

D.12 VISUAL RESOURCES

This section addresses the Proposed Project and alternatives, as they would affect visual resources. Section D.12.1 provides a description of the environmental setting and the approach to baseline analysis. The applicable visual resources management plans, regulations, and standards are presented in Section D.12.2. An analysis of the Proposed Project impacts is in Section D.12.3, and the visual resources impacts related to the Project alternatives are in Sections D.12.4 through D.12.6.

D.12.1 Environmental Setting for the Proposed Project

D.12.1.1 Approach to Data Collection

Initially, the proposed and alternative routes were viewed from various public roads and vantage points to develop an overall assessment of the existing landscape character, visual quality, and viewing conditions by segment. A number of representative Key Viewpoints (KVPs) were established to assess the various factors that are considered in the evaluation of a landscape's existing visual resources. KVPs were generally selected to be representative of the most critical locations from which the Project would be seen. KVPs were located based on their usefulness in evaluating existing landscapes and potential impacts on visual resources with various levels of sensitivity, in different landscape types and terrain, and from various vantage points. Typical KVP locations for the Proposed Project and Alternatives include (1) along major or significant travel corridors or points of visual access; (2) at significant recreation areas; (3) in residential areas; and (4) at locations that provide good examples of the existing landscape context and viewing conditions. At each KVP, the existing landscape was characterized and photographed.

Photographs were presented as 11" x 17" color images at "life-size scale" when viewed at a standard reading/viewing distance of 18 inches (i.e., when the report image is held at a distance of 18 inches from the eye, all landscape features in the images would appear to be the same scale and size as they would appear in the field at the viewpoint location. Figure D.12-1 shows the location of each of the KVPs selected for detailed analysis. (Please note that all visual figures are located at the end of this section.)

Each of the factors considered in the evaluation of the existing landscape under the Visual Sensitivity-Visual Change Methodology is generally expressed as low, moderate, or high as discussed in the following paragraphs. Visual Resources Attachment VR-1 presents a graphical explanation of all of the contributing factors to the Visual Sensitivity-Visual Change method including how the information and conclusions are derived. The results of the detailed visual analysis are summarized and presented as a series of foldout tables at the end of the Visual Resources section in Attachment VR-2.

Visual Quality is a measure of the overall impression or appeal of an area as determined by the particular landscape characteristics such as landforms, rockforms, water features, and vegetation patterns, as well as associated public values. The attributes of variety, vividness, coherence, uniqueness, harmony, and pattern contribute to visual quality classifications of indistinctive (low), common (moderate), and distinctive (high). Visual quality is studied as a point of reference to assess whether a given project would appear compatible with the established features of the setting or would contrast noticeably and unfavorably with them. The visual quality ratings (low to high) are substantially based on the BLM's Scenic Quality Rating scale shown in Table D.12-1. Additional guidance for determining the scenic quality rating is also presented in Table D.12-2.

Table D.12-1. Visual Resource Management (VRM) Scenic Quality Rating System

Component		Scenic Quality Rating		
Landform	High vertical relief (prominent cliffs, spires, or massive rock outcrops); severe surface variation, highly eroded formations (major badlands or dune systems); detail features dominant and exceptionally striking/intriguing. 5	Steep canyons, mesas, buttes, cinder cones, and drumlins; or interesting erosional patterns or variety in size and shape of landforms; or detail features, which are interesting though not dominant or exceptional. 3	Low rolling hills, foothills, or flat valley bottoms; or few or no interesting landscape features.	1
Vegetation	A variety of vegetative types as expressed in interesting forms, textures, and patterns. 5	Some variety of vegetation, but only one or two major types. 3	Little or no variety or contrast in vegetation.	1
Water	Clear and clean appearing, still, or cascading white water, any of which are a dominant factor in the landscape. 5	Flowing, or still, but not dominant in the landscape. 3	Absent or present, but not noticeable.	0
Color	Rich color combinations, variety or vivid color; or pleasing contrasts in the soil, rock, vegetation, water or snow fields. 5	Some intensity or variety in colors and contrast of the soil, rock, and vegetation, but not a dominant scenic element. 3	Subtle color variations, contrast, or interest; generally muted tones.	1
Influence of Adjacent Scenery	Adjacent scenery greatly enhances visual quality. 5	Some intensity or variety in colors and contrast of the soil, rock, and vegetation, but not a dominant scenic element. 3	Adjacent scenery has little or no influence on overall visual quality.	0
Scarcity	One of a kind; or unusually memorable, or very rare within region. Consistent chance for exceptional wildlife or wildflower viewing, etc. 5+*	Distinctive, though somewhat similar to others within the region. 3	Interesting within its setting, but fairly common within the region.	1
Cultural Modifications	Modifications add favorably to visual variety while promoting visual harmony. 2	Modifications add little or no visual variety to the area, and introduce no discordant elements. 0	Modifications add variety but are very discordant and promote strong disharmony. - 4	

* A rating of greater than 5 can be given but must be supported by written justification

Scenic Quality Rating: **A = 19 or more** **B = 12 to 18** **C = 11 or less**

Source: BLM, 1986a and 1986b

Table D.12-2. Visual Quality Rating Guidance

Visual Quality Rating	Visual Quality Guidance
High	<ul style="list-style-type: none"> • Landscape elements (landforms, vegetative patterns, water characteristics and cultural features) have high visual appeal • Landscape has high degrees of variety, vividness, intactness, harmony, and uniqueness (attributes) • Distinctive landscape that attracts people to view
Moderate-to-High	<ul style="list-style-type: none"> • Landscape elements have moderate-to-high visual appeal • Landscape attributes have a mix of moderate and high values • Landscape may contain built features that neither complement nor detract from overall visual quality
Moderate	<ul style="list-style-type: none"> • Landscape elements are moderately appealing • Landscape attributes have common or ordinary values • Landscape may contain discordant built features but they are subordinate

Table D.12-2. Visual Quality Rating Guidance	
Visual Quality Rating	Visual Quality Guidance
Low-to-Moderate	<ul style="list-style-type: none"> • Landscape elements have low-to-moderate appeal • Landscape has weak or missing attributes • Landscape may have prominent though not dominant discordant built features
Low	<ul style="list-style-type: none"> • Landscape elements have low-to-no appeal • Landscape is missing some attributes • Landscape is dominated by discordant built features

Viewer Concern addresses the level of interest or concern of viewers regarding an area’s visual resources and is closely associated with viewers’ expectations for the area. Viewer concern reflects the importance placed on a given landscape based on the human perceptions of the intrinsic beauty of the existing landforms, rockforms, water features, vegetation patterns, and even cultural features.

Viewer Exposure describes the degree to which viewers are exposed to views of the landscape. Viewer exposure considers landscape visibility (the ability to see the landscape), distance zones (proximity of viewers to the subject landscape), number of viewers, and the duration of view. Landscape visibility can be a function of several interconnected considerations including proximity to viewing point, degree of discernible detail, seasonal variations (snow, fog, and haze can obscure landscapes), time of day, and presence or absence of screening features such as landforms, vegetation, and/or built structures. Even though a landscape may have highly scenic qualities, it may be remote, receiving relatively few visitors and, thus, have a lower degree of viewer exposure. Conversely, a subject landscape or project may be situated in relatively close proximity to a major road or highway utilized by a substantial number of motorists and yet still result in relatively low viewer exposure if the rate of travel speed on the roadway is high and viewing times are brief, or if the landscape is partially screened by vegetation or other features. Frequently, it is the subject area’s proximity to viewers or *distance zone* that is of particular importance in determining viewer exposure. Landscapes are generally subdivided into three or four distance zones based on relative visibility from travel routes or observation points. Distance zones typically include foreground, middleground, and background. The actual number of zones and distance assigned to each zone is dependent on the existing terrain characteristics and public policy and is often determined on a project-by-project basis.

Overall Visual Sensitivity is a concluding assessment as to an existing landscape’s susceptibility to an adverse visual outcome. A landscape with a high degree of visual sensitivity is able to accommodate only a lower degree of adverse visual change without resulting in a significant visual impact. A landscape with a low degree of visual sensitivity is able to accommodate a higher degree of adverse visual change before exhibiting a significant visual impact. Overall visual sensitivity is derived from a comparison of existing visual quality, viewer concern, and viewer exposure.

D.12.1.2 Regional Setting

The general Project area extends into the Transverse Ranges section of the Pacific Border Province, passing through arid and semi-arid landscapes at the base of the east-west trending San Jacinto and San Bernardino Mountains, into the more urbanized and rapidly developing residential, commercial, and industrial environs of Riverside and San Bernardino Counties of Southern California. The San Gorgonio Pass area is notable for the extensive wind farm development and concentration of energy infrastructure that dominate much of the landscape east of the Proposed Project. The Proposed Project is located in northwestern Riverside County and southwestern San Bernardino County, within the incorporated Cities of Banning, Beaumont, Calimesa, Yucaipa, and Redlands, as well as unincorporated areas of Riverside and San Bernardino Counties. This area is generally described in the County of Riverside General Plan

as “...a narrow gap between two of southern California’s most spectacular mountain ranges – the San Bernardino and San Jacinto Mountains. This gap provides an obvious physical gateway between the mountains and provides a passage between the desert areas to the east and the Pacific Ocean to the west.”

Within this regional setting, the study area for the visual resources analysis was defined by the numerous viewpoints from which the Proposed Project would be seen. The viewshed is considerable given the relative openness of much of the landscape, the height of the proposed structures, and the availability of viewing opportunities from travel routes, recreational use areas, and nearby residential and commercial areas.

D.12.1.3 Project Setting

The Proposed Project would extend from the proposed 14-acre El Casco Substation site to be located immediately south of San Timoteo Canyon Road and the Southern Pacific Railroad in the Norton Younglove Reserve, to Banning Substation in the City of Banning. The new El Casco Substation would be built adjacent to several existing transmission lines including SCE’s Devers-San Bernardino Nos. 1 and 2 and Devers-Vista Nos. 1 and 2 220 kV transmission lines and SCE’s Maraschino-San Bernardino 115 kV subtransmission line. From El Casco Substation, the Proposed Project would extend southeast approximately five miles through San Timoteo Canyon and crossing State Route 60 before arriving at the loop into Maraschino Substation. This portion of the route is characterized by predominantly natural appearing and rural residential landscapes. Continuing southeast and east, the route spans SR-79 and then passes adjacent and through newly developed suburban residential areas including a one-mile segment through the Sun Lakes residential/golf community. Continuing east, the Project would again pass through rural residential landscape before turning north at Wesley Street for approximately 0.65 mile through predominantly residential areas to Banning Substation.

Views of the Proposed Project’s aboveground subtransmission facilities would be available from San Timoteo Canyon Road, SR-60, SR-79, Manzanita Park Road, Highland Springs Avenue, Sunset Avenue, Wesley Street, East Lincoln Street, and numerous other local roads. Views would also be available from residences in San Timoteo Canyon and rural and suburban residences south of I-10 in unincorporated areas of Riverside and San Bernardino Counties and the Cities of Beaumont and Banning. The Proposed Project’s aboveground fiber optic line that would be located on existing utility poles would be visible from numerous local roads in Banning, Beaumont, Calimesa, Yucaipa, Redlands, and unincorporated areas of Riverside and San Bernardino Counties.

Because of the widespread visibility of the various Project components, ten areas of potential visual sensitivity were selected for detailed analysis: (1) views of the proposed El Casco Substation from San Timoteo Canyon Road (KVP 1), (2) views of the proposed El Casco Substation from Norton Younglove Reserve (KVP 2), (3) views of the proposed El Casco Substation from a new residential development on the north side of San Timoteo Canyon Road (KVP 3/3Alt.), (4) views of the route from SR-60 (KVP 4), (5) residential and local road views of the route as it passes adjacent to existing residential areas (KVP 5), (6) residential and local road views of the route as it passes through existing residential developments (KVP 6), (7) views of the modifications to Banning Substation from adjacent roads (KVP 7), (8) views of the modifications to Zanja Substation from adjacent residences and roads (KVP 8), (9) views of the Mill Creek Communication Site from residential areas in Yucaipa (KVP 9), and (10) views of the aboveground fiber optic line from local roads (KVP 10). Therefore, ten Key Viewpoints (KVPs) were selected to represent the visual setting for the ten general areas of the Proposed Project selected for detailed analysis. The location of each of these KVPs is shown on Figure

D.12-1. The results of the visual analysis are summarized in table format in Attachment VR-2 (at the end of this section). A discussion of the existing visual setting for each KVP is presented in the following paragraphs.

Key Viewpoint 1 – El Casco Substation from San Timoteo Canyon Road

Key Viewpoint 1 was established on eastbound San Timoteo Canyon Road, immediately north of the substation site (see Figure D.12-2A). Viewing to the south toward the proposed substation site, this location was selected to generally characterize the existing landscape visible from San Timoteo Canyon Road in the vicinity of the substation site.

