

5.2 AESTHETICS**5.2.1 Significance Criteria**

The potential to create visual impacts is determined primarily by CEQA criteria and by local criteria as cited in Section 4.2. Based on the criteria in the Environmental Checklist Form in Appendix G of the CEQA Guidelines, a proposed project would have a significant visual impact if it would result in one or more of the following conditions:

- Have a substantial adverse effect on a scenic vista
- Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway
- Substantially degrade the existing visual character or quality of the site and its surroundings
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

In addition, local ordinances and regulations are evaluated herein where they apply.

These criteria are applied when considering the proposed project within the context of the visual quality, viewer sensitivity and the viewer exposure identified in Section 4.2.

5.2.2 Construction Impacts

Short-term construction impacts on visual resources would result from the temporary presence of equipment, materials, and workforce along the T/L corridors and at the substations. Vehicles, heavy equipment, facility components, and workers would be visible during construction of new towers and conductor installation, including creation of new access spur roads.

In general, the substations, and in some locations the T/L routes, are sufficiently distant from public travel corridors and rural residences that construction of these project components would not be visible. In areas where the T/L route(s) is close to residential development, construction would be more in public view. During construction, debris and materials would be kept as orderly as possible to minimize negative visual impact. Given the short-term nature of the construction and with implementation of APM VIS-1, visual impacts related to project construction activities would be less than significant.

5.2.3 Operation Impacts

Operation impacts focus on the longer-term visual impacts resulting from project operation and the presence of aboveground built facilities in the existing landscape. Changes in the visual environment would result from the addition of T/Ls to the landscape, and modification or construction of substations.

5.2.3.1 Segment 2 (Antelope – Vincent)

To facilitate the review of operation impacts along the proposed Segment 2 500 kV T/L route, the proposed route has been divided into seven sections for this visual assessment. This allows a more detailed evaluation of the potential impacts based upon the land characteristics, the number and duration of viewers, and the characteristics of the T/L itself. While many of the sections are relatively invisible, photo simulations were developed for three locations to show before and after conditions that would represent the reasonable worst case for the sector under discussion. Where simulations have been prepared, the before, or baseline, condition is identified as Photo A and the project, or after construction condition, is identified as Photo B.

Table 5.2-1 provides a detailed discussion of the potential for adverse changes to visual resources on a section-by-section basis for Segment 2. The photo references to baseline conditions and simulations are also listed.

In summary, with implementation of the APMs for visual impacts presented in Section 5.2.4.2, operational impacts associated with Segment 2 facilities would be less than significant.

5.2.3.2 Segment 2 Alternatives

Two alternatives have been identified for Segment 2. Alternative AV1 provides for a cross over from the west to the east of the existing T/L corridor for a 2.1-mile-long section about 0.75 mile north of Elizabeth Lake Road. From a visual perspective, there is no difference between the alternative and the proposed route since they are both in the same corridor and there are no significant visual receptors in the area. Alternative AV2 would maintain the T/L on the east side of the existing T/L corridor through the Ritter Ranch area. Even though the T/L will be adjacent to existing lines, it does pass through an area proposed to be developed on both sides of the corridor. The proposed T/L route traverses open space areas within the Ritter Ranch and Anaverde developments, thereby avoiding or minimizing potential visual impacts on planned homes.

