visual quality, low viewer concern, and moderate-to-high viewer exposure lead to a low-to-moderate overall visual sensitivity of the visual setting and viewing characteristics.

KOP-4 – Tehachapi Willow Springs Road

KOP-4 was established on Tehachapi Willow Springs Road at the point where the road turns northwest, after running north-south for approximately 20 miles in the Mojave Desert. A new 500-kV transmission line would exit Substation One and head south across the flat, undeveloped desert plains. The line would travel 25.6 miles south to the existing Antelope Substation in the City of Lancaster, requiring 23.2 miles of completely new ROW and 2.4 miles of new ROW adjacent to existing transmission lines. For the proposed Project, from Mile S3-9.5 to S3-16.3, the only vantage points of sensitive receptors are Oak Creek Road (see KOP-3) and Tehachapi Willow Springs Road (see Figure C.11-5A – Existing Visual Condition as seen from KOP-4).

The proposed Project would cross over the Tehachapi Willow Springs Road at approximately Mile S3-14.2 and over the Los Angeles Aqueduct at approximately Mile S3-15.0. The aqueduct is an underground facility, with access roads being the only aboveground feature. As such, the aqueduct is not a landscape feature and does not attract attention. Figure C.11-5A is representative of existing conditions seen at foreground and middleground viewing distances from Mile S3-9.9 to Mile S3-16.3.

Visual Quality: low. From Mile S3-9.5 to S3-16.3, the landscape is characterized by a gently sloping desert plain, tilted slightly southeast, covered with creosote bush and widely scattered Joshua trees. Widely spaced, shallow desert washes are obscured by this vegetation and are not visually evident to passers-by. The primary focal points in this landscape are the wind turbine generators on the skyline in the Tehachapi Wind Resource Area. The secondary focal point is the flat desert plain that creates a horizontal line in front of the rugged, barren, wind-swept mountains. The overall visual quality of the affected landscape is low.

Viewer Concern: low. People could view the transmission line from Mile S3-9.5 to S3-16.3 from both Oak Creek and Tehachapi Willow Springs Roads. Many people who travel these roads work in the wind industry, at Cal Cement, or nearby agricultural operations. They can be expected to have low concern for visual impacts that would be caused by the Project's transmission line. Travelers on these roads may be concerned with visual resources, but most are traveling through the area to other, more scenic destinations. Overall, viewer concern is estimated to be low.

Viewer Exposure: moderate-to-high. The proposed Project would vary from zero miles to two miles away from sensitive receptor locations, and therefore, would be classified as foreground and middleground viewing distances. Because there is no landscape screening by landforms or vegetation, the proposed Project would be highly visible in the middleground and foreground from Tehachapi Willow Springs Road, as well as both Oak Creek Road. The number of viewers on Tehachapi Willow Springs Road would be moderate, and on Oak Creek Road would be low-to-moderate. For all of these viewers, the duration of view would be brief because of the speed of travel, resulting in a moderate-to-high viewer exposure.

Overall Visual Sensitivity: low-to-moderate. For viewers on Tehachapi Willow Springs Road in general, and from KOP-4 specifically, the low visual quality, low viewer concern, and moderate-to-high viewer exposure lead to a low-to-moderate overall visual sensitivity.

KOP-5 – Avenue A at 110th Street West

At approximately Mile S3-16.3, the proposed Project would cross over Backus Road and enter a landscape of agricultural fields that extend to the Antelope Substation at Mile S3-35.2. The proposed Project would be approximately 0.5 miles east of the proposed, and un-built, Copa De Oro/Kern Ross Estate residential development in Kern County from approximately Mile S3-24.5 to Mile S3-25.0. The proposed Project would cross the Kern-Los Angeles County line at approximately Mile S3-25.5, but the landscape characteristics do not change at the county line. KOP-5 was established at the intersection of Avenue A at 110th Street West in Los Angeles County, because this view is typical of the Project study area from Mile S3-16.3 to Mile S3-31.5 (see Figure C.11-6A – Existing Visual Condition as seen from KOP-5).

Visual Quality: low. The landscape in this portion of the Project is characterized by the flat plain of the Mojave Desert, leading into the Antelope Valley portion of the desert. Vegetation varies from low-growing native scrub and gray-green creosote bush, to lush-green, irrigated fields of alfalfa. There are homesteads, windbreaks, and ranch buildings scattered widely throughout this portion of the proposed Project. The primary focal point in this segment of the Project is the horizontal line formed by the desert plain against the sky. Secondary focal points are created by scattered windbreaks, residences, and vertical lines of utility poles and transmission lines that criss-cross the landscape from Mile S3-16.3 to S3-35.2. The lack of topographic features, water features, or interesting vegetation leads to a low visual quality rating.

Viewer Concern: low. Other than agricultural workers and residents, the only sensitive receptors are located on the paved, two-lane roads laid out on section lines. People who travel these roads live nearby and work in agricultural operations. They can be expected to have low concern for visual impacts that would be caused by the new 500-kV transmission line due to its consistency with existing transmission lines. Travelers on these roads may be concerned with visual resources, but most are traveling through the area to other, more scenic destinations. Overall, viewer concern is estimated to be low.

Viewer Exposure: moderate-to-high. The one-mile grid of land division and roads orients sensitive receptors to north-south or east-west views. The proposed Project would vary from zero miles to 1.5 miles away, and therefore, would be classified as foreground and middleground viewing distances. The number of viewers is low-to-moderate and because of travel speeds, duration of view on these roads is brief. Figure C.11-6A is representative of existing conditions seen at foreground and middleground viewing distances from Mile S3-16.3 to Mile S3-31.5.

Overall Visual Sensitivity: low-to-moderate. For viewers on county roads near the Project Miles S3-16.3 to Mile S3-31.5, and from KOP-5 specifically, the low visual quality, low viewer concern, and moderate-to-high viewer exposure lead to a low-to-moderate overall visual sensitivity.

KOP-6 - Avenue G at 105th Street West

KOP-6 was established on Avenue G at 105th Street West (0.5 miles east of 110th Street West and 0.5 miles west of 100th Street West), looking straight south. The proposed Project would be adjacent to the west boundary of the proposed residential Del Sur Ranch Development from approximately Mile S3-31.5 to S3-33.0. Figure C.11-7A – Existing Visual Condition as seen from KOP-6 – displays existing conditions at the northwest corner of this development. Avenue G is a paved, two-lane road and 105th Street West is platted, but not developed. This view is characteristic of the landscape from Mile S3-31.5 to Mile S3-35.2.

Visual Quality: low. The primary focal point in this landscape view is Portal Ridge and the skyline, formed by the San Andreas Fault, which is just south of Portal Ridge and the skyline. The rolling, grass-covered hills

Final EIR C.11-7 December 2006

create enclosure for the flat, grass-covered desert plain of the Antelope Valley. The orange-topped, white stake in the center of this photograph is a surveyor's marker. Widely scattered, dark brown, vertical lines are visible on the right side of this view. This is the existing Sagebrush Transmission Line, which parallels 110th Street West and is suspended on TSPs built of Corten steel that have weathered to a dark brown color. The visual quality of this landscape is low because of the lack of topographic features (from Mile S3-31.5 to Mile S3-35.2), lack of water features, and uninteresting vegetation. In spring, this portion of the Antelope Valley is awash in fields of orange California poppies, raising the visual quality to low-to-moderate for a season.

Viewer Concern: low. Viewer concern is the same as described for KOP-5 above for most of the year. For a few weeks in spring, viewer concern is high during poppy bloom. The Antelope Valley California Poppy Reserve is located approximately three miles northwest of the Antelope Substation, and the California Poppy Trail follows Johnson Road and 110th Street, approximately six miles south of KOP-6. California poppies are not limited to the Reserve, but extend to the ROW of the Project and beyond. After completion of the Del Sur Ranch Development, viewer concern could increase to high because of new residents with new expectations for scenic quality.

Viewer Exposure: moderate. Figure C.11-7A is representative of the Project study area that would be seen at foreground and middleground viewing distances from Mile S3-31.5 to Mile S3-35.2 (the existing Antelope Substation). The proposed Project would vary from zero miles to 0.5 miles away, and therefore, would be classified as foreground viewing distances in the Antelope Valley. The Antelope Substation is more than three miles away in this view, but is visible as foreground from Avenue J. Currently, the number of viewers is low and because of travel speeds, duration of view on Avenue G and nearby roads is brief, resulting in moderate viewer exposure. However, after completion of the Del Sur Ranch Development, viewer exposure would increase to high because of higher number of viewers and extended duration of views.

Overall Visual Sensitivity: low-to-moderate. For viewers on county roads near the Project at Mile S3-31.5 to Mile S3-35.2, and from KOP-6 specifically, the low visual quality, low viewer concern, and moderate viewer exposure lead to a low-to-moderate overall visual sensitivity for the current situation.

C.11.1.2 Geographic Areas - Segment 2 (North to South)

Segment 2 would construct a new transmission line that would extend from Antelope Substation to Vincent Substation. The line would be constructed on two 71-foot high double-circuit 220-kV TSPs from Mile S2-0.0 to S2-0.2, on 106 single-circuit 500-kV LSTs from Mile S2-0.2 to S2-21.0, and on six single-circuit 220-kV LSTs from Mile S2-21.0 to S2-21.6. Segment 2 would head southeast from Antelope Substation and cross over Portal Ridge and the San Andreas Rift Zone, Leona Valley, Anaverde Valley, and across the steep mountains of Sierra Pelona Ridge into Soledad Pass, ending at the existing Vincent Substation. Such varied terrain and landscape characteristics are accompanied by many potentially sensitive viewing opportunities by residents, recreational travelers on local roads, and back-country recreationists. Segment 2 of the proposed Project would start at the Antelope Substation in the north, construct a new 500-kV transmission line along the western edge of the City of Lancaster (Los Angeles County) traveling approximately 21.6 miles south to the Vincent Substation near Acton (unincorporated Los Angeles County) (see Figure C.11-1A/B, KOP Location Map).

KOP-7 – Avenue L Near Olive Grove

KOP-7 was established on Avenue L near an existing homestead with an olive grove. From Mile S2-0.0 to S2-4.4, the Project would traverse the flat desert plain of Antelope Valley, following multiple existing

transmission lines in the Antelope-Vincent Corridor (see Figure C.11-8A – Existing Visual Condition as seen from KOP-7). As seen in Figure C.11-8A, the proposed Project would be constructed west of the existing homestead and olive grove, and would remove the line of wooden 66-kV transmission poles and replace them with 75-foot-tall, light-weight, direct-buried TSPs, 180 feet west of and parallel to the existing alignment of the existing wooden structures farther south of Avenue L. Following this relocation, the Project would construct the proposed 500-kV LSTs in the location of the existing 66-kV transmission poles farther south of Avenue L. Figure C.11-8A is representative of existing conditions seen at foreground and middleground viewing distances from Mile S2-0.0 to Mile S2-4.4.

Visual Quality: low. Looking southwest, the primary focal point in this landscape is Portal Ridge, a fairly horizontal grass-covered ridgeline with scattered evergreen shrubs. The secondary focal point is the horizontal line formed by the desert plain as it meets the foot of Portal Ridge. The California Aqueduct runs along the lower slopes, and is visible as a faint horizontal line, but does not attract attention. Within the Project Study Area from Mile S2-0.0 to Mile S2-4.4, the visual quality of this landscape is low because of the lack of topographic features, water features, or interesting vegetation on the desert floor.

Viewer Concern: <u>low-to-moderate</u> <u>high</u> for residences, low for roads. From roads throughout the Study Area, viewer concern is <u>low</u>, the same as described for KOPs 5 and 6 above for most of the year. For a few weeks in March and April viewer concern is high when poppies are in bloom. From residences within this portion of the Study Area, <u>existing</u> viewer concern is low, based on the fact that many houses and homesteads have been built immediately adjacent to the utility corridor and existing transmission lines. <u>However</u>, for the one homestead inside the olive grove, after completion of the proposed Project, transmission lines would be located on both west and east sides, and the existing homestead literally would be situated inside the transmission line corridor. The existing olive trees are approximately 20-feet tall, and would not visually screen transmission line towers that would range in height from 113 to 188-feet high, and the conductors also would be visible, and would be lower at the sag. Therefore, viewer concern is predicted to be moderate for this residence, resulting in an overall low-to-moderate viewer concern for residences.

Viewer Exposure: high for residences, moderate for roads. The Project would be highly visible from the nearby residential properties, including three existing houses along Avenue L which are within 300-feet of the existing transmission lines in the Antelope-Vincent Corridor and one house at the olive grove which is less than 300-feet from the proposed Project. Houses east of the existing transmission corridor have no vegetative screening, and therefore the viewer exposure is high. After completion of the proposed Project, the one house inside the olive grove would have transmission lines on both west and east sides, and literally would be situated inside the corridor. The existing olive trees are approximately 20-feet tall, and would not visually screen transmission line towers that would range in height from 113 to 188-feet, and the conductors also would be visible, and would be lower at the sag. Therefore, viewer exposure also would be high for all residences and it would cross directly over one house at KOP 7, necessitating its removal Sensitive receptors also would be located on Avenue L, 70th Street West, and at the residential developments just east of the utility corridor and north and south of Avenue M. The proposed Project would vary from zero to 0.5 mile away, and therefore, would be classified as foreground viewing distances. The number of viewers at these widely scattered residences is low, but the duration of view is extended, resulting in high viewer exposure. From roads that cross the Study Area, the number of viewers is low-to-moderate and duration of view is brief because of travel speeds, resulting in moderate viewer exposure.

Overall Visual Sensitivity: <u>high</u> <u>moderate</u> for residences, low-to-moderate for roads. For residents living near the Project from Mile S2-0.0 to Mile S2-4.4, and from KOP-7 specifically, the low visual quality, <u>low-to-</u>

Final EIR C.11-9 December 2006

<u>moderate</u>high viewer concern, and high viewer exposure lead to a <u>high</u>moderate overall visual sensitivity. For travelers on nearby roads, the low visual quality, low viewer concern, and moderate viewer exposure lead to a low-to-moderate overall visual sensitivity for the current situation. However, the proposed Project includes removal of one residence in this area which would result in high overall visual sensitivity.

KOP-8 – Avenue N at Agena Road

KOP-8 was established on Avenue N at Agena Road (see Figure C.11-9A – Existing Visual Condition as seen from KOP-8). From Mile S2-4.4 to S2-6.4, the proposed Project would cross over the crest of Portal Ridge. Because Portal Ridge forms a landscape backdrop for much of the Antelope Valley and the City of Lancaster, any additional industrial character structures in the skyline would be a potential visual impact. There are numerous major roads from which the Project would be viewed with Portal Ridge as a backdrop or with towers seen on the skyline, including 70th Street West, 60th Street West, Avenue M-8, Godde Hill Road, and Avenue N. Numerous minor roads and residential streets also provide views to the proposed Project for nearby residents and visitors to Lancaster.