Visual Quality. Moderate. The foreground view to the south from San Timoteo Canyon Road is partially screened by riparian vegetation immediately south of the road. Beyond is a level grass-covered area and the rolling, grass-and shrub-covered hills that exhibit minimal visual variety. The Southern Pacific rail line immediately adjacent to the road is a prominent built linear feature as are the five electric transmission facilities that border the site. The simple to complex vertical forms and lines of the existing transmission lines contribute considerable industrial character to a landscape that is otherwise predominantly natural in appearance. Structure skylining (extending above the horizon line) exacerbates structure prominence and visual contrast as the transmission lines cross the hilltops to the south. North of San Timoteo Canyon Road, the rural landscape is rapidly transitioning to a suburban residential character with the construction of large residential developments.

Viewer Concern. High. Travelers on San Timoteo Canyon Road are provided somewhat intermittent views of the substation site through gaps in the riparian vegetation. Although energy transmission infrastructure features prominently in the foreground to middleground landscape, particularly in the vicinity of the proposed substation site and along the southern ridges/hilltops, travelers on San Timoteo Canyon Road would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (hills, ridgelines, and background sky) an adverse visual change.

Viewer Exposure. Moderate. Foreground views of the proposed substation site from San Timoteo Canyon Road are substantially screened by riparian vegetation south of the road and the existing rail line, resulting in a moderate degree of site visibility. The number of viewers would be moderate as would the duration of view. Combining these four equally weighted factors (visibility, distance zone, number of viewers, and duration of view) gives an overall moderate viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For travelers on San Timoteo Canyon Road in the vicinity of the substation site, combining the equally weighted moderate visual quality, high viewer concern, and moderate viewer exposure lead to a moderate-to-high overall visual sensitivity of the visual setting and viewing characteristics.

Key Viewpoint 2 – El Casco Substation from Norton Younglove Reserve

Key Viewpoint 2 was established on the north access road to the Norton Younglove Reserve, immediately south of San Timoteo Canyon Road and the existing Southern Pacific rail line (see Figure D.12-3A). Viewing to the west toward the proposed substation site, this location was selected to generally characterize the existing landscape visible from the Reserve in the vicinity of the substation site.

Visual Quality. Moderate. The foreground to middleground views from the Reserve access road encompass an open rural landscape, much of which is natural in appearance with rolling, grass- and shrub-covered hills that exhibit minimal visual variety. Electric transmission facilities with structurally complex forms and lines and substantial industrial character are prominently visible between San Timoteo Canyon Road and the southern ridgelines. Skylining exacerbates structure prominence, further reducing landscape coherence and scenic integrity.

Viewer Concern. High. Visitors to the Norton Younglove Reserve would primarily be there for the recreational and nature experience. Although energy transmission infrastructure features prominently in the foreground to middleground landscape, particularly in the vicinity of the proposed substation site and along the southern ridges/hilltops, visitors to the reserve would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (hills, ridgelines, and background sky) an adverse visual change.

Viewer Exposure. Moderate. The proposed substation would be highly visible in the foreground of views from KVP 2 because of the open, unobstructed opportunities to view the site from within the Reserve. Although the duration of view would be extended, the number of viewers would be very low given that there are no plans to improve visitor access to the Reserve. Combining these four equally weighted factors (visibility, distance zone, number of viewers, and duration of view) gives an overall moderate viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For visitors to the Norton Younglove Reserve in the vicinity of the substation site, combining the equally weighted moderate visual quality, high viewer concern, and moderate viewer exposure lead to an overall moderate-to-high visual sensitivity of the visual setting and viewing characteristics.

Key Viewpoint 3 – El Casco Substation from San Timoteo Canyon Residential Development

Key Viewpoints 3 and 3 Alternative were established in the new residential development being constructed on the north side of San Timoteo Canyon Road and just northeast of the proposed substation site (see Figures D.12-4A and 4C). Key Viewpoint 3 captures the view from a slightly higher elevation next to the existing transmission line corridor. Key Viewpoint 3 Alternative is situated at a slightly lower elevation and slightly further away from the existing transmission line corridor. Viewing to the southwest and west toward the proposed substation site, these locations were selected to generally characterize the existing landscape visible from the new residential development.

Visual Quality. Moderate. The foreground to middleground views from the new residential development north of San Timoteo Canyon Road encompass a predominantly open, rural landscape, much of which is natural in appearance with rolling, grass- and shrub-covered hills that exhibit minimal visual variety. Electric transmission facilities with structurally complex forms and lines and substantial industrial character are prominently visible between the residential development and the proposed substation site and adjacent to the substation site along the southern ridgelines. Skylining exacerbates structure prominence, further reducing landscape coherence and scenic integrity and compromising visual quality.

Viewer Concern. High. Although energy transmission infrastructure features prominently in the foreground to middleground landscape, future residents of the new residential development would

consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (hills, ridgelines, and background sky) an adverse visual change.

Viewer Exposure. Moderate. The proposed substation site would be moderately visible in the foreground of views from KVPs 3 and 3 Alternative because of the open, though partially screened, views of the site from within the residential development. Although the number of viewers would be low, the duration of view would be extended. Combining these four equally weighted factors (visibility, distance zone, number of viewers, and duration of view) gives an overall moderate viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For future residents of the new residential development, combining the equally weighted moderate visual quality, high viewer concern, and moderate viewer exposure lead to an overall moderate-to-high visual sensitivity of the visual setting and viewing characteristics.

Key Viewpoint 4 – Eastbound State Route 60

Key Viewpoint 4 was established on eastbound SR-60, just east of the Project's convergence on SR-60 from El Casco Substation (see Figure D.12-5A). Viewing to the east down the highway and along the existing route, this location was selected to generally characterize the existing landscape visible to both eastbound and westbound travelers on SR-60 where the route converges on, parallels, and then spans the highway.

Visual Quality. Moderate. The foreground to middleground views from SR-60 encompass a predominantly open, rural landscape, much of which is natural in appearance with rolling, grass- and shrub-covered hills that exhibit minimal visual variety. A wood pole, H-frame electric subtransmission line is prominently visible adjacent to the highway. Although the rough-hewn texture and brown color of the poles is consistent with the overall rural character, the skylining of the structures (extending above the horizon line) exacerbates structure prominence, which reduces landscape coherence and visual quality.

Viewer Concern. High. Travelers on SR-60 anticipate a predominantly rural landscape setting along this portion of SR-60. Repeat travelers on the highway would also anticipate the prominent presence of the existing subtransmission line in the foreground to middleground landscape. However, any increase in industrial character, structure prominence, or view blockage of higher value landscape features (hills, ridgelines, and background sky) would be perceived as an adverse visual change.

Viewer Exposure. High. The proposed route would be highly visible in the foreground of views from KVP 4 because of the open, unobstructed views of the route and its prominent location within the primary cone of vision (45 degrees either side of the primary direction of travel) of both eastbound and westbound travelers. Additionally, the number of viewers would be high and the duration of view would be extended. Combining these four equally weighted factors (visibility, distance zone, number of viewers, and duration of view) gives an overall high viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For travelers on SR-60, combining the equally weighted moderate visual quality, high viewer concern, and high viewer exposure lead to an overall moderate-to-high visual sensitivity of the visual setting and viewing characteristics.

Key Viewpoint 5 – Faircliff Street

Key Viewpoint 5 was established just north of the proposed 115 kV subtransmission line route, on Faircliff Street, just west of Finley Avenue within the Seneca Springs residential development (see Figure D.12-6A). Viewing to the west-southwest, this location was selected to generally characterize the existing landscape along the route in the vicinity of the Seneca Springs development.

Visual Quality. Moderate. The foreground to middleground southerly views from the Seneca Springs development encompass a predominantly open, rural landscape, much of which is natural in appearance with rolling, grass- and shrub-covered hills that exhibit minimal visual variety. A wood pole, H-frame electric subtransmission line is prominently visible along the southern boundary of the development. Although the rough-hewn texture and brown color of the poles is consistent with the overall rural character of the background landscape, the skylining of the structures (extending above the horizon line) exacerbates structure prominence, which reduces landscape coherence and visual quality, and causes noticeable view blockage of the background hills and sky.

Viewer Concern. High. Existing and future residents along Faircliff Street and other streets bordering the route in the vicinity of the Seneca Springs development would anticipate a predominantly rural landscape setting to the south as well as the prominent presence of the existing subtransmission line in the foreground landscape. However, any increase in industrial character, structure prominence, or view blockage of higher value landscape features (hills, ridgelines, and background sky) would be perceived as an adverse visual change.

Viewer Exposure. Moderate-to-high. The proposed route would be highly visible in the foreground of views from KVP 5 and residences along Faircliff Street because of the open, unobstructed views of the route and its prominent location within the direct lines of sight from the numerous residences that have been and are being constructed along Faircliff Street. Although houses to be built along the south side of the street will partially block views of the existing transmission line, the upper portions of the line will still extend above the new residences. While the number of viewers would be low, the duration of view would be extended. Combining these four equally weighted factors (visibility, distance zone, number of viewers, and duration of view) gives an overall moderate-to-high viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For residents along the southern boundary of the Seneca Springs development, combining the equally weighted moderate visual quality, high viewer concern, and moderate-to-high viewer exposure lead to an overall moderate-to-high visual sensitivity of the visual setting and viewing characteristics.

Key Viewpoint 6 – Pine Valley Road in the Sun Lakes Development

Key Viewpoint 6 was established just south of the span of Pine Valley Road in the Sun Lakes residential development (see Figure D.12-7A). Viewing to the east-northeast, this location was selected to generally characterize the existing landscape along the route within the Sun Lakes development.

Visual Quality. Moderate. The foreground views encompass a residential and golf community landscape designed to provide aesthetic appeal and which is characterized by well-maintained, grass-covered fairways with strategic placement of trees and sand features, integrated with newer single-family residential structures. While the sculpted landscape exhibits some degree of intactness and coherence of vegetative form and character, the prominently visible existing wood pole, H-frame subtransmission line passing through the golf course and residential development compromises landscape coherence and reduces overall visual quality.

Viewer Concern. High. Residents of Sun Lakes and visitors to the golf course expect to see a landscape with high aesthetic appeal characterized by a mosaic of natural vegetative forms. Although the existing subtransmission line is also part of the resident's and repeat visitor's expectations, any increase in industrial character, structure prominence, or view blockage of higher value landscape features (hills, ridgelines, and background sky) would be perceived as an adverse visual change.

Viewer Exposure. Moderate-to-high. The proposed route would be highly visible in the foreground of views from KVP 6, nearby residences, interior roads spanned by the line, and along the fairways where the Project would pass. While the number of viewers would be low-to-moderate, the duration of view would be extended. Combining these four equally weighted factors (visibility, distance zone, number of viewers, and duration of view) gives an overall moderate-to-high viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For Sun Lakes residents and golfers along the route, combining the equally weighted moderate visual quality, high viewer concern, and moderate-to-high viewer exposure lead to an overall moderate-to-high visual sensitivity of the visual setting and viewing characteristics.

Key Viewpoint 7 – East Lincoln Street in Banning

Key Viewpoint 7 was established on East Lincoln Street in Banning, across from the existing Banning Substation (see Figure D.12-8). Viewing to the northeast, this location was selected to generally characterize foreground views of the existing substation.

Visual Quality. Low-to-moderate. The foreground views of the substation from East Lincoln Street encompass a highly industrial-appearing facility, surrounded by suburban commercial, industrial, and residential uses. The substation exhibits structurally complex forms and lines and causes substantial view blockage of the background mountains when viewed from the south. Skylining exacerbates structure prominence of the steel lattice and wood pole transmission structures that feed into the substation.

Viewer Concern. Moderate. Although the existing substation features prominently in the foreground landscape visible from East Lincoln Street, some travelers on East Lincoln Street would consider a noticeable increase in industrial character, structure prominence, or view blockage of higher value landscape features (hills, ridgelines, and background sky) an adverse visual change.

Viewer Exposure. Moderate-to-high. The substation is highly visible in the foreground of views from KVP 7 and East Lincoln Street. While the number of viewers would be low-to-moderate, the duration of view would be moderate-to-extended. Combining these four equally weighted factors (visibility, distance zone, number of viewers, and duration of view) gives an overall moderate-to-high viewer exposure.

Overall Visual Sensitivity. Moderate. For travelers on Lincoln Street, combining the equally weighted low-to-moderate visual quality, moderate viewer concern, and moderate-to-high viewer exposure lead to an overall moderate visual sensitivity of the visual setting and viewing characteristics.