TABLE 5.2-1
SEGMENT 2 – POTENTIAL FOR ADVERSE CHANGES TO VISUAL RESOURCES

<ul style="list-style-type: none"> • Impact Number • Project Segment: Milepost (MP) • Project Element • Viewing Area 	<p>Photo Reference</p>	<p>Visual Significance Assessment</p>
<p>Impact VIS2-1 Segment 2: MP 0.0 to MP 3.0 Transmission line Avenues K & L/80th, 90th, and 100th Streets W.</p>	<p>Figure 4.2-1 Photo 1 (no simulation)</p>	<p>The proposed 500 kV line leaves the Antelope Substation on tubular steel poles, passing under the Antelope-Magunden 220 kV corridor and the Midway-Vincent No. 3 corridor. The line would cross the valley toward the southeast alongside the existing 66/500 kV R-O-W. Once away from the substation, the line would consist of 500 kV towers (initially energized at 220 kV).</p> <p>There are few residences in this sector and traffic on Avenue L is low. The new T/L would always been seen in the context of the existing T/L corridor. A simulation for this general area was prepared by SCE in response to CPUC data requests for Segment 1 and may be reviewed in that document.</p> <p>While the new towers would add somewhat to the existing visual impact in the area, the impact would be less than significant.</p>
<p>Impact VIS2-2 Segment 2: MP 3.0 to MP 4.5 Transmission line Avenue M New residential development Around 70th & 75th Streets</p>	<p>Figure 4.2-1 Photo 2 (no simulation)</p>	<p>The T/L would enter into the foothills of Portal Ridge after crossing Avenue M paralleling the existing 66/220 kV R-O-W. The new line is currently planned to be west of the existing four lines.</p> <p>The new 500 kV towers would add an additional visual element to the existing corridor, but would not obstruct any major scenic vistas and would not silhouette the sky at this location.</p> <p>Residential construction (Tract 060431) is currently underway in the area of W 70th and W 75th Streets abutting the existing T/L corridor. The residential area would have increased sensitivity to changes in the surrounding visual environment. Another subdivision proposed along either side of the existing corridor at W 80th and Avenue M has the potential to locate more sensitive residential receptors close to the transmission corridor.</p> <p>While the visual change of the new T/L is adverse, it would be seen in the context of the existing four line corridor, and would be less than significant.</p>

TABLE 5.2-1 (CONTINUED)
SEGMENT 2 – POTENTIAL FOR ADVERSE CHANGES TO VISUAL RESOURCES

<ul style="list-style-type: none"> • Impact Number • Project Segment: Milepost (MP) • Project Element • Viewing Area 	<p>Photo Reference</p>	<p>Visual Significance Assessment</p>
<p>Impact VIS2-3 Segment 2: MP 4.5 to MP 7.0 Transmission line Goode Road</p>	<p>Figure 4.2-2 Photo 3 (no simulation)</p>	<p>The new T/L would be visible from Goode Road, near Goode Pass, where it crosses under the existing T/L corridor.</p> <p>With the exception of Goode Road, the existing transmission corridor is visibly inaccessible to any significant number of viewers. Thus, the new T/L paralleling the existing transmission corridor would also be essentially visually inaccessible. At Goode Road the line would be perpendicular to travelers and would not add significantly to the existing visual clutter of the corridor.</p> <p>Impacts to the visual environment would be less than significant.</p>
<p>Impact VIS2-4 Segment 2: MP 7.0 to MP 14.8 Transmission line Elizabeth Lake Road – Ritter Ranch</p>	<p>Figure 5.2-1 Photo A = Baseline B = Simulation</p>	<p>The 500 kV towers would cross Elizabeth Lake Road on the west side of the existing transmission corridor. South of Elizabeth Lake Road, the proposed 500 kV line route forms a large loop to the west on the Ritter Ranch development area to avoid or minimize potential conflicts with the residential development.</p> <p>The 500 kV towers would be seen by travelers on Elizabeth Lake Road in the context of the existing T/L corridor. Currently the area around Elizabeth Lake Road at the existing transmission corridor is relatively undeveloped. At this time there are no significant roads (other than small ranch roads) south of Elizabeth Lake Road close to the existing transmission corridor. Where glimpsed at a distance, the towers would be viewed in the context of the existing transmission corridor.</p> <p>Future development of the Ritter Ranch community is planned for a 10,625-acre area south of Elizabeth Lake Road. The rerouting of the T/L around this proposed development would result in residential neighborhoods occurring only to the east of the proposed route, a condition preferred by the land owner.</p> <p>Given the relatively low number of viewers along Elizabeth Lake Road at the current time and views of the new T/L in the context of the existing transmission corridor, impacts would be less than significant. Given the pending development on Ritter Ranch, the addition of the new T/L to the west would incrementally affect the visual environment. Given the fact that the new T/L would be constructed beyond the currently planned perimeter of the proposed development, the impacts would be less than significant.</p>