Visual Quality: low-to-moderate. The primary focal point in this landscape is the skyline ridge, which forms an extensive vertical backdrop against the flat desert plain and flat residential neighborhoods of Lancaster. Secondary focal points are the vertical lines and angular forms of the various transmission line structures in the Antelope-Vincent Corridor, which are seen crossing Portal Ridge in this view. The California Aqueduct forms a horizontal line crossing the lower slopes of Portal Ridge throughout this portion of the Study Area, and in the foreground of this view, a chain link fence surrounds the Antelope Valley East Kern (AVEK) Water Treatment Facility. Portal Ridge in its natural state exhibits a moderately high degree of intactness and coherence of form and character with moderate visual variety. But the presence of transmission lines and the aqueduct has introduced an industrial character to this otherwise natural-appearing landscape, lowering visual quality to a low-to-moderate level. Figure C.11-9A is representative of existing conditions seen at foreground and middleground viewing distances from Mile S2-4.4 to Mile S2-6.4.

Viewer Concern: moderate. Visitors and residents enjoy the predominantly rural setting with panoramic sightlines to Portal Ridge on the west side of Lancaster. Nearby residents enjoy the natural-appearing backdrop to their homes and neighborhoods, with panoramic vistas to the round landforms and mottled vegetation. Because residents are familiar with and accepting of existing transmission lines in the Antelope-Vincent corridor, viewer concern is determined to be moderate.

Viewer Exposure: high. Because there is no screening by landforms or vegetation, the Project would be highly visible on the slopes of Portal Ridge at foreground and middleground viewing distances from Mile S2-4.4 to Mile S2-6.4, and specifically as seen from KOP-8. The duration of view would be extended from these residential neighborhoods, and the number of potential viewers would be high; therefore the overall viewing exposure would be high.

Overall Visual Sensitivity: moderate. For residents and visitors to western Lancaster in general and KOP-8 specifically, the low-to-moderate visual quality, moderate viewer concern, and high viewer exposure lead to a moderate overall visual sensitivity of the visual setting and viewing characteristics.

KOP-9 - Godde Hill Road

At approximately Mile S2-6.4, the proposed Project would cross over Godde Hill Road, just downhill on the north side of Godde Pass on Portal Ridge. KOP-9 was established on Godde Hill Road at the center of the existing utility corridor. There is a turnout at this location along the twisting, two-lane paved road. During site

investigations, it was noted at several times that people were stopped at the turnout, looking at the five existing transmission lines that cross the road at this location (see Figure C.11-10A – Existing Visual Condition as seen from KOP-9).

Visual Quality: low-to-moderate. The primary focal points in this landscape are the industrial character transmission line towers and conductors that punctuate the skyline view of Portal Ridge and the different tower configurations of each line. Secondary focal points are the scattered dark-green and gray-green shrubs on the gently rolling, grass-covered hillsides. Access spur roads are present in the landscape, but have revegetated to such an extent that they are not visually evident. The interesting landforms and vegetative patterns have moderate visual quality, but the presence of these industrial character structures lowers visual quality to a low-to-moderate level.

Viewer Concern: moderate. No residences are located along Godde Hill Road in the vicinity of KOP-9. While driving over Godde Pass, visitors and residents enjoy the predominantly rural setting with panoramic sightlines to the City of Lancaster on the north and Leona Valley to the south. Because residents are familiar with and accepting of existing transmission lines in the Antelope-Vincent corridor, viewer concern is determined to be moderate.

Viewer Exposure: moderate-to-high. The proposed Project would be situated on the southwest (right) side of the existing lines in this view, and would be visible from zero miles to 0.5 miles away, resulting in foreground viewing distances. Figure C.11-10A is representative of existing conditions seen at foreground viewing distances from Mile S2-6.3 to S2-6.7. Because there is no screening by landforms or vegetation, the Project would be highly visible on the slopes of Portal Ridge at foreground viewing distances as seen from KOP-9. The duration of view would be brief on this twisting mountain road, and the number of potential viewers would be high; therefore the overall viewing exposure would be moderate-to-high.

Overall Visual Sensitivity: moderate. For residents and visitors traveling over Portal Ridge and Godde Pass on Godde Hill Road, and as seen from KOP-9 specifically, the low-to-moderate visual quality, moderate viewer concern, and moderate-to-high viewer exposure lead to a moderate overall visual sensitivity of the visual setting and viewing characteristics.

KOP-10 - Elizabeth Lake Road

KOP-10 was established on Elizabeth Lake Road near several existing rural ranchettes figure C.11-11A – Existing Visual Condition as seen from KOP-10). From Mile S2-6.7 to S2-7.9, the proposed Project would be visible from Elizabeth Lake Road and these residential ranchettes. The proposed Project would be constructed on the southwest side of the existing transmission lines and would pass directly over one uninhabited and three inhabited residences in this vicinity. The AV Buffalo Ranch is one of the affected properties, as shown in Figure C.11-11A. At approximately Mile S2-7.5, the proposed Project would enter property owned by Ritter Ranch Development, a large planned development currently under construction. Figure C.11-11A is representative of existing conditions seen at foreground viewing distances from Mile S2-6.7 to Mile S2-7.9.

Visual Quality: moderate-to-high. The primary focal points in this landscape are the unique wildlife – the American Bison – and the horizontal skyline backdrop formed by Portal Ridge. Additional focal points are created by the large, industrial transmission line structures of various designs and configurations – tall, narrow, gray LSTs, wider, shorter, gray LSTs, and white TSPs. Secondary focal points are the houses and ranch buildings, fence lined driveways, and residential landscaping. Without the transmission lines on the

Final EIR C.11-11 December 2006

skyline, this rural, pastoral landscape would exhibit high visual quality, but the introduction of these towers and conductors has lowered the visual quality to a moderate-to-high level.

Viewer Concern: high. During scoping meetings held in Rosamond and Palmdale on May 9 and May 10, 2005, respectively, residents of the three houses that would be removed as a result of the Project spoke in opposition to the proposed route based on visual impacts, housing, and land use impacts (see Section F.2.2). Residents suggested possible realignments but did not oppose the Project, only the removal of homes. Neighbors along Elizabeth Lake Road also spoke in opposition of the proposed alignment and in support of their friends and neighbors. The road is less than 0.5 miles from the proposed Project, and three houses are directly under the proposed alignment, making this a foreground landscape view. Based on the intensity of comments during scoping, viewer concern is determined to be high.

Viewer Exposure: high. The Project would be highly visible from these residential properties because it would cross directly over three houses. As seen from Elizabeth Lake Road, the Project would be highly visible on the slopes of Portal Ridge at foreground viewing distances from Mile S2-6.7 to Mile S2-7.9, and specifically as seen from KOP-10. The duration of view would be extended from these residential neighborhoods, and the number of potential viewers would be moderate. With the development of Ritter Ranch, immediately adjacent to this KOP, the number of viewers is predicted to be high. Therefore the overall viewing exposure would be high.

Overall Visual Sensitivity: high. For residents of Elizabeth Lake Road in general and KOP-10 specifically, the moderate-to-high visual quality, high viewer concern, and high viewer exposure lead to a high overall visual sensitivity of the visual setting and viewing characteristics.

KOP-11 - Ritter Ranch from Godde Hill Road

KOP-11 was established on the south side of Portal Ridge on Godde Hill Road, looking across the valley at Sierra Pelona Ridge and the Ritter Ranch development (see Figure C.11-12A – Existing Visual Condition as seen from KOP-11). At approximately Mile S2-7.9, the proposed Project would cross Elizabeth Lake Road, turn south for 0.1 miles, then turn west and make a large "C" shape around the planned residential developments of Ritter Ranch in the City of Palmdale. At approximately Mile S2-14.8, the proposed Project would rejoin the Antelope-Vincent Corridor. Representative of existing views into Ritter Ranch is the view from Godde Hill Road.

Visual Quality: high. The primary focal points in this landscape are the strong horizontal line created by Sierra Pelona Ridge, the rolling, grass-covered foothills beneath, and the long, narrow valley of the San Andreas Rift Zone traversed by Elizabeth Lake Road. Secondary focal points are several small, widely scattered communication towers on the skyline, plus numerous draws that dissect Sierra Pelona Ridge and its foothills, and then finally, the eye is drawn to rows of orchard trees at Messer Ranch at the left-center of this view. Open trenches on the valley floor in this view are Ritter Ranch infrastructure developments. Just barely visible in this late-afternoon view, near the top of Sierra Pelona Ridge but below the skyline, are large LSTs of the Midway-Vincent No. 1 500-kV ROW. The proposed Project would build a second 500-kV transmission line parallel to this existing line. The existing LSTs and conductors have weathered to a dull gray, making them almost transparent on this mountainside. Cut-slopes and fill-slopes of the access roads and spur roads have revegetated and blend in with the mottled texture of existing vegetation. The top of Sierra Pelona Ridge is approximately four miles away from KOP-11, making views to this segment of the proposed Project in Ritter Ranch a middleground viewing distance. The landscape visible from KOP-11 is substantially natural-appearing, consisting of a foreground of rolling landforms and grass-covered hills. In the middleground, there

is a mosaic of grass- and shrub-covered rolling foothills that lead the eye to the skyline. On Sierra Pelona Ridge, existing vegetation is mottled in appearance with many hues of tan and green in this summer scene. The landscape exhibits a high degree of intactness and coherence of form and character with substantial visual variety and has a high level of visual quality.

Viewer Concern: moderate. No residences are located along Godde Hill Road in the vicinity of KOP-11. While driving over Godde Pass, visitors and residents enjoy the predominantly rural setting with panoramic sightlines to Leona Valley and Sierra Pelona Ridge to the south. Because residents are familiar with and accepting of existing transmission lines in the Antelope-Vincent corridor, viewer concern is determined to be moderate.

Viewer Exposure: moderate. At approximately Mile S2-13.86, the proposed Project would cross the property line between the Ritter Ranch Development and the Anaverde Development, which is a residential development currently under construction in the City of Palmdale. New residential streets in the Anaverde planned residential community would provide middleground views to the proposed Project. Existing roads and trails on Sierra Pelona Ridge, including Ana Verde Mountainway Trail, Edison Road Trail, Ritter Mountainway Trail, and Sierra Pelona Mountainway Trail, provide foreground and middleground views to the proposed Project for hikers and equestrians. Figure C.11-12A is representative of existing conditions seen at foreground and middleground viewing distances from Mile S2-7.9 to Mile S2-14.8. The duration of view would be brief on this twisting mountain road, and the number of potential viewers would be high; therefore the overall viewing exposure would be moderate. Upon completion of Ritter Ranch, viewing exposure would increase to high.

Overall Visual Sensitivity: moderate-to-high. For residents and visitors traveling over Portal Ridge on Godde Hill Road and looking at Ritter Ranch, and KOP-11 specifically, the high visual quality, moderate viewer concern, and moderate viewer exposure lead to a moderate-to-high overall visual sensitivity of the visual setting and viewing characteristics.

KOP-12 – Sierra Pelona Ridge from Avenue S

KOP-12 was established on Avenue S looking southwest at Sierra Pelona Ridge. At approximately Mile S2-14.8, the proposed Project would rejoin the Antelope-Vincent Corridor. The portion of the Midway-Vincent No. 3 line between Mile S2-14.8 and the Vincent Substation would connect into the proposed new segment of 500-kV transmission line from Antelope to form the Antelope-Vincent 500-kV transmission line. From Mile S2-14.8 to approximately Mile S2-21.0, a new segment of 500-kV transmission line would be constructed at the east side of the corridor to replace the appropriated portion of the Midway-Vincent No. 3 transmission line, reinstating its route to the Vincent Substation (see Section B.2.1 – Project Description).

Visual characteristics of the landscape are similar from approximately Mile S-2-14.8 to Mile S2-20.2. In this segment, the proposed Project would be constructed on the northeast side of existing transmission lines in the Antelope-Vincent Corridor. This segment would be visible from many different vantage points, including new residential streets in the Anaverde and Palmdale 1000 Developments, existing residential streets in Palmdale and Acton, Tuckerway Ranch Road, Peaceful Valley Road, and Avenue S (see Figure C.11-14A – Existing Visual Condition as seen from KOP-12). Currently under construction, the Anaverde Development is visible on the right in this photograph and the proposed Palmdale 1000 Development would be constructed on vacant lands to the left side in this photograph.

Final EIR C.11-13 December 2006

Visual Quality: low-to-moderate. The primary focal points in this landscape are the rounded landforms that create a strong horizon line at Sierra Pelona Ridge, the rolling, grass-covered foothills beneath, and the communication towers on the skyline. Secondary focal points are the transmission lines with various structure designs and configurations (LSTs and TSPs) and the row of wooden poles at the sub-transmission line along Avenue S. Because of the multitude of existing and new streets near this segment of the proposed Project, it would be seen at foreground and middleground viewing distances. From approximately Mile S2-14.8 to Mile S2-20.2, the proposed Project would be located at a midslope location, below the skyline, and new towers and conductors therefore would not be seen in silhouette from most vantage points. Figure C.11-14A is representative of existing conditions seen at foreground and middleground viewing distances from Mile S2-14.8 to Mile S2-20.2. The overall visual quality of this portion of the Project is low-to-moderate.

Viewer Concern: moderate. Visitors and residents enjoy the predominantly rural setting with panoramic sightlines to the eastern end of Sierra Pelona Ridge in the City of Palmdale. Nearby residents enjoy the natural-appearing backdrop to their homes and neighborhoods, with panoramic vistas to the grass-covered, rounded landforms. Because residents are familiar with and accepting of existing transmission lines in the Antelope-Vincent corridor, viewer concern is determined to be moderate.

Viewer Exposure: moderate-to-high. Because there is no screening by landforms or vegetation, the Project would be highly visible on the slopes of Sierra Pelona Ridge at foreground and middleground viewing distances from Mile S2-14.8 to Mile S2-20.2 in general, and specifically as seen from KOP-12. The duration of view would be brief from Avenue S and the number of potential viewers would be high; therefore the overall viewing exposure would be moderate-to-high.

Overall Visual Sensitivity: moderate. For residents and visitors to Avenue S looking at Sierra Pelona Ridge in Palmdale, and KOP-12 specifically, the low-to-moderate visual quality, moderate viewer concern, and high viewer exposure lead to a moderate overall visual sensitivity of the visual setting and viewing characteristics.

KOP-13 - Sierra Highway and Antelope Valley Freeway

KOP-13 was established on Sierra Highway looking at the Antelope Valley Freeway corridor. At approximately Mile S2-20.4 to S2-20.6, the proposed Project would cross over the Antelope Valley Freeway (six-lane State Route 14), the Sierra Highway (2-lane State Highway), and the Acton/Vincent Grade Metrolink railroad (two-tracks) (see Figure C.11-15A – Existing Visual Condition as seen from KOP-13).

Visual Quality: low. The primary focal points in this landscape are the rounded landforms that create a strong horizon line as Sierra Pelona Ridge terminates at Soledad Pass in the center of this photograph, multiple LSTs and TSPs of various transmission lines crossing the highways, and on the right, the rolling, grass-covered foothills of the San Gabriel Mountains that create enclosure for this view. The proposed Project would be constructed on the far side (east) of the two large LSTs in the center of the photograph, and the transmission line would cross this view from left to right on its way to the Vincent Substation. Existing visual quality of the undeveloped landscape in this view was low-to-moderate and the introduction of the freeway, highway, railroad, and transmission lines has lowered visual quality to a low level.