Key Viewpoint 8 – North Juniper Avenue in Yucaipa

Key Viewpoint 8 was established on North Juniper Avenue in Yucaipa, across from the existing Zanja Substation (see Figures D.12-9A and 9B). Viewing to the west, this location was selected to generally characterize foreground views of the existing substation from the nearest public access and residential

area. A new residential development is also being constructed on the flats to the north and west of the substation.

Visual Quality. Low-to-moderate. The foreground views toward the substation from North Juniper Avenue encompass a predominantly non-descript rural landscape consisting of a flat, grass-covered valley floor and rolling, grass-and shrub-covered bordering hills, with minimal visual variety. The existing Zanja Substation, though relatively small in scale, exhibits substantial industrial character with structurally complex forms and lines, which compromises landscape coherence and reduces overall visual quality.

Viewer Concern. High. Although the existing substation features prominently in the foreground landscape visible from North Juniper Avenue and the adjacent residences, residents and travelers on North Juniper Avenue would consider a noticeable increase in industrial character, structure prominence, or view blockage of higher value landscape features (distant mountains, hills, and background sky) an adverse visual change.

Viewer Exposure. Moderate-to-high. The substation is highly visible in the foreground of views from KVP 8 and adjacent residences. While the number of viewers would be low, the duration of view would be moderate-to-extended. Combining these four equally weighted factors (visibility, distance zone, number of viewers, and duration of view) gives an overall moderate-to-high viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For travelers on North Juniper Avenue and adjacent residents, combining the equally weighted low-to-moderate visual quality, high viewer concern, and moderate-to-high viewer exposure lead to an overall moderate-to-high visual sensitivity of the visual setting and viewing characteristics.

Key Viewpoint 9 – Carter Street in Yucaipa

Key Viewpoint 9 was established on Carter Street, just west of Fremont Street in the City of Yucaipa (see Figure D.12-10A). Viewing to the north-northeast, this location was selected to generally characterize views of the general location of the Mill Creek Communication Site from the nearest residential areas in the City of Yucaipa.

Visual Quality. Moderate. The view from KVP 9 encompasses a foreground rural residential to suburban residential landscape, backdropped by the rolling to angular forms of the southern foothills of the San Bernardino Mountains. The foreground residential landscape is relatively non-descript and the existing vertical forms of a wood pole utility line are prominent built features in the landscape. The background landforms are natural in appearance with minimal evidence of built structures.

Viewer Concern. High. Residents in the Yucaipa area with views of the San Bernardino Mountains and foothills would consider any noticeable built structures or addition of industrial character along the undeveloped mountain ridgelines to the north an adverse visual change in the landscape.

Viewer Exposure. High. The communication tower location is highly visible along the ridgeline in the distant middleground of views from KVP 9 and nearby residential areas. The number of viewers would be high and the duration of view would be extended. Combining these four equally weighted factors (visibility, distance zone, number of viewers, and duration of view) gives an overall high viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For travelers on Carter Street and adjacent residents, combining the equally weighted moderate visual quality, high viewer concern, and high viewer exposure lead to an overall moderate-to-high visual sensitivity of the visual setting and viewing characteristics.

Key Viewpoint 10 – Live Oak Canyon Road

Key Viewpoint 10 was established on Live Oak Canyon Road, south of I-10 (see Figure D.12-11A). Viewing to the southwest, this location was selected to generally characterize views of one of the more visually sensitive landscapes that the aboveground fiber optic line would pass through.

Visual Quality. Moderate. The view from KVP 10 encompasses a foreground to middleground rural landscape with grass- and shrub-covered valley floor and rolling hills. An existing wood pole utility line with an attached cable parallels the west side of the road and is a prominent built feature in the landscape. The vertical form of the utility poles contrasts with the predominantly horizontal natural landforms, which reduces landscape coherence and overall visual quality to a moderate level.

Viewer Concern. High. Travelers on Live Oak Canyon Road anticipate a predominantly rural landscape setting. Repeat drivers on this road would also anticipate the prominent presence of the existing utility line. However, any addition of industrial character or blockage of views to higher quality landscape features (hills and background sky) would be perceived as an adverse visual change in the landscape.

Viewer Exposure. High. The fiber optic cable would be highly visible suspended from the existing wood poles along the road in the immediate foreground of views from KVP 10. The number of viewers would be moderate and the duration of view would be extended given the cable's position within the primary cone of vision of both north- and southbound travelers on Live Oak Canyon Road. Combining these four equally weighted factors (visibility, distance zone, number of viewers, and duration of view) gives an overall high viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For travelers on Live Oak Canyon Road, combining the equally weighted moderate visual quality, high viewer concern, and high viewer exposure lead to an overall moderate-to-high visual sensitivity of the visual setting and viewing characteristics.

D.12.2 Applicable Regulations, Plans, and Standards

Public agencies and planning policy establish visual resource management objectives in order to protect and enhance public scenic resources. Goals, objectives, policies, and implementation strategies and guidance are typically contained in resource management plans, comprehensive plans and elements, and local specific plans. There are three jurisdictional planning documents containing 21 policies pertinent to visual resources for the Proposed Project. These planning directives and the Proposed Project's consistency with them are listed in Table D.12-3. As indicated in the table, overall, the Proposed Project was found to be consistent with applicable policy in 12 instances. In eight cases, the Project was found to be inconsistent. In one case, the Proposed Project was found to be partially consistent. Based on a review of the General Plan documents for the Cities of Beaumont, Banning, Calimesa, and Redlands, no policies have been identified that directly apply to visual resources as they relate to Proposed Project components and activities.

Table D.12-3. Consistency with Applicable Land Use Plans and Policies

Agency Regulating Visual Resources	Regulation or Policy	Project Consistent?	Method of Consistency
Riverside County, California	General Plan Land Use Element: Project Design		
	Policy LU 4.1 – Require that new developments be located and designed to visually enhance, not degrade the character of the surrounding area through consideration of the following concepts: a. Compliance with the design standards of the appropriate area plan land use category. l. Mitigate noise, odor, lighting, and other impacts on surrounding properties. [Page LU-22 and LU23]	Yes (with mitigation)	There are no aesthetic design standards pertaining to high-voltage transmission lines in the Land Use Element. However, the Proposed Project would include facilities that would require night lighting with the potential to impact surrounding areas. However, with implementation of Mitigation Measure V-3b (Reduce Night Lighting Impacts), significant (Class II) night lighting impacts would be mitigated to a level that would be less than significant.
	Policy LU 6.1 – Require land uses to develop in accordance with the General Plan and area plans to ensure compatibility and minimize impacts. [Page LU-22 and LU23]	Yes	The Proposed Project would be located within or adjacent to an established utility corridor, which would avoid the proliferation of additional utility facilities across the landscape with the potential for land use compatibility impacts.
	Policy LU 6.4 – Retain and enhance the integrity of existing residential, employment, agricultural, and open space areas by protecting them from encroachment of land uses that would result in impacts from noise, noxious fumes, glare, shadowing, and traffic. [Page LU-23]	Yes (with mitigation)	The Proposed Project would include facilities that might cause daytime glare and night lighting impacts on surrounding areas. However, with implementation of Mitigation Measures V-3a (Reduce Visibility of the El Casco Substation Site) and V-3b (Reduce Night Lighting Impacts), glare and night lighting impacts would be mitigated to levels that would be less than significant.
	Land Use Element: Hillside Development and Slope		
	Policy LU 11.1 – Apply the following policies to areas where development is allowed and that contain natural slopes, canyons, or other significant elevation changes, regardless of land use designation: a. Restrict development on visually significant ridgelines, canyon edges and hilltops through sensitive siting and appropriate landscaping to ensure development is visually unobtrusive. [Page LU-30]	No	The Proposed Project would cross several hilltops and ridgelines (San Timoteo Canyon) in Riverside County. As a result, the subtransmission structures would cause additional skylining (extending above the horizon line) and appear slightly more prominent and obtrusive than the structures they are replacing. There is no mitigation available that would bring the Project into consistency with this policy following the proposed alignment.
Land Use Element: Scenic Corridors			
Policy LU 13.1 – Preserve and protect outstanding scenic vistas and visual features for the enjoyment of the traveling public. [Page LU-31]	Yes	The Proposed Project would be located within or adjacent to an existing utility corridor. Although some views from roads within Riverside County would be adversely affected, these visual impacts would either be less than significant (Class III) or significant but mitigable (Class II) to levels that would be less than significant.	

Table D.12-3. Consistency with Applicable Land Use Plans and Policies

Agency Regulating Visual Resources	Regulation or Policy	Project Consistent?	Method of Consistency
	Policy LU 13.3 – Ensure that the design and appearance of new landscaping, structures, equipment, signs, or grading within Designated and Eligible State and County scenic highway corridors are compatible with the surrounding scenic setting or environment. [Page LU-31]	Yes	Portions of the Proposed Project would parallel or be sited in close proximity to San Timoteo Canyon Road (eligible scenic road) within Riverside County. However, the Project would be located within or adjacent to an existing utility corridor and the proposed structures would be similar to the design of existing structures within the corridor. To the extent that significant visual impacts occur (El Casco Substation and associated 220 kV transmission line loop-in), Mitigation Measures V-3a (Reduce Visibility of the El Casco Substation Site) and V-3b (Reduce Night Lighting Impacts) are proposed to reduce those impacts to levels that would be less than significant (Class II).
	Policy LU 13.4 – Maintain at least a 50-foot setback from the edge of the right-of-way for new development adjacent to Designated and Eligible State and County Scenic Highways. [Page LU-31]	No	The proposed fiber optic line would be attached to existing utility poles immediately adjacent to the north side of, and less than 50 feet from, the edge of the right-of-way for San Timoteo Canyon Road, an eligible scenic highway. However, the visual impact associated with the addition of the new cable would be adverse but less than significant (Class III).
Land Use Element: Open Space Area Plan Land Use Designations: Recreation			While a majority of the Proposed Project would be located within established utility corridors or at existing utility facilities (substations), the El Casco Substation would be new construction in a landscape that is undeveloped though there are several utility corridors immediately adjacent to the site. Although the resulting visual impacts would be significant (Class II), they could be mitigated (by screening) to levels that, while still adverse, would be less than significant. However, the addition of the substation would not maintain the existing environmental character of the site.
Land Use Element: Open Space– Rural Land Use Designations			While a majority of the Proposed Project would be located within established utility corridors or at existing utility facilities (substations), the El Casco Substation would be new construction in a landscape that is undeveloped though there are several utility corridors immediately adjacent to the site. Although the resulting visual impacts would be significant (Class II), they could be mitigated (by screening) to levels that, while still adverse, would be less than significant. However, the addition of the substation would not maintain the existing environmental character of the site.

Table D.12-3. Consistency with Applicable Land Use Plans and Policies

Agency Regulating Visual Resources	Regulation or Policy	Project Consistent?	Method of Consistency
	Policy LU 20.2 – Require that development be designed to blend with undeveloped natural contours of the site and avoid an unvaried, unnatural, or manufactured appearance. [Page LU-52]	No	While a majority of the Proposed Project would be located within established utility corridors or at existing utility facilities (substations), the El Casco Substation would be new construction in a landscape that is undeveloped though there are several utility corridors immediately adjacent to the site. Although the resulting visual impacts would be significant (Class II), they could be mitigated (by screening) to levels that, while still adverse, would be less than significant. However, the addition of the substation would not maintain the existing environmental character of the site.
	Policy LU 20.4 – Ensure that development does not adversely impact the open space and rural character of the surrounding area. [Page LU-52]	No	While a majority of the Proposed Project would be located within established utility corridors or at existing utility facilities (substations), the El Casco Substation would be new construction in a landscape that is undeveloped though there are several utility corridors immediately adjacent to the site. Although the resulting visual impacts would be significant (Class II), they could be mitigated (by screening) to levels that, while still adverse, would be less than significant. However, the addition of the substation would not maintain the existing environmental character of the site and would adversely impact the open space and rural character of the surrounding area.
Circulation Element: Scenic Corridors			
	Policy C 19.1 – Preserve scenic routes that have exceptional or unique visual features in accordance with Caltrans’ Scenic Highways Plan. [Page C-46]	Yes	Although the Proposed Project would affect views from San Timoteo Canyon Road, an eligible scenic highway, the Project would (a) be located within or adjacent to established utility corridors and (b) exhibit visual character similar to the adjacent energy infrastructure. In addition, the resulting significant (Class II) visual impacts from El Casco Substation could be mitigated to levels that would be adverse but less than significant.
Circulation Element: Major Utility Corridors			
	Policy C 25.2 – Locate new and relocated utilities underground when possible. All remaining utilities shall be located or screened in a manner that minimizes their visibility by the public. [Page C-55]	No (Subtransmission Line) Yes (Substation)	The proposed subtransmission line would be an aboveground facility. Although the Project would be located within an existing corridor, its location would not minimize the Project’s visibility given the relatively close proximity of the utility corridor to major travel corridors, local roads, and existing development. There is no mitigation available that would bring the subtransmission line into consistency with this policy following the proposed alignment. El Casco substation would be located in close proximity to San Timoteo Canyon Road and would cause a significant visual impact on views from the road. However, implementation of Mitigation Measures V-3a (Reduce Visibility of the El Casco Substation Site) and V-3b (Reduce Night Lighting Impacts) would reduce the visual impacts to levels that would be less than significant (Class II).