TABLE 5.2-1 (CONTINUED)
SEGMENT 2 – POTENTIAL FOR ADVERSE CHANGES TO VISUAL RESOURCES

<ul style="list-style-type: none"> • Impact Number • Project Segment: Milepost (MP) • Project Element • Viewing Area 	<p>Photo Reference</p>	<p>Visual Significance Assessment</p>
<p>Impact VIS2-5 Segment 2: MP 14.8 to MP 15.1 Transmission line Ritter Ranch – Anaverde</p>	<p>Figure 5.2-2 Photo A = Baseline B = Simulation</p>	<p>The proposed 500 kV T/L route rejoins the existing transmission corridor at MP 14.8. At this point higher towers are required to transition over the existing lines to reach the new corridor addition on the east. This transition occurs at the corner of the Anaverde development which is now under construction.</p> <p>While there will be new residences in this area, the visual quality of the area to the west of the development is already characterized by the four lines in the existing corridor. The new lines are also set back from the development by an open space dedication.</p> <p>Reference to the simulation for this condition indicates that while the new line does adds a visual element to the corridor, it will not noticeably further degrade the view of this relatively bland hillside. Therefore the impact is considered as less than significant.</p>
<p>Impact VIS2-6 Segment 2: MP 15.1 to MP 20.2 Transmission line BLM: Sierra Palona</p>	<p>Figure 4.2-3 Photo 6 (no simulation)</p>	<p>The proposed line follows the existing transmission corridor that is in the vicinity of BLM land.</p> <p>This area is relatively inaccessible other than to off-road vehicles. Only a minimal number of potential viewers would see the new line in the context of the existing corridor.</p> <p>Changes to the visual environment would be less than significant.</p>
<p>Impact VIS2-7 Segment 2: MP 20.2 to MP 21.0 Transmission line Soledad Canyon – Highway 14 Corridor</p>	<p>Figure 5.2-3 Photo A = Baseline B=Simulation</p>	<p>The lattice towers of proposed 500 kV T/L would be northwest of the two existing 230 kV lines (see Photo A of Figure 5.2-3) but essentially be imbedded in this corridor with three existing lines.</p> <p>This sector is a very heavily used transportation corridor with State Highway 14, Soledad Canyon Road and the Metro Link commuter system. However, the visual quality of the area is degraded and classified as low.</p> <p>The addition of the new line, while adverse, would probably be unnoticed by almost all travelers and, therefore, would be less than significant (see simulation Photo B, Figure 5.2-3).</p>

TABLE 5.2-1 (CONTINUED)
SEGMENT 2 – POTENTIAL FOR ADVERSE CHANGES TO VISUAL RESOURCES

<ul style="list-style-type: none"> • Impact Number • Project Segment: Milepost (MP) • Project Element • Viewing Area 	<p>Photo Reference</p>	<p>Visual Significance Assessment</p>
<p>Impact VIS2-8 Segment 2: MP 21.0 to MP 21.5 Transmission Line</p>	<p>Figure 4.2-4 Photo 7</p>	<p>The proposed T/L would enter the Vincent Substation from the west. Views of the substation, but not the proposed T/L, are visible from Angeles National Forest Road N3, which passes the Vincent Substation on the east side.</p>

5.2.3.3 Proposed Segment 3 (Antelope to Substations One and Two)

To facilitate the review of operation impacts along the proposed Segment 3 T/L route, the proposed corridor has been divided into six sections. This allows a more detailed evaluation of the potential impacts based upon the land characteristics, the number and the duration of viewers and characteristics of the T/L itself. While many of the sections are relatively invisible, photo simulations were developed for three locations to show before and after conditions that would represent the reasonable worst case for the segment under discussion. Where simulations have been prepared, baseline condition is identified as Photo A, and the and the post-construction condition is identified as Photo B. Where simulations have not been prepared, reference is provided to context photos in Section 4.2.

Table 5.2-2 provides a detailed discussion of the potential for adverse changes to visual resources on a section-by-section basis for Segment 3.

In summary, with implementation of the APMs for visual impacts presented in Section 5.2.4.2, operational impacts associated with Segment 3 facilities would be less than significant.

5.2.3.4 Segment 3 Alternatives

For the southern portion of the Segment 3 T/L route through the Antelope Valley, two alternative routes (A and B) have been identified. Their overall visual impacts are very similar to the proposed route in that they cross relatively undeveloped open and rural lands up to the area of Substation One. The only notable difference is that Alternative A parallels 100th Street W., which is slightly more developed than the proposed 105th Street W. corridor. Alternative B avoids the proposed Del Sur Ranch development by passing to the west by 2,700 feet; however, this north/south route places it on the eastern edge of the proposed Copa De Oro/Kern Ross Estates project. While this route might be considered a slight visual advantage, the location along 110th Street W. means that, in the Gaskell Avenue area, the line would not be in an existing transmission corridor.