Viewer Concern: moderate. Because of the multitude of existing transportation routes in this segment, the proposed Project would be seen at foreground and middleground viewing distances. From approximately Mile S2-20.2 to Mile S2-21.0 as represented in Figure C.11-15A, the proposed Project would be visible against the skyline from many different angles and views, and therefore, new towers and conductors would be seen in silhouette from various vantage points. Figure C.11-15A is representative of existing conditions seen at

foreground and middleground viewing distances from Mile S2-20.2 to Mile S2-21.0. Travelers on the Sierra Highway and Antelope Valley Freeway enjoy the panoramic views of Soledad Pass that are portrayed in this view, but the primary use on both of these thoroughfares is for commuting. Therefore, the concern with scenic attributes of the landscape would be moderate. Any blockage of views, such as would occur with the new transmission line in the proposed Project, may be seen as an adverse visible change.

Viewer Exposure: moderate-to-high. Because there is no screening by landforms or vegetation, the Project would be highly visible in the middleground as seen from KOP-13. The duration of view would be brief for travelers on the Sierra Highway and Antelope Valley Freeway and moderate for commuters at the train station. The number of viewers would be high, considering the volume of traffic on all three travel routes, leading to a moderate-to-high viewer exposure rating.

Overall Visual Sensitivity: moderate. For travelers on the Sierra Highway, Antelope Valley Freeway and railroad in general, and KOP-13 specifically, the low visual quality, moderate viewer concern, and moderate to-high viewer exposure lead to a moderate overall visual sensitivity of the visual setting and viewing characteristics.

KOP-14 - Acton/Vincent Grade Metrolink Park and Ride

KOP-14 was established at the Acton/Vincent Grade Metrolink Park and Ride access road, looking south to the Vincent Substation. The proposed Project would be located approximately 0.1 miles west of the Acton/Vincent Grade Metrolink Park and Ride, and looking south from this facility, the Vincent Substation and a multitude of transmission lines are visible (see Figure C.11-16A – Existing Visual Condition as seen from KOP-14). Looking between the two LSTs in the center of this photograph, the viewer can see a multitude of parallel transmission lines exiting the Vincent Substation and heading south over the San Gabriel Mountains. The proposed Project would construct a new lattice steel tower left of these two towers, and then the new line would lead into the substation (see Section B.2.1- Project Description). This photograph is representative of the Project from Mile S2-20.5 to its terminus at Mile S2-21.6 in the substation. The Angeles Forest Highway is approximately 0.25 miles east of this location, and it runs parallel to the transmission line, thereby affording foreground views to the Project.

Visual Quality: low. The focal points in this landscape are all of the industrial character transmission lines, towers, and conductors that dominate the landscape. Many of the towers and lines are seen in silhouette against the skyline, furthering their visual contrast with the natural landscape. Natural vegetation in the area consists of native grasses, sagebrush, scrub pine, and junipers, all of which provide little-to-no vegetative screening for the large industrial character structures. The existing Vincent Substation is located on a small knoll surrounded by hills at the upper end of Soledad Canyon near Soledad Pass and south of the City of Palmdale. Figure C.11-16A is representative of existing conditions seen at foreground and middleground viewing distances from Mile S2-20.5 to its terminus at the existing Vincent Substation at Mile S2-21.6. The resulting visual quality of this landscape is low.

Viewer Concern: moderate. Commuters at the Park and Ride enjoy the panoramic views of Soledad Canyon, as portrayed in this view, on their way to Los Angeles. However, the primary use at the Park and Ride is for commuting. Therefore, the concern with scenic attributes of the landscape would be moderate.

Viewer Exposure: high. Because there is no screening by landforms or vegetation, the Project would be highly visible in the foreground as seen from KOP-14. The duration of view would be moderate for

Final EIR C.11-15 December 2006

commuters at the train station. The number of viewers would be high, considering the volume of traffic, leading to a high viewer exposure rating.

Overall Visual Sensitivity: moderate. For commuters at the Acton/Vincent Grade Metrolink Park and Ride in general, and KOP-14 specifically, the low visual quality, moderate viewer concern, and high viewer exposure lead to a moderate overall visual sensitivity of the visual setting and viewing characteristics.

C.11.2 Regulatory Framework

C.11.2.1 Federal

The proposed Project and its alternatives would not cross any federal lands and, therefore, there are no federal regulations for visual resources that would apply in this EIR.

C.11.2.2 State / Regional

The proposed Project and its alternatives would not cross any state lands and, therefore, there are no state regulations for visual resources that would apply in this EIR. No visual policies applicable to the proposed project have been identified.

C.11.2.3 Local

Jurisdictions crossed by the proposed Project include Kern County, Los Angeles County, and the Cities of Lancaster and Palmdale.

Kern County

Scenic Highways Element

According to the Kern County General Plan, Circulation Element, "A Scenic Route is any freeway, highway, road, or other public right-of-way, which traverses an area of exceptional scenic quality. A scenic route must be officially set as a Scenic Route by the Kern County Board of Supervisors, or the State of California. A route shall not be selected as scenic until a plan and program for the protection and enhancement of adjacent roadside view shed land is available for implementation." (County of Kern, 2004).

The California Scenic Highways Master Plan designates three State highways in Kern County as an "Eligible State Scenic Highway." Route 1 consists of State Route 14 and State Highway 395, beginning north of Mojave and continuing to the Inyo County line. Route 2 consists of State Route 58 between Mojave and Boron. Route 3 consists of five miles of State Route 41 in northwest Kern County. (Kern County General Plan, 2005.)

The Antelope Transmission Project Segments 2 and 3 would not be visible from any of these Eligible State Scenic Highways, and therefore, this criterion will be eliminated from further consideration in this EIR.

Scenic Corridor Combining District

Under the Kern County General Plan, Title 19 ZONING, Chapter 19.74 SCENIC CORRIDOR (SC) COMBINING DISTRICT, is the following direction for a Scenic Corridor Combining District. (County of Kern, 2005).

• 19.74.010 Purpose and application. The purpose of the Scenic Corridor (SC) combining district is to designate areas which contain unique visual and scenic resources as viewed from a major highway or freeway wherein the siting of off-site advertising signs needs to be reviewed on a case-by-case basis to safeguard the scenic qualities of

the natural environment and the visual qualities of primary entranceways into the county. The regulations established by the SC district shall be in addition to the regulations of the base commercial or industrial zoning district with which the SC district is combined. (Ordinance G-6297 § 57 (part), 1996)

The Project would not cross any Scenic Corridor Combining Districts in Kern County, and therefore, this criterion will be eliminated from further consideration in this EIR.

Los Angeles County

Scenic Highways Element

The California Government Code, § 65302(h) requires all city and county general plans to include a scenic highway element for the development, establishment and protection of scenic highways pursuant to the provisions of Article 2.5 (commencing with § 260) of Chapter 2 of Division 1 of the Streets and Highways Code. The Los Angeles County Board of Supervisors adopted the Scenic Highways Element of the General Plan in 1974 (County of Los Angeles, 1974). The purpose of this element is to establish and protect scenic highways in Los Angeles County by identifying and evaluating a system of existing roads that traverse areas of scenic beauty and interest. Stated in this Element (County of Los Angeles, 1990): "It shall be the policy of Los Angeles County to:

- 1. Establish a countywide scenic highway system in urban and rural areas.
- 2. Encourage utilization of appropriate existing roads as scenic highways rather than the construction of new routes.
- 3. Protect and enhance esthetic resources within corridors of designated scenic highways.
- 4. Establish and maintain rural scenic highways to provide access to scenic resources and serve recreational users.
- 5. Establish and maintain urban scenic highways to provide access to interesting and esthetic manmade features, historical and cultural sites, and urban open space areas.
- 6. Provide a comprehensive scenic highway system which safely accommodates various forms of transportation compatible with scenic highway criteria and standards.
- 7. Develop and apply standards to regulate the quality of development within corridors of designated scenic highways.
- 8. Remove visual pollution from designated scenic highway corridors.
- 9. Require the development and use of esthetic design considerations for road construction, reconstruction or maintenance for all designated scenic highways.
- 10. Increase governmental commitment to the designation of scenic highways and protection of scenic corridors.
- 11. Encourage the fair distribution of social and economic costs and benefits associated with scenic highways.

In Los Angeles County, there is only one officially designated State Scenic Highway – the Angeles Crest Highway through the Angeles National Forest, several miles southeast of the Project Study Area for visual resources. It is a USDA Forest Service Scenic Byway and State Scenic Highway and winds along the spine of the San Gabriel Mountains, however, the Project would not be visible from this highway. The only "Eligible State Scenic Highways" are many miles farther south and in different viewsheds than the Project, and therefore, this criterion will be eliminated from further consideration in this EIR.

Los Angeles County General Plan Comprehensive Update and Amendment

Los Angeles County is now preparing the General Plan Comprehensive Update and Amendment, with a vision for "Shaping the Future 2025." According to the draft General Plan, the new Circulation Element will rescind the adopted Scenic Highway Element. It its place, a scenic highway sub-element will be added to the Circulation Element. This revision will eliminate most urban routes depicted on the adopted Scenic Highway

Final EIR C.11-17 December 2006

Element, and will in turn focus on the scenic qualities present in rural routes. Relevant goals and policies, and revised procedural practices will be incorporated into this sub-element.

Relevant objectives and policies from the current Scenic Highway component of the Circulation Element will be incorporated as a sub-element of the updated Circulation Element. Following are goals and policies of the Draft Circulation Element.

GOALS

• C-6: A scenic highway system that preserves and enhances natural resources within its corridors while serving the public through various transportation modes and access to recreational opportunities.

POLICIES

- C-6.1 Provide a comprehensive scenic highway system, as shown on the Scenic Highway Plan that safely accommodates various forms of transportation and provides access to scenic resources.
- C-6.2 Protect and enhance aesthetic resources within corridors of designated scenic highways.

In the Draft General Plan, as County policy, Circulation components include highways under the jurisdiction of Los Angeles County. Scenic highways are adopted by County policy, regardless of their regulating agency, in order to apply design standards and conditions to projects on surrounding County-regulated lands.

The draft Conservation and Open Space Element sets policy direction for the open space-related resources of Los Angeles County. These resources include land and water areas devoted to recreation, scenic beauty, conservation and use of natural resources, agriculture and mineral production. The Element's policies are based on the need to conserve natural amenities, protect against natural hazards and meet the public's desire for open space experiences. To protect areas of significant natural resources, the Element recommends the retention of these areas in non-urban or open space use. Special emphasis is placed on the protection of hillside character and Significant Ecological Areas (SEAs). A scenic objective in the Conservation and Open Space Element is

• "(16) Manage hillside development to preserve significant scenic features and major ridges."

Antelope Valley Areawide General Plan

The County Board of Supervisors adopted the Antelope Valley Areawide General Plan on December 4, 1986. Under Part V. Policy Statements, the general plan states (County of Los Angeles, 1986):

Community Design: Compatibility and Proximity of Urban Activities

• 62. Mitigate where possible undesirable impacts of adjacent land uses (i.e., noise interruption, visual intrusion, and airborne emissions) through utilization of appropriate buffers, building codes and standards.

Community Design: Relationship of Urban and Natural Environments

• 63. Carefully integrate physical land use development into the natural environmental setting.

Community Design: Physical Appearance/Community Image

• 65(b). Transmission lines should be located underground where feasible.

Community Design: Scenic Highways

• 93. Implement the County Scenic Highways Element (as amended) in stages as funds become available.

City of Lancaster

General Plan

The City of Lancaster amended its General Plan on October 3, 1994. Part II of the General Plan is a Plan for the Natural Environment, including a section on Scenic Resources that states (City of Lancaster, 1994):

- Objective 3.8 Preserve and enhance important views within the City, and significant visual features which are visible from the City of Lancaster.
- Policy 3.8.1 Preserve views of surrounding ridgelines, slope areas and hilltops, as well as other scenic vistas. Specific Actions:
- 3.8.1(a) Encourage creation of vistas and view corridors of community or neighborhood value during the development review process, through the siting of buildings to avoid blocking views and view corridors.
- 3.8.1(b) Through the implementation of the policies outlined in the Plan for Physical Development, ensure that the development of hillside lands is consistent with preserving their natural character.

City of Palmdale

General Plan

The City of Palmdale amended its General Plan on January 25, 1993. The Environmental Resources Element, Part G, includes a section on Scenic Roadway Designations that states (City of Palmdale, 1993):

- The City shall protect scenic highways in the Planning Area. Scenic highways and roads have been identified in Policy ER 1.2.2 of Section 2. They include the Antelope Valley Freeway south of Avenue R, Barrel Springs Road, Tierra Subida Avenue, Sierra Highway (south of Avenue S), Elizabeth Lake Road, Pearblossom Highway, Bouquet Canyon Road, and Godde Hill Road. These roadways possess scenic qualities that have provided outdoor recreation experience to travelers and hikers.
- The City should apply to the State Scenic Highway Advisory Committee for State designation of these roadways.
- The City will establish design criteria for designated scenic highways that require specific design standards for nearby development. These standards could include the following: height limits to preserve view corridors, maintenance of roadside landscaping, limits on grading activities along highways, and the prohibition of overhead utility rights of way along scenic highways. In addition, a visual impact analysis may be required for developments within the overlay zone in order to preserve the visual qualities of scenic routes.

The Antelope Transmission Project, Segments 2 & 3 would cross over Godde Hill Road, Elizabeth Lake Road, the Antelope Valley Freeway, and the Sierra Highway, and therefore, these City of Palmdale elements will apply.

C.11.3 Applicant-Proposed Measures (APMs)

Three Applicant-Proposed Measures (APMs) for visual resources were presented by SCE in the Proponent's Environmental Assessment (PEA) (SCE, 2005). The following proposed APMs would be implemented as part of the proposed Project to minimize visual impacts during the construction and operational phases of the Project. In many cases, additional mitigation is proposed to reduce significant visual impacts of the Project to less-than-significant levels.

Table C.11-1. Applicant-Proposed Measures – Visual Resources				
APM VIS-1	Debris removal. During project construction, the work site would be kept clean of debris and construction waste. Material and construction storage areas would be selected to minimize views from public roads, trails and nearby residences.			

Final EIR C.11-19 December 2006

APM VIS-2	Location of new spur roads. New access spur roads would be located to minimize visibility from public roads and trails especially in the Portal/Ritter Ridge (Segment 2) lands and the Tehachapi Mountains areas (Segment 3).
APM VIS-3	Spacing of towers next to the Pacific Crest Trail. Where the proposed (or Alternate C [EIR Alternative 1]) 220 kV T/L crosses the Pacific Crest Trail north of Oak Creek Road, the transmission towers would be placed with a minimum setback of 300 feet from the trail.