Table D.12-3. Consistency with Applicable Land Use Plans and Policies

Agency Regulating Visual Resources	Regulation or Policy	Project Consistent?	Method of Consistency
	Multipurpose Open Space Element: Scenic Resources		
	Policy OS 21.1 – Identify and conserve the skylines, view corridors, and outstanding scenic vistas within Riverside County. [Page OS-45]	No	Portions of the Proposed Project would be located within Norton Younglove Open Space Preserve and along a number of ridgelines and slopes that would result in additional skylining (extending above the horizon). There is no mitigation available that would bring the Project into consistency with this policy.
	Multipurpose Open Space Element: Scenic Corridors		
	Policy OS 22.1 – Design developments within designated scenic highway corridors to balance the objectives of maintaining scenic resources with accommodating compatible land uses. [Page OS-45]	Yes	The Proposed Project is not located within a designated scenic highway corridor (although San Timoteo Canyon Road is an eligible scenic highway).
	The Pass Area Plan. Circulation: Scenic Highways		
	Policy PAP 12.1 – Protect the scenic highways in the Pass from change that would diminish the aesthetic value of adjacent properties in accordance with the Scenic Corridors sections of the General Plan Land Use, Multipurpose Open Space, and Circulation Elements. [Page 41]	No	The Proposed Project (El Casco Substation and associated 220 kV transmission line loop-in) would cause significant (Class II) visual impacts on views from San Timoteo Canyon Road. The Proposed Project (220 kV transmission line between the proposed El Casco Substation and its convergence on SR 60) would also cause adverse but less-than-significant (Class III) visual impacts on views from San Timoteo Canyon Road. There is no mitigation available that would bring the Project into consistency with this policy.
San Bernardino County	General Plan, 2007. Conservation Element, Section D: Countywide Goals and Policies, Section 7: Energy		
	Policy CO 8.1 – Maximize the beneficial effects and <u>minimize the adverse effects associated with the siting of major energy facilities</u> . The County will site energy facilities equitably in order to minimize net energy use and consumption of natural resources, and avoid inappropriately burdening certain communities. Energy planning should conserve energy and reduce peak load demands, reduce natural resource consumption, <u>minimize environmental impacts</u> , and treat local communities fairly in providing energy efficiency programs and locating energy facilities. [Page V-33]	Yes	The Proposed Project components in San Bernardino County (fiber optic line, substation modifications, and Mill Creek communication tower) would all be located at or on existing facilities, which would minimize the occurrence of visual impacts. The visual impacts that would occur would be adverse but less than significant (Class III).

Table D.12-3. Consistency with Applicable Land Use Plans and Policies

Agency Regulating Visual Resources	Regulation or Policy	Project Consistent?	Method of Consistency
	Policy CO 9.2 – The County will work with utilities and generators to maximize the benefits and minimize the impacts associated with siting major energy facilities... [Page V-37]	Yes	The Proposed Project components in San Bernardino County (fiber optic line, substation modifications, and Mill Creek communication tower) would all be located at or on existing facilities, which would minimize the occurrence of visual impacts. The visual impacts that would occur would be adverse but less than significant (Class III).
	General Plan, 2007. Conservation Element, Section E: Mountain Region Goals and Policies.		Policy M/CO 1.2 – Protect scenic vistas by minimizing ridgeline development that would substantially detract from the scenic quality of major ridgeline viewsheds. [Page. V-39]
City of Yucaipa	General Plan: Land Use Element. Infrastructure and Public. Section B: Existing Infrastructure and Future Needs. No. 6: Electricity.	Yes	The Proposed Project would include modifications to the existing Zanja Substation within the City of Yucaipa and all work would be confined to the existing substation area. The Project would also include the addition of a new fiber optic line, which would be located next to existing cables on existing utility poles.
	Policy 6a: Electrical Transmission Lines – The aesthetic impacts of major transmission lines shall be addressed when considering the location, method and materials to be used. Generally, transmission line towers shall be located for minimal visibility. Proper use of backdrop, screening and weathering or non-reflective materials can help to reduce visibility. Where the transmission facilities cannot be hidden or their negative effects reduced by location or screening, the use of specifically designed aesthetic towers or undergroundings should be considered. At road crossings of two or more circuits and where only a portion of the line is visible from the highway, the use of multiple circuit towers shall be considered in minimizing the impact of the lines at that point...The joint use of electric transmission corridors by two or more utilities shall be encouraged when feasible in order to reduce the total number of corridors and service and access roads required. The relative advantages and disadvantages of locating a new line either adjacent to or widely separated from existing transmission lines shall be considered.		

Table D.12-3. Consistency with Applicable Land Use Plans and Policies

Agency Regulating Visual Resources	Regulation or Policy	Project Consistent?	Method of Consistency
	Policy 6b: Electrical Substations – Locations of substations shall be coordinated with the needs of the utilities delivering power into or receiving power from the station. This is particularly important in the development of the site's electrical layout to minimize costly and unsightly transmission line crossovers or the unnecessary duplication of facilities.	Yes	The Proposed Project would include modifications to the existing Zanja Substations within the City of Yucaipa and all work would be confined to the existing substation area.

D.12.3 Environmental Impacts and Mitigation Measures for the Proposed Project

D.12.3.1 Approach to Impact Assessment

The factors considered in determining impacts on visual resources included: (1) scenic quality of the Project site and vicinity; (2) available visual access and visibility, frequency and duration that the landscape is viewed; (3) viewing distance and degree to which Project components would dominate the view of the observer; (4) resulting contrast of the proposed facilities or activities with existing landscape characteristics; (5) the extent to which Project features or activities would block views of higher value landscape features; and (6) the level of public interest in the existing landscape characteristics and concern over potential changes.

An *adverse visual impact* occurs within public view when: (1) an action perceptibly changes existing features of the physical environment so that they no longer appear to be characteristic of the subject locality or region; (2) an action introduces new features to the physical environment that are perceptibly uncharacteristic of the region and/or locale; or (3) aesthetic features of the landscape become less visible (e.g., partially or totally blocked from view) or are removed. Changes that seem uncharacteristic are those that appear out of place, discordant, or distracting. The degree of the visual impact depends upon how noticeable the adverse change may be. The noticeability of a visual impact is a function of project features, context, and viewing conditions (angle of view, distance, primary viewing directions, and duration of view).

Impacts on visual resources within the study area could result from various activities including structure and line construction, substation construction, establishment of construction staging areas and access roads, and Project operation or presence of the built facilities. The Visual Resources technical approach utilized the Visual Sensitivity–Visual Change (VS-VC) method for the Proposed Project and alternatives. The approach to impact assessment under the VS-VC method is discussed below. The results of the impact assessment are summarized and presented as a series of foldout tables at the end of the Visual Resources section in Attachment VR-2.

Under the VS-VC method, field analysis at each KVP included assessment of visual contrast, Project dominance, and view blockage. Subsequently, a conclusion was made regarding the extent of overall visual change, and taken together with the existing landscape’s visual sensitivity, the level of probable visual impact significance was determined. In many cases, a visual simulation was also prepared with which to further evaluate the preliminary impact determination. A conclusion on initial impact sig-

nificance 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 level of less than significant if possible. A final conclusion on impact significance was then reached.

Each of the key factors considered in the evaluation of visual change is generally expressed as low, low-to-moderate, moderate, moderate-to-high, or high and is discussed below (also, see Attachment VR-1 for additional discussion of the visual change factors).

Visual Contrast describes the degree to which a project's visual characteristics or elements (consisting of form, line, color, and texture) differ from the same visual elements established in the existing landscape. The degree of contrast can range from low to high. The presence of forms, lines, colors, and textures in the landscape similar to those of a proposed project indicates a landscape more capable of accepting those project characteristics than a landscape where those elements are absent. This ability to accept alteration is often referred to as visual absorption capability and typically is inversely proportional to visual contrast.

Project Dominance is a measure of a feature's apparent size relative to other visible landscape features and the total field of view. A feature's dominance is affected by its relative location in the field of view and the distance between the viewer and the feature. The level of dominance can range from subordinate to dominant.

View Blockage or **Impairment** describes the extent to which any previously visible landscape features are blocked from view as a result of the project's scale and/or position. Blockage of higher quality landscape features by lower quality project features causes adverse visual impacts. The degree of view blockage can range from none to high.

Overall Visual Change is a concluding assessment as to the degree of change that would be caused by a project. Overall visual change is derived by combining the three equally weighted factors of visual contrast, project dominance, and view blockage. Overall visual change can range from low to high.

D.12.3.2 Significance Criteria

The criteria used to assess the significance of visual impacts resulting from a project take into consideration the factors described in the previous section, as well as federal, State, and local policies and guidelines pertaining to visual resources. Appendix G of the CEQA Guidelines identifies four circumstances that can lead to a determination of significant visual impact. These have been adapted as set forth below for the analysis that follows:

- Project construction or the long-term presence of Project components would cause a substantial effect on a scenic vista.
- Project construction or the long-term presence of Project components would substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within view of a State Scenic Highway.
- Project construction or the long-term presence of Project components would substantially degrade the existing visual character or quality of the site and its surrounding landscape. [Note: Substantial degradation results from higher levels of visual contrast, Project dominance, and view blockage. Visual contrast relates to spatial characteristics, visual scale, texture, form, line, and color.]
- Project construction or the long-term presence of the Proposed Project would create a new source of substantial light or glare that would adversely affect day or nighttime views in the area or be hazardous to motorists or pedestrians.

One additional criterion that can lead to a determination of significant visual impact includes:

- Construction of the Proposed Project or the presence of Project components would result in an inconsistency with local regulations, plans, and standards applicable to the protection of visual resources. For an analysis of the Proposed Project’s consistency with applicable plans and policies, please refer to Table D.12-3. Table D.12-5 presents additional consistency analysis for the alternatives.

Under the VS–VC methodology, the degree of impact significance is a function of overall visual sensitivity and visual change. Table D.12-4 illustrates the general interrelationship between visual sensitivity and visual change and is used as a consistency check between individual KVP evaluations. Actual parameter determinations (e.g., visual contrast, Project dominance, and view blockage) are based on analyst experience and site-specific circumstances.

Table D.12-4. Visual Sensitivity–Visual Change Guidance for Review of Impact Significance

OVERALL VISUAL SENSITIVITY	OVERALL VISUAL CHANGE				
	Low	Low to Moderate	Moderate	Moderate to High	High
Low	Not Significant ¹	Not Significant	Adverse but Less Than Significant	Adverse but Less Than Significant	Adverse but Less Than Significant
Low to Moderate	Not Significant	Adverse but Less Than Significant	Adverse but Less Than Significant	Adverse but Less Than Significant	Adverse and Potentially Significant
Moderate	Adverse but Less Than Significant ²	Adverse but Less Than Significant	Adverse but Less Than Significant	Adverse and Potentially Significant	Adverse and Potentially Significant
Moderate to High	Adverse but Less Than Significant	Adverse but Less Than Significant	Adverse and Potentially Significant	Adverse and Potentially Significant	Significant ⁴
High	Adverse but Less Than Significant	Adverse and Potentially Significant ³	Adverse and Potentially Significant	Significant ⁴	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.

2 Adverse but Less Than 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 less than significant or avoided all together. Without mitigation, significant impacts would exceed environmental thresholds.

While the interrelationships presented in Table D.12-4 are intended as guidance only, it is reasonable to conclude that lower visual sensitivity ratings paired with lower visual change ratings will generally correlate well with lower degrees of impact significance when viewed onsite. Conversely, higher visual sensitivity ratings paired with higher visual change ratings will tend to result in higher degrees of visual impact.

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 Proposed Project elements or characteristics tends toward the high extreme, leading to a substantial reduction in visual quality.

D.12.3.3 Mitigation Approach

Mitigation for visual resources impacts resulting from energy infrastructure and similar types of industrial facilities typically focuses on methods to minimize the visibility of the resulting visual change, either by screening the change from view or by blending the change with the background (by selective use of coloration and/or screening). By their very nature, transmission lines (towers and conductors) tend to be large and exposed, and thus, difficult to either hide from view or blend into the background. Frequently, the only way to avoid a significant visual impact from a transmission line is to re-route the transmission line or underground it, though in some situations these measures are not feasible. Also problematic is the construction of permanent access and structure spur roads and “temporary” cleared areas that become persistent in arid and semi-arid landscapes where vegetation recruitment and growth are slow. These areas often cause unnatural and discordant demarcations in the vegetation landscape that increase the visual contrast of Project activities.