Alternative C is an alternate 220 kV T/L route between Substations One and Two. This route turns north at approximately MP 4.4 and traverses a small ridge through a wind turbine farm, crosses Cameron Canyon Road and the Pacific Crest Trail. It then rises across the main Tehachapi Ridge through another wind turbine farm before dropping downhill to Substation Two. While the majority of this route is through the industrial character of existing wind turbine farms, the portion of the T/L between MP 5.0 and 6.0 passes a relatively scenic rural residential area. As such, Alternative C is less desirable than the proposed route from a visual perspective.

TABLE 5.2-2
SEGMENT 3 – POTENTIAL FOR ADVERSE CHANGES TO VISUAL RESOURCES

<ul style="list-style-type: none"> • Impact Number • Project Segment: Milepost (MP) • Project Element • Viewing Area 	<p style="text-align: center;">Photo Reference</p>	<p style="text-align: center;">Visual Significance Assessment</p>
<p>Impact VIS3-1 Segment 3: MP 0.0 to MP 2.0 Transmission line Avenue J – Del Sur Ranch</p>	<p>Figure 4.2-5 Photo 8 (no simulation)</p>	<p>The proposed new Segment 3 500 kV line leaves the Antelope Substation in a northwestern direction across rural lands, crossing W Avenue J and W Avenue I to MP 2.0 before turning at a right angle and crossing under the existing Midway-Vincent and Antelope-Magunden T/Ls and heading due north away from the existing corridor.</p> <p>Avenue I serves as the connecting rural highway between Lancaster and Gorman (Lancaster Road). As the line departs from the Antelope Substation it would be seen within the context of the existing T/L corridor. Once it leaves the existing corridor, the proposed T/L would be perceived as a new element in the visual environment.</p> <p>While the T/L has the potential to degrade the visual character of the surrounding area once it departs from the existing corridor, there are currently no sensitive visual receptors in the area.</p>
<p>Impact VIS3-2 Segment 3: MP 2.0 to MP 22.6 Transmission line 105th Street W. Corridor</p>	<p>Figure 4.2-5 Photo 9 (no simulation)</p>	<p>The proposed T/L runs north along the 105th Street W. alignment just west of the proposed Del Sur Ranch project. At present this is all open country as can be seen in Photo # 9 of Figure 4.2-5. It runs adjacent to 105th Street W. on the west side until MP 9.0 where it slants to the west to pick up an alignment at 107th Street W. At MP 12.0 the T/L follows and existing corridor until MP 13.0 where it again tracks north along an alignment at 103rd Street W. The character of the surrounding area along this corridor is rural with occasional residences located along the quarter section avenues.</p> <p>Depending on the design of the Del Sur Ranch development, the addition of the new T/L could have a negative effect on the visual environment. In the context of existing adjacent residential development the addition of the line, while adverse, would be less than significant.</p>
	<p>Figure 5.2-4 Photo A = Baseline B = Simulation</p>	<p>Along the 105th Street W. corridor, the addition of 500 kV scattered towers would for the most part be seen in the context of the rural countryside with minimal development except for scattered power lines. Given the moderately low character of the existing landscape and the small number of viewers, the impact would be less than significant. Under the applicable CEQA criteria, the addition of the T/L would not adversely affect a scenic vista nor damage scenic resources and the impact would be less than significant.</p>