C.11.4 Environmental Impacts and Mitigation Measures

C.11.4.1 Visual Resource Methodology

The Project would cross private lands under the jurisdiction of Kern County, Los Angeles County, and the Cities of Lancaster and Palmdale. Because no federal lands would be traversed by the Project, this visual analysis used the **Visual Sensitivity/Visual Change (VS/VC)** method to assess the visual effects of the Project on existing landscapes. The VS/VC criteria were ascertained from the General Plans of Kern and Los Angeles Counties, and the Cities of Lancaster and Palmdale, all of which have criteria for visual resource management. Los Angeles County has designated several roads as Priority Two Scenic Highways, indicating a high sensitivity for scenic integrity of landscapes within these viewsheds.

As explained above, the visual resource analysis included a combination of information review, agency consultation, field reconnaissance, analysis of aerial photographs and topographic maps, on-site photography, data mapping, computerized visual simulation, and data evaluation. Observer positions were analyzed for their potential to display typical or worst-case visual effects of the Project to the scenic and aesthetic landscape. From dozens of potential observer positions, 15 locations were selected as Key Observation Positions (KOPs) for detailed analysis of the proposed Project (with Options A and B), and two additional KOPs were selected for analysis of Alternatives 1 and 4 (because of different alignments affecting different landscapes). KOPs were established at significant viewpoints that view the Project, regardless of whether they were located on private or public lands.

At each KOP, photographs were taken with a Canon-20D digital camera equipped with the 18-55 mm zoom lens set at a "normal" focal length. When printed on 11x17 paper, each photograph appears "life-size" when held approximately 18-inches from the eye. From among the photographs taken, the best was selected to represent the view from each KOP. Computerized visual simulations were prepared using AutoCAD and 3D-Studio software to create accurate, computerized depictions showing the visual effects of the Project. In the Affected Environment section, the existing visual situation is described in detail for each of the KOPs. Using the computerized visual simulations, predicted future visual effects of the Project for each KOP are described in the Environmental Consequences section. The KOP Map is presented at the end of the Visual Resource Section (see Figure C.11-1).

Visual Sensitivity/Visual Change Components

The VS/VC methodology used to analyze the Project included a characterization of the visual sensitivity of existing landscapes and the characteristics of existing visual changes apparent in the landscape. At each KOP, existing conditions of the landscape and viewing circumstances were described, leading to a conclusion about the viewpoint's overall visual sensitivity.

Visual sensitivity consists of three components: visual quality, viewer concern, and viewer exposure. The description of visual quality notes the existing built structures and landscape features that contribute to overall visual quality. Viewer concern can be described as the personal expectations for the landscape that are held by

the viewing public. These concerns were elicited during scoping. Viewer concern is often reflected in public policy documents that identify landscapes of special concern (vista points or ridgelines) or roadways with special scenic status (scenic highways). Viewer exposure also affects a landscape's overall visual sensitivity. Landscapes that have very low viewer exposure (based on landscape visibility, the viewing distance, the number of people who view the landscape, or the duration of time that the landscape can be viewed) will tend to be less sensitive to overall visual change in the context of human experience of visual impacts. Landscapes with higher viewer exposure are more sensitive to overall visual changes.

Project-induced visual change was determined for each KOP based on field studies of anticipated visual contrast, project dominance, and the potential for view blockage of higher quality landscape features. Project-induced visual change can result from aboveground facilities, vegetation removal, landform modification, component size or scale relative to existing landscape characteristics, and the placement of project components relative to developed features. The experience of visual change can also be affected by the degree of available screening by vegetation, landforms, and structures; distance from the observers; atmospheric conditions; and angle of view.

Computerized visual simulations were prepared to aid in the assessment of visual change and overall impact significance, which was arrived at by evaluating the extent of visual change in the context of the existing visual sensitivity. The KOP analyses were thoroughly documented and summarized in tabular format (see Table C.11-3, Impact and Mitigation Summary – Visual Resources).

In order to accommodate the various State, county and city regulations presented in Section C.11.2, Regulatory Framework, the visual analysis used a single methodology to determine the degree of impact significance. Visual impact significance is a function of two factors – overall VS/VC. Table C.11-2 illustrates the general relationship between visual sensitivity and visual change. This table was used primarily as a consistency check between individual KOP evaluations. Determinations of visual sensitivity and visual change were based primarily on analyst experience and site-specific circumstances.

The relationships presented in Table C.11-2, on the following page, are intended as a guide only, recognizing that site-specific circumstances may warrant a different conclusion. However, it is reasonable to conclude that lower visual sensitivity ratings combined with lower visual change ratings will generally correlate well with lower degrees of impact significance when viewed on-site. Conversely, higher visual sensitivity ratings combined with higher visual change ratings will tend to result in higher degrees of visual impact occurring at the site.

Implicit in this rating methodology is the acknowledgment that for a visual impact to be considered significant two conditions generally exist: (1) the existing landscape is of reasonably high quality and is relatively valued by viewers; and (2) the perceived incompatibility of one or more elements or characteristics of the Project tends toward the high extreme, leading to a substantial reduction in visual quality.

C.11.4.1 Criteria for Determining Significance

An adverse visual impact occurs when: (1) a proposed action perceptibly changes existing or desired features of the physical environment so that they no longer appear to be fitting in the characteristic landscape; or (2) a proposed action introduces new features in the physical environment that are perceptibly uncharacteristic of, and discordant with, the subject landscape. Changes that seem uncharacteristic are those that appear out of place, discordant, or distracting, and do not repeat form, line, color, texture, pattern, or scale common to the valued landscape character being viewed. The degree of the visual impact depends upon how noticeable the

Final EIR C.11-21 December 2006

adverse change may be, that is, the magnitude and extent of deviations from the existing visual conditions. The noticeability of a visual impact is a function of the visual characteristics of Project features, as compared to existing visual conditions, degree of visual contrast, and viewing conditions (distance, duration of view, angle of view, atmospheric conditions, etc).

Table C.11-2. General Guidance for Review of Visual Impact Significance						
Visual Sensitivity	Visual Change					
	Low	Low to Moderate	Moderate	Moderate to High	High	
Low	Not Significant ¹	Not Significant	Adverse but Not Significant ²	Adverse but Not Significant	Adverse but Not Significant	
Low to Moderate	Not Significant	Adverse but Not Significant	Adverse but Not Significant	Adverse but Not Significant	Adverse and Potentially Significant ³	
Moderate	Adverse but Not Significant	Adverse but Not Significant	Adverse but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant	
Moderate to High	Adverse but Not Significant	Adverse but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant	Significant ⁴	
High	Adverse but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant	Significant⁴	Significant	

¹ Not Significant – Impacts may or may not be perceptible but are considered minor in the context of existing landscape characteristics and view opportunity.

For this visual resource analysis, assessment of the likely visual impacts that would occur as a result of the proposed Project and alternatives was accomplished by establishing representative viewpoints from which to conduct a detailed analysis of the Project. At each of these KOPs, photographs of existing conditions were taken, field analysis was performed, vantage points were established, distance zones were determined, and visibility conditions were noted. Also for each KOP, a computerized visual simulation was prepared with which to further evaluate the preliminary impact determination. A conclusion on initial impact significance was then reached. If a determination was made that the resulting impact would be significant, the impact situation was further evaluated against the application of feasible mitigation measures in an effort to reduce the visual impact to a less-than-significant level, if possible. A final conclusion on impact significance was then reached. The results of the visual analysis conducted for the proposed Project is presented in Table C.11-3. Also

² Adverse but Not Significant – Impacts are perceived as negative but do not exceed environmental thresholds.

³ Adverse and Potentially Significant – Impacts are perceived as negative and may exceed environmental thresholds depending on project and site-specific circumstances.

⁴ Significant – Impacts with feasible mitigation may be reduced to levels that are not significant or avoided all together. Without mitigation, significant impacts would exceed environmental thresholds.

provided at the end of the Visual Resources section are all Existing Condition Photographs and Visual Simulations for the KOPs.

An assessment was made at each KOP of existing visual conditions, visual contrast, and project dominance, using the Visual Sensitivity/Visual Change methodology. Subsequently, a conclusion was reached regarding the extent of overall visual change. Taken together with the existing landscape's visual sensitivity, the level of probable visual impact significance was determined.

As listed in Appendix G of the CEQA Guidelines, the Project would result in significant visual resource impacts if it would:

- Criterion VIS1: Have a substantial adverse effect on a scenic vista, or substantially degrade the existing visual character or quality of the site and its surroundings.
- Criterion VIS2: Conflict with applicable city, county, State, or federal plans, policies, regulations, or standards for the protection of visual resources.
- Criterion VIS3: Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.
- Criterion VIS4: Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway.

C.11.4.2 Impact Analysis

Impact and Mitigation Summary

This section summarizes the conclusions of the impact analysis and associated mitigation measures presented in Section C.11.4.2.2. Table C.11-3 lists each impact identified for the proposed Project, along with the significance of each impact. Impacts are classified as Class I (significant, cannot be mitigated to a level that is less than significant), Class II (significant, can be mitigated to a level that is less than significant), Class III (adverse, but less than significant), or Class IV (beneficial). Detailed discussions of each impact and the specific locations where each is identified are presented in the following sections.

Impact	Impact Significance	Mitigation Measures*
V-1: Construction of the proposed Project and introduction of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-1 – Highway 58 and Jameson Street.	Class II	V-1a through V-1f
V-2: Construction of the proposed Project and introduction of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-2 – Pacific Crest National Scenic Trail and Trailhead.	Class II	V-1a through V-1e
V-3: Construction of the proposed Project and introduction of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-3 – Oak Creek Road.	Class II	V-1a through V-1f
V-4: Construction of the proposed Project and introduction of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-4 – Tehachapi Willow Springs Road.	Class III	V-1b, V-1c, V-1e
V-5: Construction of the proposed Project and introduction of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-5 – Avenue A at 110th Street West.	Class III	V-1b, V-1c, V-1e, V-5
7-6: Construction of the proposed Project and introduction of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-6 – Avenue G at 105th Street West.	Class III	V-1b, V-1c, V-1e

Final EIR C.11-23 December 2006

Table C.11-3. Impact and Mitigation Summary – Visual Resources				
Impact	Impact Significance	Mitigation Measures*		
V-7: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-7 – Avenue L Near Olive Grove.	Class I <u>I</u>	V-1b, V-1c, V-1e, V-5		
V-8: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-8 – Avenue N at Agena Road.	Class III	V-1a through V-1e, V-5		
V-9: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-9 – Godde Hill Road.	Class II	V-1a through V-1e, V-5 (V-9 for Option A only)		
V-10: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-10 – Elizabeth Lake Road.	Class I (Proposed Project and Opt. B only; No Impact for Opt. A)	None available		
V-11: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-11 – Ritter Ranch from Godde Hill Road.	Class II for Proposed Project and Opt. A only; (No Impact for Opt. B)	V-1b through V-1e, V-5, V-9		
V-12: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-12 – Sierra Pelona Ridge from Avenue S.	Class II	V-1b through V-1e, V-5		
V-13: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-13 – Sierra Highway and Antelope Valley Freeway.	Class III	V-1b through V-1e, V-5		
V-14: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-14 – Acton/Vincent Grade Metrolink Park and Ride.	Class II	V-1b through V-1e, V-5		
V-15: The Project would conflict with applicable visual resource policies, regulations, and standards contained in state and local plans.	Class III	V-15		
V-16: The Project would create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. * Applicable to significant impacts only (i.e., Class Land Class II)	Class II	V-16a through V-16d		

^{*} Applicable to significant impacts only (i.e., Class I and Class II).

Project Impacts and Mitigation Measures

The Project Would Substantially Degrade Scenic Vistas, Existing Visual Character, or Quality of the Site and Its Surroundings (Criterion VIS1)

The proposed Project would create industrial character infrastructure in foreground views of certain landscapes that currently have no industrial features: specifically in the Mojave Desert from Mile S3-13.3 to Mile S3-15.0; in Antelope Valley from Mile S3-24.4 to Mile S3-33.0; and in/near Ritter Ranch from Mile S2-8.1 to Mile S2-10.6 where new ROW would be acquired and new transmission lines would be constructed. In all other locations, the proposed Project would add industrial character landscape features next to existing industrial character structures and features, resulting in less significant visual impacts. As seen from certain roads and trails within 0.5 miles of the Project, the Project would create visual contrasts, create permanent changes to a more industrial landscape character, and would negatively affect scenic vistas. These permanent visual changes to landscape character would create significant visual impacts in certain areas of the proposed Project. Although APMs VIS-1, VIS-2, and VIS-3 will be implemented on this segment, the mitigation measures identified below would be required to reduce the significant impact (Class II) to less than significant

levels. Other portions of the proposed Project would result in adverse, but less-than-significant visual impacts, as explained below.

Impact V-1: Construction of the proposed Project and introduction of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-1 – Highway 58 and Jameson Street. (Class II)

Starting at the north end of Segment 3, as seen from KOP-1, the proposed Project would create a new substation and new 220-kV transmission line that would be visible from Highway 58, Jameson Road, and Monolith. Figure C.11-2A presents the existing view from here and Figure C.11-2B shows a simulation of the substation and transmission line heading south through the Tehachapi Wind Resource Area.

This analysis of Impact V-1 is representative of Project visual impacts that would be seen at middleground viewing distances for the proposed Project from Mile S3-0.0 to Mile S3-3.0. The enclosed site area for the Substation Two facility would be 1,100 feet by 800 feet, or 20.2 acres, and total land disturbance, including grading and access roads, would be approximately 28.3 acres. Substation Two would create new vertical lines in the landscape, similar to those on the skyline, but closer to the viewer and situated on the valley floor. Substation Two is simulated at build-out (rather than just the first phase of construction) and at build-out, it would create moderate contrast with the natural environment, be a co-dominant feature in the landscape, and create moderate view blockage of the lower hillside. At build-out, it would be very visually evident from Highway 58, Jameson Road, and other local roads near Monolith. Nearby farm and ranch buildings are effectively screened by windbreaks, and the new substation could be completely screened by windbreak-type vegetation. The new 220-kV transmission line would be less visually evident, and would blend in with existing wind turbine generators that flank the hillside and occupy the skyline. The transmission line would create low contrast, be subordinate to the existing vertical lines of the wind turbine generators on the skyline, and would not create any view blockage.

The overall visual change at and near Substation Two would be moderate, and in the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be adverse. The visual change for the transmission line from Mile S3-0.0 to Mile S3-3.0 would be low and in the context of the existing landscape's moderate visual sensitivity, the resulting visual impact would not be significant. Overall impacts to visual resources, as seen from KOP-1, especially with regard to build-out of Substation Two, would be significant. Although APMs VIS-1, VIS-2, and VIS-3 will be implemented on this segment, implementation of mitigation measures would reduce visual impacts that would be seen from Highway 58, nearby roads, and residences, to a less than significant level (Class II).

From Mile S3-0.0 to Mile S3-3.0, implementation of Mitigation Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), and V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes) would improve the visual environment of the new 220-kV transmission line, and implementation of Mitigation Measure V-1f (Establish Evergreen Vegetative Screen) would improve the visual environment of Substation Two.