However, in some cases there are techniques that can reduce the prominence of transmission lines, land scarring, and vegetation changes though they may not reduce the impact to a level that is not significant. The following techniques were considered where appropriate for the Proposed Project and alternatives:

- Implement route adjustments where such adjustments would reduce visual contrast, structural dominance, or view blockage;
- Reduce structure height to minimize or eliminate skylining (extension above the horizon line) when viewed from critical viewpoints (recognizing that reduced structure height will usually result in shorter spans and, therefore, more structures);
- Increase structure height to eliminate one or more structures in particularly sensitive locations;
- Match structure height and locations, and conductor spans to existing adjacent facilities;
- Require screening adjacent to sensitive viewpoints if visual access is already limited under existing conditions and selective placement of vegetation would reduce structure visibility;
- Require specific coloration of structures to blend with the background more effectively;
- Require changes from lattice to tubular design and/or vice versa in selected areas to reduce visual contrast. This technique can be effective depending on the viewing distance (lattice structures are less visible from distant viewpoints compared to tubular structures and tubular structures appear less industrially complex from close vantagepoints compared to lattice structures and cause less view blockage) and whether the recommended changes match the design of existing structures if present;
- Require revegetation and restoration efforts to mitigate the unnatural demarcation in vegetation landscapes caused by removal of or changes in the vegetation within the right-of-way (ROW) as a result of ROW clearing and maintenance; and
- Consider alternative low-impact construction techniques such as structure installation by helicopter where traditional construction techniques and the associated access and spur roads would cause prominent land scarring visible to sensitive viewpoints.

For each of the visual impacts identified in the following sections, the mitigation approaches discussed above were evaluated for applicability and likelihood of success. Where mitigation opportunities were identified, they are discussed.

D.12.3.2 Applicant Proposed Measures

SCE has proposed no measures (Applicant Proposed Measures - APMs) to reduce visual resources impacts associated with operation and/or construction of the Proposed Project.

D.12.3.3 Proposed Project Impact Analysis

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), and Class IV (beneficial).

Construction Impacts

Construction impacts on visual resources would result from the presence and visual intrusion of construction vehicles, equipment, materials, and work force (Impact V-1) at the substations, Mill Creek Communication Site, along the new subtransmission line routes, and along the new fiber optic route. Construction impacts on visual resources would also result from the temporary alteration of landforms and vegetation clearance (Impact V-2) at the proposed and existing substation sites and along the ROW. Vehicles, heavy equipment, project components, and workers would be visible during substation construction and modification, access and spur road clearing and grading, structure erection, conductor stringing, and site/ROW clean-up and restoration.

Impact V-1: Short-term visibility of construction activities, equipment, and night lighting (Class II [Substation and Staging Areas] and Class III [Subtransmission Line, Loop-In, and Fiber Optic Routes]).

Substation and Staging Areas. Construction impacts on visual resources would result from the presence and visual intrusion of construction vehicles, equipment, materials, and work force at the substations and staging areas. Construction equipment and activities would be seen by various viewers in close proximity to the substations and staging areas including nearby rural and suburban residents as well as travelers and recreationists on highways and local roads (San Timoteo Canyon Road, East Lincoln Street, North Juniper Avenue, and other local roads in the vicinity of the Substations. View durations from these vantage points would vary from moderate to extended. Construction impacts on visual resources would also result from the temporary use of night lighting if night lighting is not appropriately controlled at the construction sites.

Construction impacts at these sites could last up to two years and the resulting visual impacts would be significant but mitigable (Class II). Mitigation Measures V-1a (Reduce Visibility of Construction Activities and Equipment) and V-1b (Reduce Construction Night Lighting Impacts) are required to reduce the impacts to levels that would be less than significant.

Subtransmission Line, Loop-In, and Fiber Optic Routes. Construction impacts on visual resources would result from the presence and visual intrusion of construction vehicles, equipment, materials, and work force along the subtransmission line and fiber optic routes. Construction impacts on visual resources would also result from the temporary alteration of landforms and vegetation along the ROWs. Vehicles, heavy equipment, Project components, and workers would be visible during structure site clearing, structure erection, conductor stringing, and site/ROW clean-up and restoration. Construction equipment and activities would be seen by various viewers in close proximity to the ROWs including rural residents, suburban residents, patrons of commercial sites, outdoor recreation enthusiasts, and travelers on public roads including San Timoteo Canyon Road, SR-60, SR-79, Live Oak Canyon Road, Highland Springs Avenue, and numerous other local roads. However, construction activities along the subtransmission line and fiber optic routes would be transient and of short duration as construction progresses along the routes. As a result, affected viewers would be aware of the temporary nature of Project construction impacts, which would decrease their sensitivity to the impact. The resulting visual impacts would be adverse but less than significant (Class III). To ensure that viewers are not

unnecessarily impacted during construction, Mitigation Measures V-1a (Reduce Visibility of Construction Activities and Equipment) is recommended, even though the impact is less than significant without mitigation.

Mitigation Measures for Impact V-1

V-1a Reduce Visibility of Construction Activities and Equipment. Substation construction sites and all staging and material and equipment storage areas including storage sites for excavated materials shall be appropriately located away from areas of high public visibility. If visible from nearby roads; residences; public gathering areas; recreational areas, facilities, or trails; construction sites and staging areas shall be visually screened using temporary screening fencing. Fencing will be of an appropriate design and color for each specific location. Additionally, avoid construction in areas visible from recreation facilities and areas during holidays and periods of heavy recreational use. SCE shall submit final construction plans demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction.

V-1b Reduce Construction Night Lighting Impacts. SCE shall design and install all lighting at construction sites, storage yards, and staging areas such that light bulbs and reflectors are not visible from public viewing areas and private residences; lighting does not cause reflected glare; and illumination of the Project facilities, vicinity, and nighttime sky are minimized. SCE shall submit a Construction Lighting Mitigation Plan to the CPUC for review and approval at least 90 days prior to the start of construction or the ordering of any exterior lighting fixtures or components, whichever comes first. SCE shall not order any exterior lighting fixtures or components until the Construction Lighting Mitigation Plan is approved by the CPUC. The Plan shall include but is not limited to the following:

- Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources are shielded to prevent light trespass outside the Project boundary
- All lighting shall be of minimum necessary brightness consistent with worker safety
- High illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied.

Impact V-2: Long-term visibility of land scars and vegetation clearance in arid and semi-arid landscapes (Class II).

Land scarring would occur from use of staging areas, construction of new access and spur roads, and activities adjacent to construction sites (El Casco Substation) and along the ROW. Such land scarring could be long-lasting (several years) in arid and semi-arid environments where vegetation recruitment and growth are slow. In-line views of linear land scars or newly bladed roads are particularly problematic and introduce adverse visual change and contrast by causing unnatural vegetative lines and soil color contrast from newly exposed soils. Vegetation clearance could occur in conjunction with Project construction or during the life of the Project if vegetation is cleared as part of ongoing ROW maintenance or if a changed vegetation structure is maintained within the ROW.

Long-term land scarring and vegetation clearance impacts would constitute significant visual impacts that could be mitigated to levels that are less than significant. Mitigation Measures V-2a (Reduce In-Line

Views of Land Scars) and V-2b (Reduce Visual Contrast from Unnatural Vegetation Lines) shall be implemented to reduce impacts to less-than-significant levels (Class II).

Mitigation Measures for Impact V-2

- V-2a Reduce In-Line Views of Land Scars.** Construct access or spur roads at appropriate angles from the originating, primary travel facilities to minimize extended, in-line views of newly graded terrain. Contour grading should be used where possible to better blend graded surfaces with existing terrain. SCE shall submit final construction plans demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction. Construction plans will include sufficient photo-documentation to document pre-construction conditions.
- V-2b Reduce Visual Contrast from Unnatural Vegetation Lines.** In those areas where views of land scars are unavoidable, the boundaries of disturbed areas shall be aggressively revegetated to create a less distinct and more natural-appearing line to reduce visual contrast. If necessary to ensure vegetative success, plantings will be watered. If Measure V-2b is not successful within two years following the completion of construction, a new plant palette will be developed in consultation with an approved restoration ecologist. Furthermore, all graded roads and areas not required for on-going operation, maintenance, or access shall be returned to pre-construction conditions. SCE shall submit final construction and restoration plans demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction. Construction plans will include sufficient photo-documentation to document pre-construction conditions.

Operational Impacts

The Proposed Project would result in visual impacts that would range from adverse but less than significant (Class III) to significant but mitigable (Class II). Long-term, operational visual impacts would be experienced by (a) travelers on State highways and local roads; (b) recreationists accessing the Norton Younglove Reserve and the Sun Lakes golf course; (c) residents in proximity to El Casco Substation, the transmission line ROWs, and the fiber optic ROW; and (d) residents with direct, line-of-sight views of the Mill Creek Communication Tower. Ten representative Key Viewpoints (KVP 1 through KVP 10) were selected to characterize the visual impacts that would occur from implementation of the Proposed Project.

Impact V-3: Increased structure contrast, industrial character, view blockage, skylining, and glare when viewed from Key Viewpoint 1 on eastbound San Timoteo Canyon Road (Class II).

Figure D.12-2A presents the existing view to the south from Key Viewpoint 1 on eastbound San Timoteo Canyon Road, immediately north of the substation site. Figure D.12-2B presents a visual simulation that depicts the addition of the proposed substation and the connecting subtransmission line structures. As shown in the simulation, El Casco Substation would be located immediately south of San Timoteo Canyon Road, a Southern Pacific rail line, and a riparian corridor. While many of the low-profile substation components would be screened from view by existing riparian vegetation, some of the taller subtransmission components closest to San Timoteo Canyon Road would be prominently visible, particularly where there are gaps in the intervening riparian vegetation. The new structures would introduce additional industrial character into the landscape and cause additional view blockage of background hills and sky. The structures and conductors would skyline (extend above the horizon line),

which would exacerbate structure prominence. As a result, visual contrast would be moderate-to-high and the Proposed Project would appear co-dominant with the existing landscape features (primarily the horizontal forms of the background hills and foreground vegetation). View blockage of background sky and hills would be moderate. The overall visual change would be moderate and in the context of the existing landscape's moderate to high visual sensitivity, the resulting visual impact would be significant but mitigable (Class II).

This conclusion is in part, reflective of three key facts. First, what is not indicated in Figures D.12-2A and D.12-2B is that there are five existing transmission lines that border three sides of the substation site. These existing facilities have already established in the landscape the complex forms and lines and industrial character that would be similar to the Proposed Project (though clearly the substation would add a higher density of structures). Second, visibility of the site from San Timoteo Canyon Road is somewhat limited. Along most of this stretch of roadway, existing riparian vegetation to the south of the road effectively screens much of the landscape to the south. As a result, most of the lower components of the low-profile substation would be screened from view. The upper portions of the subtransmission line towers closer to the road would be moderately visible. It is primarily where there are gaps in the vegetation (of which there are relatively few) that the landscape beyond the riparian vegetation (in the vicinity of the substation site) becomes visible. This limitation is not represented in Figures D.12-2A and D.12-2B. Third, views of the site through the relatively few gaps in the vegetation would be at right angles to the primary directions of travel and at relatively high travel speeds. This would result in brief durations of view through the gaps (though the upper portions of closer subtransmission towers would be moderately visible from greater distances. As a result, visual resources Mitigation Measure V-3a (Reduce Visibility of the El Casco Substation Site) is required to reduce substation visibility from San Timoteo Canyon Road. The Project would also include the installation of night lighting fixtures, which if not properly controlled, could result in significant (Class II) night lighting and glare impacts on travelers on San Timoteo Canyon Road. Mitigation Measure V-3b (Reduce Operation Night Lighting Impacts) is required to control night lighting and ensure that night lighting impacts do not become significant. This viewpoint analysis is considered representative of Project views from San Timoteo Canyon Road in the vicinity of the proposed substation site.