TABLE 5.2-2 (CONTINUED)
SEGMENT 3 – POTENTIAL FOR ADVERSE CHANGES TO VISUAL RESOURCES

<ul style="list-style-type: none"> • Impact Number • Project Segment: Milepost (MP) • Project Element • Viewing Area 	<p style="text-align: center;">Photo Reference</p>	<p style="text-align: center;">Visual Significance Assessment</p>
<p>Impact VIS3-3 Segment 3: MP 22.6 to MP 26.0 Oak Creek wash Substation One</p>	<p>Figure 5.2-5 Photo A = Baseline B = Simulation</p>	<p>The 500 kV T/L in this sector would be in a new corridor. Substation One is proposed to be located on presently undeveloped land adjacent to and south of Oak Creek Road and a currently operating wind farm.</p> <p>The general area of the proposed T/L south of Substation One is open space and inaccessible to all but off-road vehicles. The visual quality of the area is moderate and relatively untouched by roads or structures (with the exception of a railroad branch line to the Cal Cement plant).</p> <p>The context of Substation One is relatively industrial given its proximity to extensive wind farm developments to the north and the Cal Cement plant's operation 2 miles to the west. Much of the vehicular traffic is related to these two industrial operations.</p> <p>Given the lack of sensitive viewers along the T/L route, the visual impact would be less than significant. While the addition of Substation One would occur on undeveloped land and the view of the distant hills is altered, the general electrical/industrial character of the area suggests adverse but less than significant visual impacts. Under CEQA criteria, the addition of the T/L would not adversely affect a scenic vista nor significantly damage scenic resources. Therefore, impacts would be less than significant.</p>
<p>Impact VIS3-4 Segment 3: MP 26.0 to MP 30.0 Transmission line Oak Creek Road Corridor</p>	<p>Figure 4.2-6 Photo 12 (no simulation)</p>	<p>The 220 kV T/L route for this sector would follow the southern side of Oak Creek Road for just over a mile and then follow an existing 66 kV subtransmission line within the existing wind farm.</p> <p>While the general visual character for this area is moderate in scenic value, the immediate context of the T/Ls, as seen from Oak Creek Road, would be that of the wind farms.</p> <p>The impact, while adverse from the addition of the line, would be less than significant in this context and with the limited number of viewers.</p>

TABLE 5.2-2 (CONTINUED)
SEGMENT 3 – POTENTIAL FOR ADVERSE CHANGES TO VISUAL RESOURCES

<ul style="list-style-type: none"> • Impact Number • Project Segment: Milepost (MP) • Project Element • Viewing Area 	Photo Reference	Visual Significance Assessment
Impact VIS3-5 Segment 3: MP 30.0 to MP 35.0 Transmission line Cameron Canyon/Tehachapi Mtns.	Figure 4.2-7 Photo 13	<p>This sector of the proposed 220 kV T/L route is, for the most part, across open country through the rolling terrain of an eastern spur of the Tehachapi Mountains. At MP 31.4 it crosses the Pacific Crest Trail which is a scenic resource and Cameron Canyon Road which heads northeast toward a small valley occupied by half a dozen small farms and residences.</p> <p>The terrain is one of rolling scrub-covered hills. The land uses are open space interspersed with several wind generation farms and a 66 kV subtransmission line. While hikers and travelers to the residences are considered to be potentially sensitive visual receptors, the T/L is relatively perpendicular to the path of travel and the location of the lattice towers would be set back from the routes of travel, as practical.</p> <p>With the setback measure for towers adjacent to the Pacific Crest Trail in place, the impact of the line, while adverse, would be less than significant.</p>
Impact VIS3-6 Segment 3: MP35. 0 Substation Two Highline Road	Figure 5.2-6 Photo A = Baseline B = Simulation	<p>Substation Two is located at the foot of the Tehachapi Mountains spur on the southern side of Tehachapi Valley. Access is by the Highway 58 frontage road and then along one-half mile of Monolith Street. The proposed T/L would connect from the south.</p> <p>While this site is set against a relatively scenic backdrop, it is on the valley floor. The substation would be seen in the context of several wind generation farms and the General Electric assembly and maintenance facility to the southwest. To the west are several farms with large sheds and sheet metal structures. A mile and a half north is the large Monolith Cement facility. While the simulation (Photo B of Figure 5.2- 6) does project into the skyline, this would not be the case from Highway 58, which is half a mile north with a different perspective.</p> <p>Given the somewhat industrial context of the immediate area, and the low visual mass when compared to other manmade structures in the area, the visual impact would be less than significant.</p>

In summary, with implementation of the APMs for visual impacts presented in Section 5.2.4.2, operational impacts associated with the T/L route and substation site alternatives for Segment 3 would be less than significant. One exception is alternate Substation 1C site which would result in a significant visual impact on the Pacific Crest National Scenic Trail since the trail crosses the site. Alternative substation site 1C is not considered to be a viable alternative.

5.2.4 Mitigation Measures

5.2.4.1 Construction

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.

5.2.4.2 Operation

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) 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.