Mitigation Measures for Impact V-1

V-1a Use Tubular Steel Poles. In locations designated by the CPUC, SCE and its Contractors shall <u>take</u> measures to eliminate lattice steel towers from the proposed Project and substitute tubular steel poles to reduce significant visual impacts as seen from designated sensitive receptor locations. SCE and its Contractors shall submit design calculations to demonstrate any locations where use of tubular steel

Final EIR C.11-25 December 2006

- poles is not feasible. SCE and its Contractors shall submit site plans, topographic screening studies, and visibility studies demonstrating where tubular steel poles are feasible and would lessen visual impacts, and conversely, where lattice steel towers would blend in with a landform backdrop. SCE shall consult with the visual specialist designated by the CPUC to ensure that the objectives of this measure are achieved. SCE and its Contractors shall submit these plans and studies to the CPUC for review and approval at least 60 days prior to the start of construction.
- V-1b Construct, Operate, and Maintain with Existing Access Roads. In locations designated by the CPUC, SCE shall construct the new transmission line using existing access roads and spur roads. SCE shall consult with the visual specialist designated by the CPUC to ensure that the objectives of this measure are achieved. SCE and its Contractors shall submit plans and construction drawings for access roads and spur roads, demonstrating compliance with this measure, to the CPUC for review and approval at least 60 days prior to the start of construction.
- V-1c Dispose of Cleared Vegetation. For areas where cleared vegetation would be visible from sensitive viewing locations, SCE and its Contractors shall dispose of cleared vegetation and woody material in a manner that is not visually evident and does not create visual contrasts. SCE and its Contractors shall submit a vegetation removal plan demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction.
- V-1d Slope-Round and Dispose of Excavated Materials. For areas where cuts-and-fills and excavated materials would be visible from sensitive viewing locations, SCE and its Contractors shall employ slope-rounding techniques to blend earthwork with natural contours and shall dispose of excavated materials (soil, rocks, and concrete, and reinforcing steel) in a manner that is not visually evident and does not create visual contrasts. SCE and its Contractors shall submit an excavation plan demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction.
- V-1e Treat Surfaces with Appropriate Colors, Textures, and Finishes. For all structures that are visible from sensitive viewing locations, SCE and its Contractors shall apply surface coatings with appropriate colors, finishes, and textures to most effectively blend the structures with the visible backdrop landscape. For structures that are visible from more than one sensitive viewing location, if backdrops are substantially different when viewed from different vantage points, the darker color shall be selected, because dark colors tend to blend into landscape backdrops more effectively than lighter colors, which may contrast and produce glare. At locations where a lattice steel tower or a tubular steel pole would be silhouetted against the skyline, non-reflective, light-gray colors shall be selected to blend with the sky. The transmission line conductors shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive. SCE shall consult with the visual specialist designated by the CPUC to ensure that the objectives of this measure are achieved. SCE and its Contractors shall submit a Structure Surface Treatment Plan for the lattice steel towers, tubular steel poles, and any other visible structures, demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction.
- V-1f Establish Evergreen Vegetative Screen. SCE and its Contractors shall establish a permanent evergreen vegetative screen of sufficient height for immediate visual screening around the substation(s), and shall provide permanent drip irrigation system for plant survival. Plant materials selected for screening shall be evergreen, wind-resistant, and acclimated to the desert environment. SCE shall consult with the visual specialist designated by the CPUC to ensure that the objectives of this measure are achieved. SCE and its Contractors shall submit a Vegetative Screening Plan for the substation demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction.

Option A

North of Mile S2-5.7 and south of Mile S2-7.7, Option A would be identical to the proposed Project, and visual effects under Impact V-1 would be as described for the Project route. As a result, the visual impacts of Option A would be significant, but mitigable (Class II). Implementation of Mitigation Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-1f (Establish Evergreen Vegetative Screen) is recommended to improve the visual environment of the new 220-kV transmission line and Substation Two.

Option B

North of proposed Project Mile S2-8.1 and south of Mile S2-14.9, Option B would be identical to the proposed Project, and visual effects under Impact V-1 would be as described for the Project route. As a result, the visual impacts of Option B would be significant, but mitigable (Class II). Implementation of Mitigation Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-1f (Establish Evergreen Vegetative Screen) is recommended to improve the visual environment of the new 220-kV transmission line and Substation Two.

Impact V-2: Construction of the proposed Project and introduction of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-2 – Pacific Crest National Scenic Trail and Trailhead. (Class II)

KOP-2 was established at the trailhead to the PCT, located at the intersection of Tehachapi Willow Springs Road and Cameron Road, looking southwest toward existing wind turbine generators and the new 220-kV transmission line. Figure C.11-3A presents the existing view from KOP-2 at the trailhead and Figure C.11-3B presents a visual simulation that depicts the new transmission line. Figure C.11-3B is representative of Project visual impacts that would be seen at foreground viewing distances from Mile S3-3.0 to Mile S3-9.9, along the PCT, Tehachapi Willow Springs Road, and Oak Creek Road. SCE's APM VIS-3 states, "Where the proposed (or Alternate C) 220 kV T/L crosses the Pacific Crest Trail north of Oak Creek Road, the transmission towers would be placed with a minimum setback of 300 feet from the trail." There is an existing sub-transmission line crossing the PCT and trailhead in the vicinity of KOP-2, and the new 220-kV line would cross over the PCT in two locations near the trailhead. The new LSTs, with their geometric forms, would create strong contrast in this industrial and recreational landscape, as they would stand out as a different structure type against the vertical lines of the wind turbine generators' monopoles on the skyline. Substitution of TSPs would reduce this visual contrast and would help the new transmission line blend in with the existing industrial landscape character.

The new 220-kV transmission line would be visually evident, and would have high contrast with existing wind turbine generators on the skyline. The transmission line would be co-dominant with the existing vertical lines of the wind turbine generators on the skyline, and would create moderate view blockage of the skyline and hillside.

Referring to Table C.11-2, the overall visual change at the PCT and nearby roads would be moderate-to-high, and in the context of the existing landscape's moderate-to-high visual sensitivity as seen from the PCT, the resulting visual impact would be adverse and significant. The overall visual change for the transmission line

Final EIR C.11-27 December 2006

from Mile S3-3.0 to Mile S3-9.9 would be moderate-to-high, and in the context of the moderate visual sensitivity as seen from the nearby roads, the resulting visual impact would be adverse and significant.

Impact V-2 would be significant, but mitigable (**Class II**), and implementation of mitigation measures would reduce visual impacts as seen from KOP-2 to a less-than-significant level. From Mile S3-3.0 to Mile S3-9.9, implementation of Mitigation Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), and V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes) would improve the visual environment of the new 220-kV transmission line.

Option A

North of Mile S2-5.7 and south of Mile S2-7.7, Option A would be identical to the proposed Project, and visual effects under Impact V-2 would be as described for the Project route. As a result, the visual impacts of Option A would be significant, but mitigable (Class II). Implementation of Mitigation Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), and V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes) are recommended to improve the visual environment of the new 220-kV transmission line.

Option B

North of proposed Project Mile S2-8.1 and south of Mile S2-14.9, Option B would be identical to the proposed Project, and visual effects under Impact V-2 would be as described for the Project route. As a result, the visual impacts of Option B would be significant, but mitigable (**Class II**). Implementation of Mitigation Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), and V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes) are recommended to improve the visual environment of the new 220-kV transmission line.

Impact V-3: Construction of the proposed Project and introduction of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-3 – Oak Creek Road. (Class II)

The 220-kV transmission line would terminate at proposed Substation One south of Oak Creek Road and across the road from existing wind turbine generators in the Tehachapi Wind Resource Area. A new 500-kV transmission line would exit the substation and head south to Antelope Substation. These new structures would be visible from Oak Creek Road. Figure C.11-4A presents the existing view from here and Figure C.11-4B shows a simulation of the substation and transmission lines leading into and out of the substation. This analysis of Impact V-3 is representative of Project visual impacts that would be seen at middleground viewing distances for the proposed Project near Mile S3-9.6. The enclosed site area for new Substation One facility would be approximately 1,800 feet by 1,300 feet, or 53.7 acres, and the total land disturbance, including grading and access roads, would be approximately 62.9 acres.

Substation One would create visual contrasts in this landscape: new vertical lines, geometric forms, and light-gray or silver colors against the darker, desert landscape. Substation One is simulated at build-out (rather than just the first phase of construction), and at build-out it would create high visual contrast against the darker mountains in the background, be a co-dominant feature in the landscape, and create moderate view blockage of the background mountains. At build-out, it would be very visually evident from Oak Creek Road. Because of

the desert terrain and vegetation types in the vicinity (predominantly creosote bush scrub and Joshua trees), Substation One could not be completely screened by windbreak-type vegetation; however, dense planting of Joshua trees, creosote bush scrub, sagebrush, and other desert plants would dramatically improve the visual quality of the substation surroundings. The new 220-kV and 500-kV transmission lines would be less visually evident than the substation, but their light-gray to silver colors would stand out against the darker color landscape backdrop. The transmission line would create moderate color contrasts, be subordinate to the existing vertical lines of the wind turbine generators on the north side of the road, and would not create any view blockage.

Referring to Table C.11-2, the overall visual change at and near Substation One would be high and in the context of the existing landscape's low-to-moderate visual sensitivity, the resulting visual impact would be adverse and significant. The visual change for the transmission line near Substation One would be low-to-moderate and in the context of the existing landscape's low-to-moderate visual sensitivity, the resulting visual impact would adverse but not significant. Overall, impacts to visual resources as seen from KOP-3 would be significant, but mitigable (Class II).

Implementation of mitigation measures would reduce visual impacts to a less-than-significant level such that Substation One would not be as visually evident from Oak Creek Road. From Mile S3-3.0 to Mile S3-9.9, implementation of Mitigation Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), and V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes) would improve the visual environment of the new 220-kV transmission line, and implementation of Mitigation Measure V-1f (Establish Evergreen Vegetative Screen) would improve the visual environment of Substation One.

Option A

North of Mile S2-5.7 and south of Mile S2-7.7, Option A would be identical to the proposed Project, and visual effects under Impact V-3 would be as described for the Project route. As a result, the visual impacts of Option A would be significant, but mitigable (**Class II**). Implementation of Mitigation Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-1f (Establish Evergreen Vegetative Screen) are recommended to improve the visual environment of the new 220-kV and 500-kV transmission lines and Substation One.

Option B

North of proposed Project Mile S2-8.1 and south of Mile S2-14.9, Option B would be identical to the proposed Project, and visual effects under Impact V-3 would be as described for the Project route. As a result, the visual impacts of Option B would be significant, but mitigable (Class II). Implementation of Mitigation Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-1f (Establish Evergreen Vegetative Screen) are recommended to improve the visual environment of the new 220-kV and 500-kV transmission lines and Substation One.

Final EIR C.11-29 December 2006

Impact V-4: Construction of the proposed Project and introduction of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-4 – Tehachapi Willow Springs Road. (Class III)

KOP-4 was established on Tehachapi Willow Springs Road at the point where the northbound road turns northwest, after running north-south for many miles in the Mojave Desert. A new 500-kV transmission line would exit Substation One and head south across the flat, undeveloped desert plains. For the proposed Project from Mile S3-9.5 to S3-16.3, the only vantage points of sensitive receptors are Oak Creek Road (see Impact VIS-3 above) and Tehachapi Willow Springs Road. Figure C.11-5A exhibits existing conditions as seen from the Tehachapi Willow Springs Road and Figure C.11-5B shows a simulation of the transmission line leaving Substation One and crossing the highway. Impact VIS-4 is representative of proposed Project visual impacts seen at foreground and middleground viewing distances from Mile S3-9.9 to Mile S3-16.3. The new 500-kV transmission line structures would be very visible after construction because of their height and bulk in the landscape. The proposed transmission line LSTs would range in height between 113 feet and 188 feet; however, all simulations of LSTs are shown at 144 feet tall. Because towers would be constructed of dulled galvanized steel, their colors (light gray to silver) would contrast with the darker landscape backdrop of the Tehachapi Mountains. This color contrast would draw the viewer's eye to the geometric forms of the towers, vertical lines of the tower legs, and horizontal lines of conductors and communication wires, creating moderate-to-high contrast. Neither the towers nor conductors would block the skyline or views, and would remain subordinate-to-co-dominant compared to the existing landscape characteristics. The motion of wind turbine generators on the skyline also would attract attention, making this a focal point for people driving on the highway.

Referring to Table C.11-2, the overall visual change seen from Tehachapi Willow Springs Road would be low-to-moderate and in the context of the existing landscape's low-to-moderate visual sensitivity, the resulting visual impact would be adverse, but not significant (**Class III**).

Even though the visual change to this landscape from Mile 9.9 to Mile 16.3 is not significant, implementation of mitigation measures would reduce visual impacts from the Tehachapi Willow Springs Road. From Mile S3-9.9 to Mile S3-16.3, implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), and V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes) would improve the visual environment of the new 500-kV transmission line. This would result in an improved visual environment, as compared to the proposed Project without mitigation.

Option A

North of Mile S2-5.7 and south of Mile S2-7.7, Option A would be identical to the proposed Project, and visual effects under Impact V-4 would be as described for the Project route. As a result, the visual impacts of Option A would be adverse, but less than significant (**Class III**). However, implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), and V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes) is recommended to improve the visual environment of the new 500-kV transmission line.

Option B

North of proposed Project Mile S2-8.1 and south of Mile S2-14.9, Option B would be identical to the proposed Project, and visual effects under Impact V-4 would be as described for the Project route. As a result, the visual impacts of Option B would be adverse, but less than significant (**Class III**). However, implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads),

V-1c (Dispose of Cleared Vegetation), and V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes) is recommended to improve the visual environment of the new 500-kV transmission line.

Impact V-5: Construction of the proposed Project and introduction of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-5 – Avenue A at 110th Street West. (Class III)

KOP-5 was established at the intersection of Avenue A at 110th Street West, looking southeast into agricultural fields in the Mojave Desert. Figure C.11-6A presents existing conditions as seen from the intersection of Avenue A at 110th Street West and Figure C.11-6B shows a simulation of the transmission line at this location. These views are typical of the foreground and middleground viewing distances of the proposed Project from Mile S3-16.3 to Mile S3-31.5. LSTs of the new 500-kV transmission line would end at approximately Mile S3-16.3, and would be used again from Mile S3-22.1 to S3-23.2 (parallel to existing line on LSTs). As seen from KOP-5, TSPs would suspend the conductors from Mile S3-16.3 to S3-22.1 and Mile S3-23.2 to Mile S3-33.4. The single-circuit 500-kV TSPs would be approximately 135 feet tall, and are simulated at that height in Figure C.11-6B. More than twice as tall as the wooden distribution poles that run along Avenue A, new TSPs would be visible against the skyline and contribute moderate skyline blockage, as seen from 110th Street West, 100th Street West, and Avenue A, plus other cross roads between Mile S3-16.3 and S3-31.5. Vertical lines of new poles and horizontal lines of new conductors would create moderate contrast with the horizontal nature of the desert and would be subordinate to co-dominant in visual dominance, as compared to existing homesteads and windbreaks.