Mitigation Measures for Impact V-3

V-3a Reduce Visibility of the El Casco Substation Site. SCE shall submit to CPUC an El Casco Screening Plan that reduces visibility of the proposed El Casco Substation and connecting subtransmission line structures when viewed from San Timoteo Canyon Road, the Norton Younglove Reserve, and the new residential development on the north side of the road. Starting from the previously submitted El Casco Substation Preliminary Site Development Plan, SCE shall increase the density of native habitat plants, including but not limited to Coast Live Oak (*Quercus agrifolia*) and Black Willow (*Salix gooddingii*) along the north to east boundaries of the site. Additional understory shrubs shall also be planted to intersect lower sightlines. Also, the existing gaps in the riparian vegetation must be filled with the appropriate riparian plant species to match the maximum heights of the densest riparian vegetation along San Timoteo Canyon Road. SCE shall submit the Plan to CPUC for review and approval at least 90 days prior to installing the landscape screening. If CPUC notifies SCE that revisions to the Plan are needed before the Plan can be approved, SCE shall prepare and submit for review and approval a revised Plan within 30 days of receiving that notification. The plan shall include but not be limited to:

- 11”x17” color simulations of the proposed landscaping at 5 years when viewed from Key Viewpoints 1, 2, and 3.
- Plan view to scale depicting the Project and the location of screening elements.
- A detailed list of any plants to be used; their size and age at planting; the expected time to maturity, and the expected height at five years and at maturity.

SCE shall complete installation of the screening prior to the start of Project operation. SCE shall notify CPUC within seven days after completing installation of the screening, that the screening components are ready for inspection.

V-3b Reduce Operation Night Lighting Impacts. SCE shall design and install all permanent lighting such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the Project facilities, vicinity, and nighttime sky is minimized. SCE shall submit a Lighting Mitigation Plan to the CPUC for review and approval at least 90 days prior to ordering any permanent exterior lighting fixtures or components. SCE shall not order any exterior lighting fixtures or components until the Lighting Mitigation Plan is approved by the CPUC. The Plan shall include but is not limited to the following:

- Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources are shielded to prevent light trespass outside the project boundary;
- All lighting shall be of minimum necessary brightness consistent with worker safety; and
- High illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied.

Impact V-4: Increased structure contrast, industrial character, view blockage, skylining and glare when viewed from Key Viewpoint 2 in Norton Younglove Reserve (Class II).

Figure D.12-3A presents the existing view to the west from KVP 2 on the existing access road within Norton Younglove Reserve, immediately south of San Timoteo Canyon Road. Figure D.12-3B presents a visual simulation that depicts the addition of the proposed substation and the connecting subtransmission line structures. As shown in the simulation, El Casco Substation would introduce a highly industrial-appearing facility in a predominantly natural-appearing landscape. While the existing transmission lines have established a structural precedence with respect to vertical, linear features, they are considerably more dispersed compared to the high concentration of industrial structures that comprises a substation. The new substation would be prominently visible on the flats north of the hills visible in Figure D.12-3B. The new facility would appear structurally complex and exhibit considerable industrial character. Also, the connecting subtransmission structures and conductors would skyline (extend above the horizon line), which would exacerbate structure prominence. As a result, visual contrast would be high and the proposed substation would appear co-dominant to dominant compared to the existing landscape features (primarily the horizontal forms of the background hills). View blockage of background hills and sky (connecting subtransmission line towers) would be moderate. The overall visual change 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 significant but mitigable (Class II). Visual resources Mitigation Measure V-3a (Reduce Visibility of the El Casco Substation Site) presented previously, is required to reduce substation visibility from the access road and KVP 2 and reduce the resulting visual impact to a level that would be less than significant. The Project would also include the installation of night lighting fixtures, which would result in significant but mitigable (Class II) night lighting and glare impacts on visitors to the reserve. Mitigation Measure V-3b (Reduce Operation Night Lighting Impacts) presented previously, is required to control night lighting and Reduce Night Lighting Impacts to levels that would be less than significant. This viewpoint analysis is considered representative of Project views from the north access road in the vicinity of the proposed substation site.

Mitigation Measures for Impact V-4

V-3a Reduce Visibility of the El Casco Substation Site.

V-3b Reduce Night Lighting Impacts.

Impact V-5: Increased structure contrast, industrial character, view blockage and glare when viewed from Key Viewpoint 3 in the new residential development north of San Timoteo Canyon Road (Class III).

Figure D.12-4A and D.12-4C present the existing views to the southwest from KVPs 3 and 3 Alternative respectively, from the new residential development under construction north of San Timoteo Canyon Road. Figure D.12-4B presents a visual simulation that depicts the addition of the proposed substation and the connecting subtransmission line structures. As shown in the simulation, El Casco Substation would introduce a highly industrial-appearing facility in a predominantly natural appearing landscape though there are several transmission lines that border the site. While the existing transmission lines have established a structural precedence with respect to vertical, linear features, they are more dispersed compared to the high concentration of industrial structures that comprises a substation. However, the new substation would be partially screened from view by intervening terrain and vegetation, especially when viewed from the lower elevations of the residential development (see Figure D.12-4C). The resulting visual contrast would be moderate and the proposed substation would appear co-dominant compared to the existing landforms and utility infrastructure. View blockage of the background hills would be low-to-moderate. The overall visual change would be moderate and in the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be adverse but less than significant (Class III). This conclusion is substantially influenced by the presence of the five existing transmission lines that border the site – three of which would pass between the residential viewers and the substation and two of which would pass behind the substation site. While Impact V-5 is less than significant, Mitigation Measure V-3a (Reduce Visibility of the El Casco Substation Site) is recommended to further reduce the visibility of the substation and the resulting visual impact that would be experienced by the residential viewers. The Project would also include the installation of night lighting fixtures, which would result in adverse but less than significant (Class III) night lighting and glare impacts on residents of the new residential development under construction north of San Timoteo Canyon Road. Mitigation Measure V-3b (Reduce Operation Night Lighting Impacts) would ensure that adverse night lighting impacts do not occur. This viewpoint analysis is considered representative of Project views from the new residential development north of San Timoteo Canyon Road.

Mitigation Measures for Impact V-5

V-3a Reduce Visibility of the El Casco Substation Site.

V-3b Reduce Night Lighting Impacts.

Impact V-6: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 4 on eastbound SR-60 (Class III).

Figure D.12-5A presents the existing view to the east from Key Viewpoint 4 on eastbound SR-60, just east of the proposed subtransmission line's convergence on SR-60. Figure D.12-5B presents a visual simulation that depicts the replacement of the existing single circuit, wood pole H-frame subtransmission line with a double-circuit, single tubular steel pole subtransmission line. As shown in the simulation, the proposed tubular steel poles (TSPs) would have a more simple structural design compared to the H-frame structures they would replace, but the TSPs would be taller. Also, the TSPs would have a more industrial metallic gray appearance compared to the more natural, rough-hewn wood poles to be replaced. The new structures and additional conductors would also result in a slight net increase in view blockage of background hills and sky. However, because the existing subtransmission line towers and conductors have established a structural precedence with respect to form and line, the resulting visual contrast would be moderate. The new structures and conductors would appear co-dominant compared to the existing landforms and built features (SR-60). The additional set of conductors for the new double-circuit facility would cause greater view blockage compared to the existing single-circuit facility. However, this would be off-set by a reduction in view blockage associated with the proposed single pole design compared to the existing double pole H-frame design. The resulting net increase in view blockage of background sky would be low-to-moderate. The overall visual change would be moderate when the three equally weighted factors of visual contrast, Project dominance, and view blockage are combined. In the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be adverse but less than significant (Class III). This conclusion is substantially influenced by the prominence of the slightly more structurally-complex existing subtransmission line that is to be removed. Since (a) the structures are being replaced tower-for-tower within the existing ROW, (b) the structure design has been simplified, and (c) the new structure color is a neutral color, no mitigation is proposed. This viewpoint analysis is considered representative of both eastbound and westbound views from SR-60.

Impact V-7: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 5 on Faircliff Street (Class III).

Figure D.12-6A presents the existing view to the west-southwest from Key Viewpoint 5 on Faircliff Street, just west of Finley Avenue in the Seneca Springs residential development that is presently under construction. Figure D.12-6B presents a visual simulation that depicts the replacement of the existing single circuit, wood pole H-frame subtransmission line with a double-circuit, single tubular steel pole subtransmission line. As shown in the simulation, the proposed TSPs would have a more simple structural design compared to the H-frame structures they would replace, but the TSPs would be taller. Also, the TSPs would have a more industrial metallic gray appearance compared to the more natural, rough-hewn wood poles to be replaced. The new structures and additional conductors would also result in a slight net increase in view blockage of background hills and sky. However, because the existing subtransmission line towers and conductors have established a structural precedence with respect to form and line, the resulting visual contrast would be moderate. The new structures and conductors would

appear co-dominant compared to the existing background landforms (hills not visible from the viewing perspective presented in Figure D.12-6B) and built features (new subdivision). The additional set of conductors for the new double-circuit facility would cause greater view blockage compared to the conductors associated with the existing single-circuit facility. However, this would be off-set by a reduction in view blockage associated with the proposed single pole design compared to the existing double pole H-frame design. The resulting view blockage of background sky would be low-to-moderate. The overall visual change would be moderate when the three equally weighted factors of visual contrast, Project dominance, and view blockage are combined. In the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be adverse but less than significant (Class III). This conclusion is substantially influenced by the prominence of the slightly more structurally-complex existing subtransmission line that is to be removed. Since (a) the structures are being replaced tower-for-tower within the existing ROW, (b) the structure design has been simplified, and (c) the new structure color is a neutral color, no mitigation is proposed. This viewpoint analysis is considered representative of views from the adjacent and nearby residences and local roads within the Seneca Springs residential development.

Impact V-8: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 6 on Pine Valley Road in the Sun Lakes development (Class III).

Figure D.12-7A presents the existing view to the east-northeast from Key Viewpoint 6 on Pine Valley Road, just south of the span of Pine Valley Road in the Sun Lakes residential development. Figure D.12-7B presents a visual simulation that depicts the replacement of the existing single circuit, wood pole H-frame subtransmission line with a double-circuit, single tubular steel pole subtransmission line. As shown in the simulation, the proposed TSPs would have a more simple structural design compared to the H-frame structures they would replace, but the TSPs would be taller. Also, the TSPs would have a more industrial metallic gray appearance compared to the more natural, rough-hewn wood poles to be replaced. The new structures and additional conductors would also result in a slight net increase in view blockage of background mountains and sky. However, because the existing subtransmission line towers and conductors have established a structural precedence with respect to form and line, the resulting visual contrast would be moderate. The new structures and conductors would appear co-dominant compared to the existing landforms (horizontal form of the golf course and background mountains that are only slightly visible from the viewing perspective presented in Figure D.12-7B) and built features (residential development). The additional set of conductors for the new double-circuit facility would cause greater view blockage compared to the conductors associated with the existing single-circuit facility. However, this would be off-set by a reduction in view blockage associated with the proposed single pole design compared to the existing double pole H-frame design. The resulting net change in view blockage of background sky and landforms would be low-to-moderate. The overall visual change would be moderate when the three equally weighted factors of visual contrast, Project dominance, and view blockage are combined. In the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be adverse but less than significant (Class III). This conclusion is substantially influenced by the prominence of the slightly more structurally complex existing subtransmission line that is to be removed. Since (a) the structures are being replaced tower-for-tower within the existing ROW, (b) the structure design has been simplified, and (c) the new structure color is a neutral color, no mitigation is proposed. This viewpoint analysis is considered representative of views from the golf course, adjacent and nearby residences, and local roads within the Sun Lakes residential development.

Impact V-9: Increased structure contrast and industrial character when viewed from Key Viewpoint 7 on East Lincoln Street in the City of Banning (Class III).

Figure D.12-8 presents the existing view to the northeast from Key Viewpoint 7 on East Lincoln Street, immediately south of Banning Substation. The proposed modifications to Banning Substation would include the addition of a new switchrack, two low-profile transformer racks, additional communications equipment, and replacement of a capacitor bank. However, all of the modifications would be accommodated within the existing substation property. In the context of the existing structural complexity and substantial industrial character exhibited by the existing substation facilities, the new structures and equipment would be minimally noticeable to the casual observer. Because the existing substation facilities have established a complex structural and industrial precedence with respect to form, line, and character; the resulting incremental increase in visual contrast would be low and the new structures and equipment would appear subordinate-to-co-dominant compared to the existing substation components. View blockage of the background mountains and sky would be low-to-moderate. The overall visual change would be low-to-moderate when the three equally weighted factors of visual contrast, Project dominance, and view blockage are combined. In the context of the existing landscape's moderate visual sensitivity, the resulting visual impact would be adverse but less than significant (Class III). This conclusion is substantially influenced by the industrial character of the existing substation facility and the relatively minor amount of incremental change that would be apparent. Therefore, no mitigation is proposed. This viewpoint analysis is considered representative of views of the substation from East Lincoln Street and adjacent properties.

Impact V-10: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 8 on North Juniper Avenue in the City of Yucaipa (Class II).