Referring to Table C.11-2, the overall visual change seen from Avenue A at 110th Street West would be moderate and in the context of the existing landscape's low-to-moderate visual sensitivity, the resulting visual impact would be adverse, but not significant (**Class III**).

Even though the visual change to this landscape from Mile S3-16.3 to Mile S3-31.5 is not significant, implementation of mitigation measures would reduce visual impacts from 110th Street West, 100th Street West, and Avenue A, or other cross roads between Mile S3-16.3 and S3-31.5. From Mile S3-16.3 to S3-22.2 and from Mile S3-23.3 to S3-31.5, implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), and V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes) would improve the visual environment of the new 500-kV transmission line. This would result in an improved visual environment, as compared to the proposed Project without mitigation.

From approximately Mile S3-22.2 to S3-23.3, the new 500-kV transmission line would be constructed with LSTs adjacent and parallel to on LSTs of the LADWP Sylmar-Celilo 1000-kV DC and Owens Gorge-Rinaldi 220-kV transmission lines. In these locations, implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) would improve the visual environment of the new 500-kV transmission line. This would result in an improved visual environment, as compared to the proposed Project without mitigation.

Mitigation Measure for Impact V-5

V-5 Match Structure Spacing and Spans. In locations designated by the CPUC, SCE and its Contractors shall match existing structure spacing and spans as closely as possible to avoid or reduce the number of off-setting tower placements to reduce visual complexity as seen from sensitive receptor locations. All new structures shall match the heights of the existing transmission line

Final EIR C.11-31 December 2006

structures to the extent possible as dictated by variation in terrain. All new spans shall match existing conductor spans as closely as possible in order to avoid or reduce the occurrence of unnecessary visual complexity associated with asynchronous conductor spans. SCE shall consult with the visual specialist designated by the CPUC to ensure that the objectives of this measure are achieved, and shall prepare construction drawings for structure locations. SCE and its Contractors shall submit these plans and studies to the CPUC for review and approval at least 60 days prior to the start of construction.

Option A

North of Mile S2-5.7 and south of Mile S2-7.7, Option A would be identical to the proposed Project, and visual effects under Impact V-5 would be as described for the Project route. As a result, the visual impacts of Option A would be adverse, but less than significant (**Class III**). However, implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) are recommended to improve the visual environment of the new 500-kV transmission line.

Option B

North of proposed Project Mile S2-8.1 and south of Mile S2-14.9, Option B would be identical to the proposed Project, and visual effects under Impact V-5 would be as described for the Project route. As a result, the visual impacts of Option B would be adverse, but less than significant (Class III). However, implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) are recommended to improve the visual environment of the new 500-kV transmission line.

Impact V-6: Construction of the proposed Project and introduction of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-6 – Avenue G at 105th Street West. (Class III)

KOP-6 was established on Avenue G at 105th Street West (0.5 miles east of 110th Street West and 0.5 miles west of 100th Street West), looking straight south. Figure C.11-7A presents existing conditions as seen from KOP-6 and Figure C.11-7B shows a simulation of the new transmission line at this location. These views are typical of the foreground and middleground viewing distances and potential visual impacts of the proposed Project from Mile S3-31.5 to S3-35.2. The proposed Project would be adjacent to the west boundary of the proposed residential Del Sur Ranch Development from approximately Mile S3-31.5 to S3-33.0, and would be visible as foreground from Avenue G and the new residential development. The addition of 135-foot tall TSPs and 500-kV conductors would be very noticeable from this vantage point (and could be expected to be very noticeable from the future Del Sur Ranch Development). New TSPs would introduce vertical lines into this horizontal landscape and would interrupt views to the skyline of Portal Ridge. This would create moderate view blockage, and increased structural prominence would result in a high degree of visual contrast. The Project would appear co-dominant with the existing natural landscape character and would introduce industrial character features into the landscape. This visual analysis is representative of the landscape changes from Mile S3-31.5 to S3-35.2.

Referring to Table C.11-2, the overall visual change seen from Avenue G at 105th Street West would be moderate-to-high and in the context of the existing landscape's low-to-moderate visual sensitivity, the resulting visual impact would be adverse, but not significant (**Class III**).

Even though the visual change to this landscape from Mile S3-31.5 to S3-35.2 is not significant, implementation of mitigation measures would reduce visual impacts from 110th Street West, 100th Street West, and Avenue G, or other cross roads between Mile S3-31.5 and S3-35.2. From Mile S3-31.5 to S3-35.2, implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), and V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes) would improve the visual environment of the new 500-kV transmission line. This would result in an improved visual environment, as compared to the proposed Project without mitigation.

Option A

North of Mile S2-5.7 and south of Mile S2-7.7, Option A would be identical to the proposed Project, and visual effects under Impact V-6 would be as described for the Project route. As a result, the visual impacts of Option A would be adverse, but less than significant (**Class III**). However, implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), and V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes) are recommended to improve the visual environment of the new 500-kV transmission line.

Option B

North of proposed Project Mile S2-8.1 and south of Mile S2-14.9, Option B would be identical to the proposed Project, and visual effects under Impact V-6 would be as described for the Project route. As a result, the visual impacts of Option B would be adverse, but less than significant (**Class III**). However, implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), and V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes) are recommended to improve the visual environment of the new 500-kV transmission line.

Impact V-7: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-7 – Avenue L Near Olive Grove. (Class II)

KOP-7 was established on Avenue L near an existing homestead with an olive grove. From Mile S2-0.0 to S2-4.4, the Project would traverse the flat desert plain of Antelope Valley, following multiple existing transmission lines in the Antelope-Vincent Corridor. Figure C.11-8A exhibits existing conditions at KOP-7 and Figure C.11-8B presents a simulation of the new and relocated transmission lines at this location. These views are typical of the foreground and middleground viewing distances and potential visual impacts of the proposed Project from Mile S2-0.0 to Mile S2-4.4. The proposed 500-kV line Project would be constructed west of the existing homestead with an olive grove, and would replace the line of wooden 66-kV transmission poles with LSTs. For the one house inside the olive grove, after completion of the proposed Project, transmission lines would be located on both west and east sides, and the existing homestead literally would be situated inside the corridor. The existing olive trees are approximately 20-feet tall, and would not visually screen transmission line towers that would range in height from 113 to 188-feet high, and the conductors also would be visible, and would be lower at the sag. South of Avenue L, the existing 66-kV line would be demolished, then relocated farther to the right (southwest) with 75-foot tall, light-weight, direct-buried TSPs, 180 feet west of and parallel to existing alignment of the existing wooden structures south of Avenue L. The proposed Project would run parallel to and southwest of the Midway-Vincent ROW, next to the existing Midway-Vincent No. 3 500-kV transmission line (see Figure B.2-14). From a visual resource perspective of nearby roads, construction of new 500-kV LSTs and relocation of the existing 66-kV transmission line on new TSPs would create very little contrast because of the amount of existing visual clutter in the Midway-Vincent

Final EIR C.11-33 December 2006

ROW. New and relocated transmission lines would add to the visual clutter, but would not change the contrast, structural dominance, or view blockage of the skyline at Portal Ridge, all of which are high. From the perspective of the one residence that would be <u>surrounded by taken by passage of the new 500-kV line and relocated 66-kV lines to the west, and the existing transmission lines to the eastdirectly overhead, the visual impacts would be high because the house would be <u>completely inside the newly widened Antelope-Vincent Corridor eliminated.</u></u>

Referring to Table C.11-2, the overall visual change seen from Avenue L Near Olive Grove would be high and in the context of the existing landscape's <u>low-to-moderateto-high</u> visual sensitivity, the resulting visual impact for travelers on nearby roads would be <u>adverse and potentially</u> significant. For residents of the one house that would be <u>surrounded by transmission lines removed</u>, the overall visual change would be high and in the context of the <u>high moderate</u> visual sensitivity, visual impacts would be <u>adverse and potentially</u> significant and <u>unavoidable</u>(Class II).

For the existing homestead at the olive grove, implementation of mitigation measures would not reduce visual impacts at KOP-7 to a less-than-significant level because the existing homestead will be surrounded by transmission lines. However, the following mitigation measures are recommended from Mile S2-0 to S2-4.4 to improve the visual environment of the new 500-kV transmission line and the relocated 66-kV transmission line: Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans).

Option A

North of Mile S2-5.7 and south of Mile S2-7.7, Option A would be identical to the proposed Project, and visual effects under Impact V-7 would be as described for the Project route. As a result, the visual impacts of Option A would be <u>adverse and potentially</u> significant and unavoidable(Class <u>II</u>). Implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) are recommended to improve the visual environment at KOP-7, but would not reduce impacts to a less than significant level.

Option B

North of proposed Project Mile S2-8.1 and south of Mile S2-14.9, Option B would be identical to the proposed Project, and visual effects under Impact V-7 would be as described for the Project route. As a result, the visual impacts of Option B would be <u>adverse and potentially</u> significant and unavoidable(Class <u>II</u>). Implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) are recommended to improve the visual environment at KOP-7, but would not reduce impacts to a less than significant level.

Impact V-8: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-8 – Avenue N at Agena Road. (Class III)

KOP-8 was established on Avenue N at Agena Road. Figure C.11-9A presents existing conditions at KOP-8 and Figure C.11-9B presents a simulation of the new 500-kV transmission line with LSTs adjacent to four existing transmission lines at this location. From Mile S2-4.4 to S2-6.4, the proposed Project would cross over

the crest of Portal Ridge. Because Portal Ridge forms a landscape backdrop for much of the Antelope Valley and the City of Lancaster, any additional industrial character structures in the skyline would be a potential visual impact. The proposed Project would be located away from the viewer at KOP-8, on the far-side of existing transmission lines, and new towers would be aligned with existing clusters of towers and TSPs. Spacing of towers would be comparable to existing spacing of structures. New towers and conductors would be co-dominant with existing towers and conductors. Therefore, spans of conductors would be synchronized and new towers would create low contrast. However, new LSTs would not have a landform backdrop and would be seen against the skyline, thereby creating moderate-to-high skyline blockage.

Referring to Table C.11-2, the overall visual change seen from Avenue N at Agena Road would be low-to-moderate and in the context of the existing landscape's moderate visual sensitivity, the resulting visual impact would be adverse, but not significant (**Class III**).

However, even though the visual changes to KOP-8 are not significant, implementation of mitigation measures would reduce visual impacts. From Mile S2-4.4 to S2-6.4, implementation of Mitigation Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) is recommended to improve the visual environment with the new 500-kV transmission line. This would result in an improved visual environment, as compared to the proposed Project without mitigation.

Option A

North of Mile S2-5.7 and south of Mile S2-7.7, Option A would be identical to the proposed Project, and visual effects under Impact V-8 would be as described for the Project route. As a result, the visual impacts of Option A would be adverse, but less than significant (**Class III**). However, implementation of Mitigation Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) are recommended to improve the visual environment of the new 500-kV transmission line.

Option B

North of proposed Project Mile S2-8.1 and south of Mile S2-14.9, Option B would be identical to the proposed Project, and visual effects under Impact V-8 would be as described for the Project route. As a result, the visual impacts of Option B would be adverse, but less than significant (**Class III**). However, implementation of Mitigation Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) are recommended to improve the visual environment of the new 500-kV transmission line.

Impact V-9: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-9 – Godde Hill Road. (Class II)

KOP-9 was established on Godde Hill Road at the center of the existing Midway-Vincent utility corridor, looking toward Vincent Substation from a turnout along the twisting, two-lane paved road over Godde Hill. Figure C.11-10A presents existing conditions at KOP-9 and Figure C.11-10B presents a simulation of the new

Final EIR C.11-35 December 2006

500-kV transmission line with LSTs adjacent to five existing transmission lines at this location. These two figures are representative of existing and future visual conditions as seen at foreground viewing distances from Mile S2-6.3 to S2-6.7. The proposed Project would be located on the far right side of the existing corridor, and new towers would be aligned with existing clusters of towers and TSPs. Spacing of towers would approximate the spacing of existing structures. Existing towers and conductors have created a dominant industrial character in this landscape, and new towers and conductors of the proposed Project would augment these dominant features, creating high dominance. New LSTs would not have a landform backdrop and would be seen against the skyline, thereby creating high skyline and view blockage similar to the existing transmission lines.

Referring to Table C.11-2, the overall visual change seen from Godde Hill Road would be high and in the context of the existing landscape's moderate visual sensitivity, the resulting visual impact would be adverse and significant (Class II).

Although APMs VIS-1, VIS-2, and VIS-3 will be implemented on this segment Mitigation Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) are recommended from Mile S2-6.3 to S2-6.7 to reduce the significant impact (Class II) to less than significant levels.

Option A

North of Mile S2-5.7 and south of Mile S2-7.7, Option A would be identical to the proposed Project. At this location on Godde Hill Road, Option A would realign the 500-kV transmission line approximately 1,000 feet to the northeast, and visual effects would be as described above under Impact V-9 for the Project route, but would occur at a different location than KOP-9. Specifically, these visual impacts would occur approximately 1,000 feet to the left and downhill of KOP-9. As a result, the visual impacts of Option A would be adverse and significant (Class II). Implementation of Mitigation Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-9 (Construct New Access and Spur Roads with Least Visual Disturbance) would reduce impacts to a less-than-significant level.

V-9 Construct New Access and Spur Roads with Least Visual Disturbance. SCE and its contractors shall design all new access and spur roads such that they are located in the least visually obtrusive locations, that they follow the lay of the land, that cut-and-fill slopes are minimized, that vegetative patterns are protected or enhanced, and that the least number of roads are created. SCE shall consult with the visual specialist designated by the CPUC to ensure that the objectives of this measure are achieved. SCE and its contractors shall construct and maintain access and spur roads to minimize visual contrasts of form, line, color, texture, and scale. SCE and its contractors shall submit plans and construction drawings for access roads and spur roads demonstrating compliance with this measure to the CPUC and other affected agencies for review and approval at least 60 days prior to the start of construction.

Option B

North of proposed Project Mile S2-8.1 and south of Mile S2-14.9, Option B would be identical to the proposed Project, and visual effects under Impact V-9 would be as described for the Project route. As a result, the visual impacts of Option B would be adverse and significant (**Class II**). Implementation of Mitigation

Measures V-1a (Use Tubular Steel Poles), V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) are recommended to reduce impacts to a less-than-significant level.

Impact V-10: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-10 – Elizabeth Lake Road. (Class I)

KOP-10 was established on Elizabeth Lake Road near several existing rural ranchettes that are situated on both sides of the road. From Mile S2-6.7 to S2-7.9, the new 500-kV transmission line would be visible from Elizabeth Lake Road and these residential ranchettes. Figure C.11-11A presents existing conditions at KOP-10 and Figure C.11-11B presents a simulation of the proposed Project, which would be constructed on the southwest side of the existing transmission lines and would pass directly over one uninhabited and three inhabited residences on the northeast side of Elizabeth Lake Road in this vicinity. The AV Buffalo Ranch is one of the affected properties, as shown in these figures. At approximately Mile S2-7.5, the proposed Project would enter property owned by the Ritter Ranch Development.