Figure D.12-9A presents the existing view to the west from Key Viewpoint 8 on North Juniper Avenue, immediately east of Zanja Substation. Figure D.12-9B presents an elevational diagram of the existing substation facilities, viewing to the west. Figure D.12-9C presents an elevational diagram that depicts the addition of a new switchrack and communications equipment. All of the modifications would be accommodated within the existing substation property. In the context of the existing structural complexity and substantial industrial character exhibited by the existing substation facilities, the new structures and equipment would be minimally noticeable to the casual observer. Because the existing substation facilities have established a complex structural and industrial precedence with respect to form, line, and character; the resulting incremental increase in visual contrast would be low and the new equipment would appear subordinate-to-co-dominant compared to the existing substation components. View blockage of the background mountains and sky would be low-to-moderate. The overall visual change would be low-to-moderate when the three equally weighted factors of visual contrast, Project dominance, and view blockage are combined. In the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be significant. . This conclusion is substantially influenced by the industrial character of the existing substation facility and the relatively minor amount of change that would be apparent. However, because the substation is highly exposed to nearby residences with direct views of the substation, and additional residences are being built to the north and west, this impact is considered significant and it is recommended that Mitigation Measure V-10 (Reduce Visibility of the Zanja Substation Modifications) be implemented to reduce the visual impact of the proposed substation modifications on residential views to a level that is less than significant (Class II). This viewpoint analysis is considered representative of residential views of the substation from adjacent and nearby properties.

Mitigation Measure for Impact V-10

V-10 Reduce Visibility of the Zanja Substation Modifications. SCE shall submit to CPUC a Zanja Substation Screening Plan that reduces visibility of Zanja Substation and the connecting subtransmission line structures when viewed from existing residences along North Juniper Avenue and Juniper Avenue, and the new residential subdivision north and west of the substation. SCE shall plant habitat-appropriate species of trees and shrubs to intersect sightlines of the substation and screen substation components and the lower portions of the connecting subtransmission line structures from residential views. SCE shall submit the Plan to CPUC for review and approval at least 90 days prior to installing the landscape screening. If CPUC notifies SCE that revisions to the Plan are needed before the Plan can be approved, SCE shall prepare and submit for review and approval a revised Plan within 30 days of receiving that notification. The Plan shall include but not be limited to:

- 11"x17" color simulations of the proposed landscaping at 5 years when viewed from Key Viewpoint 8 and a new viewpoint that is representative of views from the new residential subdivision under construction north and west of the substation.
- Plan view to scale depicting the Project and the location of screening elements.
- A detailed list of any plants to be used; their size and age at planting; the expected time to maturity, and the expected height at five years and at maturity.

SCE shall complete installation of the screening prior to the start of Project operation. SCE shall notify CPUC within seven days after completing installation of the screening that the screening components are ready for inspection.

Impact V-11: Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 9 on Carter Street in the City of Yucaipa (Class III).

Figure D.12-10A presents the existing view to the north-northeast from Key Viewpoint 9 on Carter Street, just west of Fremont Street in the City of Yucaipa. Figure D.12-10B presents a simulation of the proposed Mill Creek communication tower along the ridgeline to the north of Yucaipa. The viewing distance from Key Viewpoint 9 is approximately two miles. The proposed tower would support a new microwave antenna as well as the two existing antennas at the Mill Creek Communication Site. The proposed neutral-gray colored, lattice-steel antenna tower and attached microwave antennas would appear as a faintly visible, simple vertical structure situated on the ridge north of Yucaipa. The microwave antennas would appear as light-colored circular discs on the neutral gray structure. However, at a viewing distance of approximately 1.5 to five miles (depending on location in the immediate Yucaipa area), the structure on the ridgeline would be minimally noticeable to the casual observer though it could be visible. The resulting visual contrast associated with the faint vertical structure along the generally horizontal ridgeline would be low and the new structure would appear subordinate compared to the more massive mountain landform. View blockage of the background sky would be low. The overall visual change would be low when the three equally weighted factors of visual contrast, Project dominance, and view blockage are combined. In the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be adverse but less than significant (Class III) and no mitigation is proposed. This viewpoint analysis is considered representative of views of the communication tower from the general Yucaipa area.

Impact V-12: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 10 on southbound Live Oak Canyon Road (Class III).

Figure D.12-11A presents the existing view to the southwest from Key Viewpoint 10 on southbound Live Oak Canyon Road, south of Interstate 10. Figure D.12-11B presents a visual simulation that depicts the addition of a fiber optic cable to the existing wood pole H-frame utility poles that are located adjacent to Live Oak Canyon Road. As shown in the simulation, the proposed fiber optic line would appear very similar to the cable that is already present on the existing utility poles. While the additional cable would slightly increase the view blockage caused by the existing facilities, it is unlikely that the additional cable would be noticed by travelers on Live Oak Canyon Road or casual observers along other portions of the fiber optic route. Because the existing utility line has established a structural precedence with respect to form and line, the resulting incremental increase in visual contrast would be low. The new cable would appear subordinate compared to the existing built landscape features (utility line and Live Oak Canyon Road), and adjacent and background landforms. The resulting view blockage of background sky and hills caused by the new cable would be low. The overall visual change would be low when the three equally weighted factors of visual contrast, Project dominance, and view blockage are combined. In the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be adverse but less than significant (Class III) and no mitigation is proposed. While this viewpoint analysis is considered representative of views of the fiber optic cable throughout the fiber optic route, it should be noted that the cable would be even less noticeable in the more developed suburban and urban landscapes through which most of the fiber optic cable would pass. This is because in the more developed areas, overhead utility lines and cables are more numerous and landscape contexts are more complex, rendering slight changes in the landscape less obvious.

D.12.4 CPUC's Northerly Route Alternative Option 3

The CPUC's Northerly Route Alternative Option 3 (also referred to as Route Alternative Option 3) is similar to the Proposed Project except for the route of the subtransmission line and associated upgrades. New construction in the subtransmission portion of this alternative would occur along the El Casco-Maraschino route and the El Casco-Banning route (which includes the El Casco-Zanja line), as well as a 0.7-mile portion of the Banning-Maraschino route extending south out of Banning Substation. The El Casco-Maraschino line follows the same route from El Casco Substation to Maraschino Substation as the western portion of the Proposed Project route, which is described above in Section D.12.1. The El Casco-Banning route would exit the proposed El Casco Substation and enter an existing ROW containing three 220 kV transmission lines. The El Casco-Banning 115 kV subtransmission line would follow this ROW into the City of Banning, where it would exit the ROW at the base of the foothills of the San Bernardino Mountains at San Gorgonio Avenue and follow city streets south into Banning Substation. In this area, the subtransmission line would pass adjacent and/or through established residential neighborhoods north of Interstate 10 (I-10) in the City of Banning.

The landscape along the transmission line corridor in the Cities of Beaumont and Calimesa is decidedly suburban with well-defined residential developments, interspersed with occasional park and recreation facilities and undeveloped lands, backdropped to the north by the San Bernardino Mountains. The landscape is similar to that of the Proposed Project south of I-10, though at present there is more residential development in close proximity to the alternative route compared to the Proposed Project route. Viewing opportunities are similar to those of the Proposed Project and would include views from adjacent and nearby residences, major travel corridors (I-10), numerous local roads, and park and recreation facilities.

D.12.4.1 CPUC's Northerly Route Alternative Option 3 – Environmental Setting

Landscapes crossed by the route would range from suburban residential, to transitional rural (transitioning to suburban residential), to undeveloped agricultural lands and open space. Three areas of potential visual sensitivity were selected for detailed analysis: (1) views of the subtransmission line from established residential neighborhoods in the City of Banning (KVP 11), (2) views of the subtransmission line from new residential neighborhoods in the City of Beaumont (KVP 12), and (3) views of the subtransmission line converging on San Timoteo Canyon Road from undeveloped hills in the southern part of the City of Calimesa (KVP 13). Therefore, three Key Viewpoints (KVPs) were selected to represent the visual setting for the three general areas of the Route Alternative Option 3. The location of each of these KVPs is shown on Figure D.12-1. The results of the visual analysis are summarized in table format in Attachment VR-2. A discussion of the existing visual setting for each KVP is presented in the following paragraphs.

Key Viewpoint 11 – Summit Drive in the City of Banning

Key Viewpoint 11 was established on westbound Summit Drive, just east of North Alessandro Street in the City of Banning (see Figure D.12-12A). Viewing to the west along Summit Drive and an existing wood pole electric distribution line that would be replaced by the Route Alternative Option 3 (with distribution underbuild), this location was selected to represent the existing views from potentially affected residential areas in Banning.

Visual Quality. Moderate. The foreground established, suburban residential landscape consists of older homes and mature vegetation. An existing wood pole electric distribution line (with attached cable) is a noticeable overhead feature, though not out of place in this typical neighborhood setting. The vertical forms of the utility wood poles blend relatively well with the vertical forms of the natural features (trees).

Viewer Concern. High. Residential viewers along Summit Drive anticipate a predominantly suburban residential setting. Although residents anticipate the noticeable presence of the existing wood pole utility line, it is not out of place in a residential landscape and does not exhibit substantial industrial character. However, any addition of developed industrial features to the landscape or blockage of views to higher quality landscape features (hills and background sky) would be perceived as an adverse visual change in the landscape.

Viewer Exposure. Moderate-to-high. The alternative route would be highly visible in the foreground of the views of residents and travelers on Summit Drive in general and from KVP 11 specifically. Although the number of viewers would be low, the duration of views would be extended. Combining these four equally weighted factors (visibility, distance zone, number of viewers, and duration of view) gives an overall moderate-to-high viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For residents and travelers on Summit Drive, combining the equally weighted moderate visual quality, high viewer concern, and moderate-to-high viewer exposure lead to an overall moderate-to-high visual sensitivity of the visual setting and viewing characteristics.

Key Viewpoint 12 – Cedar Hollow Road in the City of Beaumont

Key Viewpoint 12 was established on Cedar Hollow Road off of Cherry Avenue and immediately south of Beaumont High School in the City of Beaumont (see Figure D.12-13A). Viewing to the west-south-

west along Cedar Hollow Road and toward the existing transmission line corridor, this location was selected to represent the existing views from residences facing the proposed route in Beaumont.

Visual Quality. Low-to-moderate. The foreground newer suburban residential landscape of one and two-story single-family homes is generally lacking distinctive landscape features or elements of visual interest and is visually dominated by the adjacent energy transmission infrastructure (towers and conductors) that is substantially skylined throughout the corridor.

Viewer Concern. High. Residential viewers in the adjacent residential area would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (such as background sky) an adverse visual change.

Viewer Exposure. Moderate-to-high. The Route Alternative Option 3 would be highly visible in the foreground of views from residences facing onto the corridor. Although the number of viewers would be low, the duration of view would be extended. Combining these four equally weighted factors (visibility, distance zone, number of viewers, and duration of view) gives an overall moderate-to-high viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For residents in the adjacent neighborhood, combining the equally weighted 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.

Key Viewpoint 13 – San Timoteo Canyon Road

Key Viewpoint 13 was established on westbound San Timoteo Canyon Road, just west of the road span (see Figure D.12-14A). Viewing to the southeast toward the existing transmission line corridor and the span of San Timoteo Canyon Road, this location was selected to represent the existing views from San Timoteo Canyon Road.

Visual Quality. Moderate. The foreground landscape is predominantly rural in character, and natural in appearance with rolling, grass- and shrub-covered hills with minimal visual variety. However, electric transmission facilities with structurally complex forms and lines and substantial industrial character are prominently visible, particularly along the ridges and at the span of San Timoteo Canyon Road. Skylining (extending above the horizon) exacerbates structure prominence. The hills and ridges north of San Timoteo Canyon Road are transitioning to a suburban residential landscape.

Viewer Concern. High. Although energy transmission infrastructure features prominently in the foreground of views from San Timoteo Canyon Road, travelers would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (such as background sky and hills) an adverse visual change.

Viewer Exposure. Moderate-to-high. The Route Alternative Option 3 would be highly visible in the foreground of views from San Timoteo Canyon Road. Although the number of viewers would be moderate, the duration of view would be moderate-to-extended. Combining these four equally weighted factors (visibility, distance zone, number of viewers, and duration of view) gives an overall moderate-to-high viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For travelers on San Timoteo Canyon Road, combining the equally weighted 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.

D.12.4.2 Applicable Regulations, Plans, and Standards

Regulations, plans, and standards that pertain to the Route Alternative Option 3 include those previously identified for the Proposed Project in Table D.12-3. The Route Alternative Option 3’s consistency with those planning policies would be as determined for the Proposed Project because of the commonality of the Project components between the Proposed Project and Route Alternative Option 3. Three additional policies pertaining to visual resources in the City of Calimesa were also found to be applicable to that portion of the Route Alternative Option 3 passing through the City of Calimesa. Those three policies are presented below in Table D.12-5.