The proposed Project would run parallel to existing transmission lines in the Midway-Vincent utility corridor, next to the same five existing transmission lines visible from KOP-9. From a strictly visual resource perspective and as seen from this nearby road, construction of new 500-kV LSTs and conductors would create moderate visual contrast, because the existing transmission lines have created visual contrasts and clutter in the Midway-Vincent ROW. However, because three existing inhabited residences would be removed, two of which are shown in Figures C.11-11A and C.11.11B, the visual impact is high for all accounts. The view from these sensitive receptor locations would be permanently disrupted and the viewer platforms would be removed. The proposed Project would add visual clutter and industrial character to this pastoral landscape, but more importantly, the proposed alignment would eliminate three existing houses from three different ranchettes, creating high visual contrast, dominance, and view blockage, as well as land use impacts (see Section C.8 for further discussion). Because the new transmission line would be constructed adjacent to existing ROW, requiring a widening of the corridor by 180- to 200-feet, ranch properties would remain in use by current land owners. Removal of these four houses (three occupied, one uninhabited) would not mean the purchase of the entire properties upon which these houses are situated, and that only adequate ROW lands would be purchased by SCE, thereby leaving the remainder of the property useable and in current ownerships. Therefore, with monies received from SCE for the removal of these houses, it is entirely feasible that the landowners would relocate their existing houses, or conversely, would build new houses somewhere else on their properties. Additionally, the view from Elizabeth Lake Road (and the visual effect on the neighborhood) would be affected by removal (or relocation) of these houses. Therefore, viewer concern is determined to be "high."

Referring to Table C.11-2, the overall visual change seen from Elizabeth Lake Road would be high and in the context of the existing landscape's high visual sensitivity, the resulting visual impacts would be significant and unavoidable (Class I).

From Mile S2-6.7 to S2-7.9, implementation of standard visual resource mitigation measures would do nothing to remedy the disruption of the pastoral landscape and living conditions in these three residences. Only a relocation of the proposed Project would mitigate these significant visual impacts.

Final EIR C.11-37 December 2006

Option A

Option A would be sited approximately 1,000 feet east of the proposed Project alignment from approximately Mile S2-5.7 to Mile S2-7.7, and therefore would be located away from three existing residences located along Elizabeth Lake Road. The resulting visual effect of implementing Option A would be that three existing houses would remain in this pastoral setting, as displayed in Figure C.11-11A. Because the transmission line would be completely screened by landforms and 1,000 feet farther away from KOP-10, it would not be visible from Elizabeth Lake Road or residences along both sides of Elizabeth Lake Road. This landform screening would also prevent viewers from seeing the transmission line from any other locations. No recreational resources or sensitive receptors would be traversed by the approximately 2.1-mile portion of Option A that deviates from the proposed Project route. The realigned portion of Option A would not be visible from any sensitive receptor location listed above in Section C.11-1. For Impact V-10, implementation of Option A would create no visual impacts as seen from KOP-10.

Option B

North of proposed Project Mile S2-5.7 and south of Mile S2-7.7, Option B would be identical to the proposed Project, and visual effects under Impact V-10 would be as described for the proposed Project route. As a result, the visual impacts of Option B would be significant and unavoidable (**Class I**).

Impact V-11: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-11 – Ritter Ranch from Godde Hill Road. (Class II)

KOP-11 was established on the south side of Portal Ridge on Godde Hill Road, looking across the valley at Sierra Pelona Ridge and the new Ritter Ranch development. Figure C.11-12A displays existing conditions as seen from KOP-11 and Figure C.11-12B presents a visual simulation of the proposed Project, which would be constructed across the face of Sierra Pelona Ridge in the middleground. At approximately Mile S2-7.9, the proposed Project would cross Elizabeth Lake Road, turn south for 0.1 miles, then turn west and make a large "C" shape around the planned residential developments of Ritter Ranch in the City of Palmdale. At approximately Mile S2-14.8, the proposed Project would rejoin the Antelope-Vincent Corridor. New LSTs and conductors would be visible in the middleground from Godde Hill Road and Elizabeth Lake Road. New access roads would be required from approximately Mile S2-8.1 to approximately Mile S2-10.5, which is the portion of new ROW with no existing access roads. New access roads were not simulated, and therefore, visual impacts seen from KOP-11 would be greater than displayed in Figure C.11-12B.

Color contrasts of new, dulled galvanized steel towers would attract visual attention to the proposed Project, and new access roads would lead the viewer's eye from one tower to the next across this mountainside. The proposed Project would loop around in a large "C" shape, entering this view from the lower left, proceeding to the right side of the view, and then doubling back to the left nearer to the skyline. The new structures would cause a noticeable increase in structure prominence and industrial character within this new ROW. Some view blockage of middleground mountains would occur, distracting from the natural-appearing landscape character. Additional visual contrast would be caused by the highlighting of the towers and conductors by the afternoon sun as illustrated in the simulation presented in Figure C.11-12B.

Referring to Table C.11-2, the overall visual change seen from KOP-11 would be moderate-to-high and in the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be adverse and significant (**Class II**).

To reduce visual impacts to a less-than-significant level, implementation of mitigation measures is recommended from Mile S2-7.9 to S2-14.8. Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-9 (Construct New Access and Spur Roads with Least Visual Disturbance) would improve the visual environment of the new 500-kV transmission line. This would result in an improved visual environment, and would reduce impacts to less than significant.

Option A

North of Mile S2-5.7 and south of Mile S2-7.7, Option A would be identical to the proposed Project, and visual effects under Impact V-11 would be as described for the Project route. As a result, the visual impacts of Option A would be adverse and significant (**Class II**). Implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-9 (Construct New Access and Spur Roads with Least Visual Disturbance) are recommended to reduce impacts to a less-than-significant level.

Option B

Option B would deviate from the proposed Project at approximately Mile S2-8.1 and would travel 3.1 miles southeast along the existing Midway-Vincent Utility Corridor through the new Ritter Ranch and Anaverde developments in the City of Palmdale. Option B would avoid the large "C" shaped new ROW of the proposed Project, and would construct a new 500-kV transmission line adjacent to existing lines in the existing corridor. It would proceed in a straight line heading southeast, and reconnect with the proposed Project at Mile S2-14.9. The resulting visual effects as seen from KOP-11 on Godde Hill road, looking in to the new Ritter Ranch development, would be no effect under Impact V-11, as compared to existing visual conditions.

Impact V-12: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-12 – Sierra Pelona Ridge from Avenue S. (Class II)

KOP-12 was established just east of the new Anaverde development, on Avenue S looking southwest at Sierra Pelona Ridge. Figure C.11-14A displays existing conditions as seen from KOP-12 and Figure C.11-14B presents a visual simulation of the proposed Project. At approximately Mile S2-14.8, the proposed Project would rejoin the Antelope-Vincent Corridor. The portion of the Midway-Vincent No. 3 line between Mile S2-14.8 and the Vincent Substation would be cut into the proposed new segment of 500-kV transmission line from Antelope to form the Antelope-Vincent 500-kV transmission line. From Mile S2-14.8 to approximately Mile S2-20.9, a new segment of 500-kV transmission line would be constructed at the east side of the corridor to replace the appropriated portion of the Midway-Vincent No. 3 transmission line, reinstating its route to the Vincent Substation, and it is this new line on the east side of the existing utility corridor that would be visible from KOP-12. New LSTs and conductors would be visible against the skyline on the right and left sides of this view, and would be seen against a landscape backdrop in the middle of this view. Color contrasts of new, dulled galvanized steel towers would attract visual attention to the proposed Project. The new structures would cause a noticeable increase in structure prominence and industrial character within this view, adding to the existing industrial character in the existing utility corridor. Some view blockage of middleground mountains would occur, distracting from their natural-appearing landscape character. Additional visual contrast would be

Final EIR C.11-39 December 2006

caused by the highlighting of the towers and conductors by the afternoon sun as illustrated in the simulation presented in Figure C.11-14B.

Referring to Table C.11-2, the overall visual change seen from KOP-12 would be moderate-to-high, and in the context of the existing landscape's moderate visual sensitivity, the resulting visual impact would be adverse and significant (Class II).

To reduce visual impacts to a less-than-significant level, implementation of mitigation measures is recommended from Mile S2-14.8 to Mile S2-20.2. Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) would improve the visual environment of the new 500-kV transmission line. This would result in an improved visual environment, and would reduce impacts to less than significant.

Option A

North of Mile S2-5.7 and south of Mile S2-7.7, Option A would be identical to the proposed Project, and visual effects under Impact V-12 would be as described for the Project route. As a result, the visual impacts of Option A would be adverse and significant (**Class II**). Implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) are recommended to reduce impacts to a less-than-significant level.

Option B

North of proposed Project Mile S2-8.1 and south of Mile S2-14.9, Option B would be identical to the proposed Project, and visual effects under Impact V-12 would be as described for the Project route. As a result, the visual impacts of Option B would be adverse and significant (**Class II**). Implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) are recommended to reduce impacts to a less-than-significant level.

Impact V-13: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-13 – Sierra Highway and Antelope Valley Freeway. (Class III)

KOP-13 was established on Sierra Highway looking at the Antelope Valley Freeway corridor. At approximately Mile S2-20.4 to S2-20.6, the proposed Project would cross over the Antelope Valley Freeway (six-lane State Route 14), the Sierra Highway (two-lane State Highway), and the Acton/Vincent Grade Metrolink railroad (two-tracks). Figure C.11-15A displays existing conditions as seen from KOP-13 and Figure C.11-15B presents a visual simulation that is representative of Project visual impacts seen at foreground and middleground viewing distances from Mile S2-20.2 to Mile S2-20.9. Two new 500-kV LSTs would be visible from KOP-13, one in the island of land between the Antelope Valley Freeway (on the left) and the Sierra Highway, and the other to the right of the railroad tracks. The new tower between the highways would line up with two existing LSTs in the same location, and would create low contrast and no additional view blockage. The new tower to the right of the railroad tracks would stand alone, creating a new focal point of

industrial character in the landscape, with moderate view blockage of the middleground mountainside beyond, and co-dominance with other industrial structures nearby.

Referring to Table C.11-2, the overall visual change seen from KOP-13 would be moderate, and in the context of the existing landscape's moderate visual sensitivity, the resulting visual impact would be adverse, but not significant (Class III).

However, even though the visual changes to KOP-13 are not significant, implementation of mitigation measures would reduce the visual effects of the Project. From Mile S2-20.2 to Mile S2-20.9, implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) would improve the visual environment of the new 500-kV transmission line. This would result in an improved visual environment, as compared to the proposed Project without mitigation.

Option A

North of Mile S2-5.7 and south of Mile S2-7.7, Option A would be identical to the proposed Project, and visual effects under Impact V-13 would be as described for the Project route. As a result, the visual impacts of Option A would be adverse, but less than significant (Class III). However, implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) is recommended to improve the visual environment of the new 500-kV transmission line.

Option B

North of proposed Project Mile S2-8.1 and south of Mile S2-14.9, Option B would be identical to the proposed Project, and visual effects under Impact V-13 would be as described for the Project route. As a result, the visual impacts of Option B would be adverse, but less than significant (**Class III**). However, implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) are recommended to improve the visual environment of the new 500-kV transmission line.

Impact V-14: Construction of the proposed Project and increase of industrial character structures would result in a permanent change in landscape character and scenic vistas as seen from KOP-14 – Acton/Vincent Grade Metrolink Park and Ride. (Class II)

KOP-14 was established at the Acton/Vincent Grade Metrolink Park and Ride access road, looking south to the Vincent Substation. The proposed Project would be located approximately 0.1 miles west of the Acton/Vincent Grade Metrolink Park and Ride and looking south from this facility, the Vincent Substation and a multitude of transmission lines are visible. Figure C.11-16A displays existing conditions as seen from KOP-14 and Figure C.11-16B presents a visual simulation of the proposed Project. Looking between the two LSTs in the center of this photograph, the viewer can see a multitude of parallel transmission lines leaving the Vincent Substation and heading south over the San Gabriel Mountains. The proposed Project would construct a 500-kV transmission line left of these two towers, and then the new line would head over the small hill into the substation. The new towers and conductors of the proposed Project would add to the visual clutter of this

Final EIR C.11-41 December 2006

industrial landscape character, with high view blockage of the skyline and background mountains, high contrast of discordant lines and discordant geometric forms overlaying one-another, and dominance of industrial character infrastructure.

Referring to Table C.11-2, the overall visual change seen from KOP-14 would be high, and in the context of the existing landscape's moderate visual sensitivity, the resulting visual impact would be adverse and significant (Class II).

To reduce visual impacts to a less-than-significant level, implementation of mitigation measures is recommended from Mile S2-20.5 to Mile S2-21.6. Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) would improve the visual environment of the new 500-kV transmission line. This would result in an improved visual environment, and would reduce impacts to less than significant.

Option A

North of Mile S2-5.7 and south of Mile S2-7.7, Option A would be identical to the proposed Project, and visual effects under Impact V-14 would be as described for the Project route. As a result, the visual impacts of Option A would be adverse and significant (**Class II**). Implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) are recommended to reduce impacts to a less-than-significant level.

Option B

North of proposed Project Mile S2-8.1 and south of Mile S2-14.9, Option B would be identical to the proposed Project, and visual effects under Impact V-14 would be as described for the Project route. As a result, the visual impacts of Option B would be adverse and significant (Class II). Implementation of Mitigation Measures V-1b (Construct, Operate, and Maintain with Existing Access Roads), V-1c (Dispose of Cleared Vegetation), V-1d (Slope-Round and Dispose of Excavated Materials), V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), and V-5 (Match Structure Spacing and Spans) are recommended to reduce impacts to a less-than-significant level.

Conflict with applicable city, county, State, or federal plans, policies, regulations, or standards for the protection of visual resources (Criterion VIS2)

The CPUC encourages, but does not require, SCE to comply with local plans and policies. Prior to start of construction, therefore, adherence to county and local planning goals, policies, and objectives for visual resources is not required. No federal lands would be crossed by the proposed Project or Options, and therefore no federal visual resource management regulations or standards apply.

Impact V-15: The Project would conflict with applicable visual resource policies, regulations, and standards contained in state and local plans. (Class III)

Table C.11-4 provides an analysis of the proposed Project's consistency with applicable plans and policies discussed in Section C.11.2. The proposed Project would be consistent with existing plans, objectives, and policies for visual resources (see Table C.11-4). However, for a transmission line of this scale, with 113- to 178-foot tall and 96-foot wide single-circuit LSTs in the desert and on hillsides, there is relatively little

opportunity to mitigate visual impacts to a level of insignificance. There are occasions when a reduction of tower height or the installation of vegetative screening in close proximity to an observation position would accomplish some level of visual impact reduction. Given that SCE would obtain all necessary permits from State and local agencies, no conflicts with applicable visual resource policies were identified. Therefore, as described in Table C.11-4, conflicts with visual resource policies would be anticipated to be less than significant (Class III). However, implementation of Mitigation Measure V-15 (Local Agency Approvals [Miles S3-0.0 to S3-35.2 and S2-0.0 to S2-21.6]) has been recommended to ensure Project consistency with visual resource policies, regulations, and standards.

V-15 Local Agency Approvals (Miles S3-0.0 to S3-35.2 and S2-0.0 to S2-21.6). SCE shall obtain all necessary and applicable approvals and permits from the Counties and affected local agencies, and shall submit said approvals and permits to the CPUC at least 60 days prior to construction.

Agency Regulating Land Use	Regulation	Is Proposed Project Consistent?	Explanation
Kern County	General Plan (GP) Scenic Highways Element	Yes	The Antelope Transmission Project Segments 2 and 3 would not be visible from any designated or eligible State Scenic Highways.
	GP Scenic Corridor Combining District	Yes	The Antelope Transmission Project Segments 2 and 3 would not be visible from any Scenic Corridor Combining Districts.
Los Angeles County	GP Scenic Highways Element, Article 3. Protect and enhance esthetic resources within corridors of designated scenic highways.	Yes	County of Los Angeles Scenic Highways Element includes the following roads as Second Priority: Avenue K, 110th Street, Johnson Road, Elizabeth Lake Road, and Bouquet Canyon Road. SCE shall obtain all necessary and applicable approvals from affected local agencies. The CPUC encourages, but does not require SCE to comply with local plans and policies.
	Scenic Highways Element, Article 4. Establish and maintain rural scenic highways to provide access to scenic resources and serve recreational users.	Yes	The proposed Project would be seen from County Scenic Highways, all of which serve recreational users. SCE shall obtain all necessary and applicable approvals from affected local agencies. The CPUC encourages, but does not require SCE to comply with local plans and policies.
	Scenic Highways Element, Article 5. Establish and maintain urban scenic highways to provide access to interesting and esthetic manmade features, historical and cultural sites, and urban open space areas.	Yes	The proposed Project would be seen from County Urban Scenic Highways in the vicinity of Lancaster and Palmdale, and would be visible in context with interesting and esthetic manmade features currently present in the landscape. SCE shall obtain all necessary and applicable approvals from affected local agencies. The CPUC encourages, but does not require SCE to comply with local plans and policies.
Los Angeles County		eral Plan, A Com	ponent of the Los Angeles County General Plan (Adopted
	Community Design, Policy 62. Mitigate where possible undesirable impacts of adjacent land uses (i.e., noise interruption, visual intrusion, and airborne emissions) through utilization of appropriate buffers, building codes and standards.	Yes	Within the unincorporated Los Angeles County areas of Antelope Valley, the proposed Project would create undesirable visual intrusions and visual impacts as seen from residences, streets and roads. Utilization of appropriate buffers (vegetative screening, further set-backs, etc.) or building codes and standards would not be effective in mitigating the visual intrusions. SCE shall obtain all necessary and applicable approvals from affected local agencies. The CPUC encourages, but does not require SCE to comply with local plans and policies.

Final EIR C.11-43 December 2006

Agency Regulating Land Use	Regulation	Is Proposed Project Consistent?	Explanation
	Relationship of Urban and Natural Environments, Policy 63. Carefully integrate physical land use development into the natural environmental setting.	Yes	The proposed Project alignment was carefully integrated into the natural environmental setting with a goal of reducing visual impacts. SCE shall obtain all necessary and applicable approvals from affected local agencies. The CPUC encourages, but does not require SCE to comply with local plans and policies.
	Physical Appearance/ Community Image, Policy 65(b). Transmission lines should be located underground where feasible.	Yes	The proposed Project is not an underground transmission line, and it has been determined that it is technically feasible to construct an underground transmission line in the flatter landscapes in the Antelope Valley area. SCE shall obtain all necessary and applicable approvals from affected local agencies. The CPUC encourages, but does not require SCE to comply with local plans and policies.
City of	The City of Lancaster amended	its General Plan	
Lancaster	Plan for the Natural Environment, Objective 3.8 Preserve and enhance important views within the City, and significant visual features which are visible from the City of Lancaster.	Yes	The proposed Project with mitigation measures would enhance important views within the City and would enhance significant visual features which are visible from the City of Lancaster. SCE shall obtain all necessary and applicable approvals from affected local agencies. The CPUC encourages, but does not require SCE to comply with local plans and policies.
	Policy 3.8.1(a) Encourage creation of vistas and view corridors of community or neighborhood value during the development review process, through the siting of buildings to avoid blocking views and view corridors.	Yes	The proposed Project does not encourage creation of vistas and view corridors of community or neighborhood value. Through the siting of transmission line structures and substation expansion, the proposed Project does not avoid blocking views and view corridors. SCE shall obtain all necessary and applicable approvals from affected local agencies. The CPUC encourages, but does not require SCE to comply with local plans and policies.
	Policy 3.8.1(b) Through the implementation of the policies outlined in the Plan for Physical Development, ensure that the development of hillside lands is consistent with preserving their natural character.	Yes	The proposed Project does not enhance or protect hillside lands on Portal Ridge or Sierra Pelona Ridge from disruption of their natural character. SCE shall obtain all necessary and applicable approvals from affected local agencies. The CPUC encourages, but does not require SCE to comply with local plans and policies.
City of Palmdale General Plan (Amended January 1993)	The City shall protect scenic highways in the Planning Area, including Sierra Highway (south of Avenue S), Elizabeth Lake Road, and Bouquet Canyon Road.	Yes	The proposed Project is aligned such that it avoids alignments that parallel these scenic highways within the City Limits of the City of Palmdale, but rather, crosses them at 90-degree angles for the least visual intrusion.
Environment al Resources Element, Part G, Scenic Roadways	Height limits to preserve view corridors, maintenance of roadside landscaping, limits on grading activities along highways, and the prohibition of overhead utility rights of way along scenic highways.	Yes	The proposed Project would cross at a 90-degree angle those roadways mentioned by the City of Palmdale and would not follow alongside parallel to these roadways. Structures would be set back from roadways for safety reasons; therefore, roadside landscaping and grading activities would not create visual impacts.

Option A

The 2.1-mile portion of Option A that deviates from the proposed Project traverses unincorporated Los Angeles County and the Ritter Ranch community of the City of Palmdale. As such, the policies from the County of Los Angeles General Plan, the Antelope Valley Areawide General Plan, and the City of Palmdale

General Plan would be applicable to the re-routed portion of Option A. As described in Table C.11-4, Option A would not conflict with local plans and policies, and conflicts with visual resource policies would be anticipated to be less than significant (Class III). However, implementation of Mitigation Measure V-15 (Local Agency Approvals [Miles S3-0.0 to S3-35.2 and S2-0.0 to S2-21.6]) has been recommended to ensure consistency with visual resource policies, regulations, and standards.

Option B

The 3.1-mile portion of Option B that deviates from the proposed Project traverses the Ritter Ranch and Anaverde communities of the City of Palmdale. Consequently, the policies from the City of Palmdale General Plan and the City Ranch Specific Plan would be applicable to the re-routed portion of Option B. As described in Table C.11-4, Option B would not conflict with local plans and policies, and conflicts with visual resource policies would be anticipated to be less than significant (Class III). However, implementation of Mitigation Measure V-15 (Local Agency Approvals [Miles S3-0.0 to S3-35.2 and S2-0.0 to S2-21.6]) has been recommended to ensure consistency with visual resource policies, regulations, and standards.

Creation of a new source of substantial light or glare that would adversely affect day or nighttime views in the area (Criterion VIS3)

The Federal Aviation Administration (FAA) considers a structure to be an obstruction to air navigation if it is of a height greater than 500 feet above ground level (AGL) at the site of the object. At five miles from an airport, this height reduces to 400 feet AGL; to 300 feet AGL at four miles away; and to 200 feet AGL at three miles away. Greater restrictions apply when a tower is closer than three nautical miles from an airport. If the FAA determines that a tower is an obstruction to air navigation, then obstruction marking (alternating aviation orange and aviation white paint) and/or lighting (red lights or white lights) would be required (14 CFR Part 77, § 77.23 Standards for determining obstructions). Because the proximity of the proposed Project to airports is greater than distances specified above, the proposed Project would have no new sources of light on LSTs or TSPs that would affect nighttime views and, therefore, there would be no nighttime lighting visual impacts.

Impact V-16: The Project would create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. (Class II)

At the two new substations (Substation Two and Substation One), new sources of light (Criterion VIS-3) would adversely affect nighttime views as seen from sensitive receptor locations, specifically KOP-1 (Highway 58 and Jameson Street), KOP-3 (Oak Creek Road), and KOP-4 (Tehachapi Willow Springs Road). Each substation would require outdoor and indoor lighting; however, the outdoor lighting would not have to be on all the time. Lighting would be switched on when SCE employees or contractors were working in the station. At the entrance gate, SCE may propose motion-activated lighting to illuminate the locked gate at night. Motion-activated lighting can be triggered by animals as well as maintenance vehicles, and therefore, would create adverse lighting effects in the nighttime landscape even when no maintenance vehicle is present. Presence of nighttime lights at the two new substations would be unusual and visually incongruous with the dark, unlit landscape at each site, as no other sources of light are present. SCE may propose to illuminate the entire substation in case of nighttime emergency repair, maintenance, or other reasons. Standard illumination of the entire substation and motion-activated-lighting would create strong visual impacts.

Final EIR C.11-45 December 2006

Referring to Table C.11-2, the overall visual change to the nighttime landscape would be high, and in the context of the existing landscape's visual sensitivity at KOPs 1, 3, and 4, the resulting visual impacts would be significant, but mitigable (**Class II**).

New LSTs, TSPs, switch racks, and chain link fences would be constructed of dulled galvanized angle steel. During certain times of day and from certain viewing angles and distances, the new towers and conductors would reflect sunlight, create glare, and draw attention of viewers. New steel structures that have not weathered or rusted will create more glare than existing structures that have weathered and rusted. In order to minimize reflected light that would cause glare, it is important to create structures with colored, non-reflective, textured surfaces.

Implementation of Mitigation Measures V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes) V-16a (Use Only Non-Specular and Non-Reflective Conductors and Insulators), V-16b (Use Magnetic Coils at Entrance Gate), V-16c (Use Only Low-Level, Directional, Shielded Lighting), and V-16d (Only Perform Maintenance Activities During Daylight Hours) would reduce the visual impacts described above to less-than-significant levels.

- V-16a Use Only Non-Specular and Non-Reflective Conductors and Insulators. SCE and its Contractors shall use only non-specular and non-reflective conductors, and the insulators shall be non-reflective and non-refractive. SCE and its Contractors shall submit samples of these materials to the CPUC for review and approval at least 120 days prior to the start of construction.
- **V-16b Use Magnetic Coils at Entrance Gate.** Instead of motion-activated lighting, SCE and its Contractors shall install magnetic coils, or other technology, in the entrance road to each transition station to activate low-level, directional lighting at the locked entrance gate.
- V-16c Use Only Low-Level, Directional, Shielded Lighting. In order to illuminate equipment areas within the transition stations, SCE and its Contractors shall install only low-level, directional, shielded lighting sufficient to limit spill-over glare and nighttime sky-lighting. The brightness of station lighting shall be kept relatively low.
- V-16d Only Perform Routine Maintenance Activities During Daylight Hours. SCE and its Contractors shall perform routine maintenance and repair activities only during daylight hours, thus eliminating the need for nighttime lighting of the transition stations.

Option A

Visual effects under Impact V-16 resulting from Option A would be as described for the Project route. As a result, the visual impacts of Option A would be significant, but mitigable (Class II). Implementation of Mitigation Measures V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), V-16a (Use Only Non-Specular and Non-Reflective Conductors and Insulators), V-16b (Use Magnetic Coils at Entrance Gate) and V-16c (Use Only Low-Level, Directional, Shielded Lighting), and V-16d (Only Perform Maintenance Activities During Daylight Hours) would reduce visual impacts to less-than-significant levels.

Option B

Visual effects under Impact V-16 resulting from Option B would be as described for the Project route. As a result, the visual impacts of Option B would be adverse and significant (**Class II**). Implementation of Mitigation Measures V-1e (Treat Surfaces with Appropriate Colors, Textures, and Finishes), V-16a (Use Only Non-Specular and Non-Reflective Conductors and Insulators), V-16b (Use Magnetic Coils at Entrance Gate),

V-16c (Use Only Low-Level, Directional, Shielded Lighting), and V-16d (Only Perform Maintenance Activities During Daylight Hours) would reduce visual impacts to less-than-significant levels.

Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway (Criterion VIS4)

The proposed Project is not visible from the Angeles Crest Highway, which is the only State scenic highway in the vicinity of the Project. Therefore, there is no impact to visual resources of a State scenic highway, and no mitigation is required.

Final EIR C.11-47 December 2006

Figure Links

(Click to activate)	I Igui C Dinnis	page
C.11-1A	Key Observation Position Map (North)	C.11-47
C.11-1B	Key Observation Position Map (South)	C.11-48
C.11-2A	Existing Visual Condition as seen from KOP 1	C.11-49
C.11-2B	Visual Simulation of the Proposed Project as seen from KOP 1	C.11-50
C.11-3A	Existing Visual Condition as seen from KOP 2	C.11-51
C.11-3B	Visual Simulation of the Proposed Project as seen from KOP 2	C.11-52
C.11-4A	Existing Visual Condition as seen from KOP 3	C.11-53
C.11-4B	Visual Simulation of the Proposed Project as seen from KOP 3	C.11-54
C.11-5A	Existing Visual Condition as seen from KOP 4	C.11-55
C.11-5B	Visual Simulation of the Proposed Project as seen from KOP 4	C.11-56
C.11-6A	Existing Visual Condition as seen from KOP 5	C.11-57
C.11-6B	Visual Simulation of the Proposed Project as seen from KOP 5	C.11-58
C.11-7A	Existing Visual Condition as seen from KOP 6	C.11-59
C.11-7B	Visual Simulation of the Proposed Project as seen from KOP 6	C.11-60
C.11-8A	Existing Visual Condition as seen from KOP 7	C.11-61
C.11-8B	Visual Simulation of the Proposed Project as seen from KOP 7	C.11-62
C.11-9A	Existing Visual Condition as seen from KOP 8	C.11-63
C.11-9B	Visual Simulation of the Proposed Project as seen from KOP 8	C.11-64
C.11-10A	Existing Visual Condition as seen from KOP 9	C.11-65
C.11-10B	Visual Simulation of the Proposed Project as seen from KOP 9	C.11-66
C.11-11A	Existing Visual Condition as seen from KOP 10	C.11-67
C.11-11B	Visual Simulation of the Proposed Project as seen from KOP 10	C.11-68
C.11-12A	Existing Visual Condition as seen from KOP 11	C.11-69
C.11-12B	Visual Simulation of the Proposed Project as seen from KOP 11	C.11-70
C.11-13A	Existing Visual Condition as seen from KOP 12	C.11-71
C.11-13B	Visual Simulation of the Proposed Project as seen from KOP 12	C.11-72
C.11-14A	Existing Visual Condition as seen from KOP 13	C.11-73
C.11-14B	Visual Simulation of the Proposed Project as seen from KOP 13	C.11-74
C.11-15A	Existing Visual Condition as seen from KOP 14	C.11-75
C.11-15B	Visual Simulation of the Proposed Project as seen from KOP 14	C.11-76