Table D.12-5 Consistency with Applicable Land Use Plans and Policies

Agency Regulating Visual Resources	Regulation or Policy	Project Consistent?	Method of Consistency
City of Calimesa	General Plan: Land Use Element: Page 1-5, Rural Atmosphere and Quality of Life Policies		
	Policy 1.1 – Preserve the natural character and visual quality of the hillsides through sensitive site design and grading.	Yes	The Route Alternative Option 3 would cross several hillsides to the north of San Timoteo Canyon in the City of Calimesa. However, along this route segment, the Project would be placed between existing transmission lines within a major transmission line corridor containing three existing transmission lines. From most viewing locations the resulting visual change would appear adverse but less than significant. Placement of the Route Alternative Option 3 in an existing transmission line corridor would prevent the proliferation of rights-of-way and help to preserve the visual integrity of undeveloped hillsides.
City of Calimesa	General Plan: Land Use Element: Page 1-8, Preservation of Natural Resources and Environmentally Sensitive Areas.		
	Policy 5.4 – Development shall be prohibited in areas containing sensitive biological resources and habitats, cultural resources, groundwater recharge areas, and prominent ridgelines, unless adequate protection and/or preservation is provided.	Yes	The Route Alternative Option 3 would cross several hillsides to the north of San Timoteo Canyon in the City of Calimesa. However, along this route segment, the Project would be placed between existing transmission lines within a major transmission line corridor containing three existing transmission lines. From most viewing locations the resulting visual change would appear adverse but less than significant. Placement of the Route Alternative Option 3 in an existing transmission line corridor would prevent the proliferation of rights-of-way and help to preserve the visual integrity of undeveloped hillsides.

Table D.12-5 Consistency with Applicable Land Use Plans and Policies

Agency Regulating Visual Resources	Regulation or Policy	Project Consistent?	Method of Consistency
	General Plan: Resource Management Element: Page 14-5, Geologic Resources.		
	Policy 2.5 – Protect the City's scenic and visual resources by limiting ridgeline development and building heights.	Yes	The Route Alternative Option 3 would cross several hillsides to the north of San Timoteo Canyon in the City of Calimesa. However, along this route segment, the Project would be placed between existing transmission lines within a major transmission line corridor containing three existing transmission lines. From most viewing locations the resulting visual change would appear adverse but less than significant. Placement of the Route Alternative Option 3 in an existing transmission line corridor would prevent the proliferation of rights-of-way and help to preserve the visual integrity of undeveloped hillsides.

D.12.4.3 CPUC's Northerly Route Alternative Option 3 – Environmental Impacts and Mitigation Measures

Construction Impacts

Construction along the Route Alternative Option 3 would be as described above for the Proposed Project in Section D.12.3.3 and would include the visual intrusion of construction vehicles, equipment, materials, and work force (Impact V-1) at the substations, Mill Creek Communication Site, along the new subtransmission line routes, and along the new fiber optic route. Construction impacts on visual resources would also result from the temporary alteration of landforms and vegetation clearance (Impact V-2) at the substation sites and along the ROW. Vehicles, heavy equipment, Project components, and workers would be visible during substation construction and modification, access and spur road clearing and grading, structure erection, conductor stringing, and site/ROW clean-up and restoration.

Mitigation Measures for Impact V-1: Short-term visibility of construction activities, equipment and night lighting (Class II)

V-1a Reduce Visibility of Construction Activities and Equipment

V-1b Reduce Construction Night Lighting Impacts

Mitigation Measures for Impact V-2: Visibility of land scarring and vegetation clearance in arid and semi-arid landscapes (Class II)

V-2a Reduce In-Line Views of Land Scars

V-2b Reduce Visual Contrast from Unnatural Vegetation Lines

Operational Impacts

The Route Alternative Option 3 would result in visual impacts that would range from adverse but less than significant (Class III) to significant but mitigable (Class II). Long-term, operational visual impacts would be experienced by (a) travelers on State highways and local roads; (b) recreationists accessing parks and golf courses; (c) residents in proximity to the subtransmission line ROW, as well as viewers of the other

components common to both the Proposed Project and Alternative (substations, communications site, fiber-optic line). In addition to the 10 KVPs previously presented for the Proposed Project (for common Project areas), three representative Key Viewpoints (KVP 11 through KVP 13) were selected to characterize the visual impacts that would occur from implementation of the northern subtransmission component of the Route Alternative Option 3.

Mitigation Measures for Impact V-3: Increased structure contrast, industrial character, view blockage, skylining, and glare when viewed from Key Viewpoint 1 on eastbound San Timoteo Canyon Road (Class II)

V-3a Reduce Visibility of the El Casco Substation Site

V-3b Reduce Operation Night Lighting Impacts

Mitigation Measures for Impact V-4: Increased structure contrast, industrial character, view blockage, skylining and glare when viewed from Key Viewpoint 2 in Norton Younglove Reserve (Class II)

V-3a Reduce Visibility of the El Casco Substation Site

V-3b Reduce Operation Night Lighting Impacts

Mitigation Measures for Impact V-5: Increased structure contrast, industrial character, view blockage and glare when viewed from Key Viewpoint 3 in the new residential development north of San Timoteo Canyon Road (Class III)

V-3a Reduce Visibility of the El Casco Substation Site

V-3b Reduce Operation Night Lighting Impacts

Mitigation Measure for Impact V-10: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 8 on North Juniper Avenue in the City of Yucaipa (Class II)

V-10 Reduce Visibility of the Zanja Substation Modifications

Impact V-13: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 11 on westbound Summit Drive (Class I).

Figure D.12-12A presents the existing view to the west from Key Viewpoint 11 on Summit Drive, just east of North Alessandro Street in the City of Banning. Figure D.12-12B presents a visual simulation that depicts the replacement of the existing wood pole distribution line with a tubular steel pole subtransmission line with a distribution underbuild. As shown in the simulation, the proposed structures would be taller and would have a more industrial metallic gray appearance compared to the more natural, rough-hewn wood poles to be replaced. The new structures and additional conductors would also result in a slight net increase in view blockage of background hills and sky. The taller structures and additional conductors would exacerbate structure prominence in the landscape and would increase visual contrast to a moderate level. The structures would appear co-dominant with other landscape features and view blockage would be low-to-moderate. The overall visual change would be moderate when the three equally weighted factors of visual contrast, Project dominance, and view blockage are

combined. In the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be significant (Class I). This conclusion is substantially influenced by the increase in industrial character that would occur compared to the rough-hewn appearance of the utility poles that are common to older residential developments. No mitigation is available to lessen the visual impact that would be experienced along Summit Drive. This viewpoint analysis is considered representative of residential views of the subtransmission line where a wood pole distribution line would be replaced by a tubular steel pole with distribution underbuild.

Impact V-14: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 12 on Cedar Hollow Road (Class III).

Figure D.12-13A presents the existing view to the west from Key Viewpoint 12 at about mid-block on Cedar Hollow Road, which is located immediately south of Beaumont High School in the City of Beaumont. Figure D.12-13B presents a visual simulation that depicts the addition of the tubular steel pole subtransmission line to the existing transmission line corridor. As shown in the simulation, the proposed 115 kV subtransmission line would introduce additional vertical (tubular steel poles) and curvilinear (conductors) elements into the already dominant and structurally complex electric transmission line corridor. The new facility would increase visual contrast, Project dominance, and view blockage of background sky. However, in the visual context of the existing facilities, the degree of visual change would not be substantial. The resulting visual contrast would be low and the subordinate-to-co-dominant structures would cause a low-to-moderate degree of additional view blockage (primarily of background sky). The overall visual change would be low-to-moderate when the three equally weighted factors of visual contrast, Project dominance, and view blockage are combined. In the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be adverse but less than significant (Class III) and no mitigation is proposed. This conclusion is substantially influenced by the structural dominance and industrial character associated with the existing transmission line facilities. This viewpoint analysis is considered representative of views of the transmission line corridor.

Impact V-15: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 13 on San Timoteo Canyon Road (Class III).

Figure D.12-14A presents the existing view to the southeast from Key Viewpoint 13 on eastbound San Timoteo Canyon Road, just west of the existing transmission line's span of the road. Figure D.12-14B presents a visual simulation that depicts the addition of the tubular steel pole subtransmission line to the existing transmission line corridor. As shown in the simulation, the proposed 115 kV subtransmission line would introduce additional vertical (tubular steel poles) and curvilinear (conductors) elements into the already dominant and structurally complex electric transmission line corridor. The new facility would increase visual contrast, Project dominance, and view blockage of background hills and sky. However, in the visual context of the existing facilities, the degree of visual change would not be substantial. The resulting visual contrast would be low-to-moderate and the subordinate-to-co-dominant structures would cause a moderate degree of additional view blockage. The overall visual change would be low-to-moderate when the three equally weighted factors of visual contrast, Project dominance, and view blockage are combined. In the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be adverse but less than significant (Class III) and no mitigation is proposed. This conclusion is substantially influenced by the structural dominance and industrial

character associated with the existing transmission line facilities. This viewpoint analysis is considered representative of views of the alternative route from San Timoteo Canyon Road.

D.12.5 Partial Underground Alternative

The Partial Underground Alternative would contain the same elements as the Proposed Project, except for an approximately one-mile portion of the alignment through the Sun Lakes community beginning just east of Highland Springs Avenue and ending just east of South Riviera Avenue and west of South Highland Home Road. This alternative would result in the removal of the existing wood H-frame 115 kV subtransmission line structures through the Sun Lakes development (as would the Proposed Project). However, instead of replacing the existing subtransmission line with an aboveground tubular steel pole line, the Partial Underground Alternative would locate the subtransmission line and fiber optic line underground through the development. As a result, a pair of transition structures would be located at each end of the underground segment.

D.12.5.1 Partial Underground Alternative – Environmental Setting

The landscape along this alternative is suburban residential to rural residential. Viewing opportunities of the aboveground transition structures would be similar to those of the Proposed Project and would include views from adjacent and nearby residences and roads within the Sun Lakes development, Highland Springs Road (just west of the development), and South Highland Home Road and residences along South Highland Home Road east of the Sun Lakes development. Three areas of potential visual sensitivity were selected for detailed analysis: (1) views of the transition structures from within the Sun Lakes development, (2) views of the transition structures from Highland Springs Road, and (3) views of the transition structures from South Highland Home Road and nearby residences east of the Sun Lakes development. It was determined that while several residences at each end of the Sun Lakes development would be adversely affected by the introduction of the transition structures, the majority of the viewers along the route within the development would experience the positive visual impact of the removal of the existing line. In contrast, the views of the transition structures from points external to the Sun Lakes development would experience the negative impact of the structures without the positive benefit of the removal of the existing line. Therefore, South Highland Home Road (KVP 14) was selected to represent the visual setting for the Partial Underground Alternative because the eastern structures would be slightly more prominent in views from South Highland Home Road compared to the western structures and their visibility from Highland Springs Road. The location of KVP 14 is shown on Figure D.12-1. The results of the visual analysis are summarized in table format in Attachment VR-2. A discussion of the existing visual setting for KVP 14 is presented in the following paragraphs.

Key Viewpoint 14 – South Highland Home Road

Key Viewpoint 14 was established on northbound South Highland Home Road, just south of the Proposed Project's span of the road and just east of the Sun Lakes community (see Figure D.12-15A). Viewing to the northwest toward the proposed transition structure locations at the eastern end of the Sun Lakes community, this location was selected to represent the existing views from South Highland Home Road and the adjacent residences.

Visual Quality. Moderate. The foreground landscape is predominantly rural in character, but in transition to suburban residential. Nearby rolling, grass- and shrub-covered hills and fields are predominantly natural or agricultural in appearance. However, the rooflines of the Sun Lakes development are also slightly visible above the rise to the west. An existing wood pole electric

subtransmission line with simple, structural forms and lines and exhibiting minimal industrial character is prominently visible, particularly along the hilltops to the west and at the span of south Highland Home Road. Skylining (extending above the horizon) of the structures exacerbates structure prominence and compromises landscape integrity.

Viewer Concern. High. Local residents and travelers on South Highland Home Road anticipate a predominantly transitional rural landscape setting and the noticeable presence of the existing utility line. However, any addition of developed industrial features to the landscape or blockage of views to higher quality landscape features (hills and background sky) would be perceived as an adverse visual change in the landscape.

Viewer Exposure. Moderate-to-high. The Partial Underground Alternative's transition structures would be highly visible in the foreground of views from South Highland Home Road and adjacent residences. Although the number of viewers would be low, the duration of view would be moderate-to-extended. Combining these four equally weighted factors (visibility, distance zone, number of viewers, and duration of view) gives an overall moderate-to-high viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For travelers on South Highland Home Road and adjacent residents, combining the equally weighted 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.

D.12.5.2 Applicable Regulations, Plans, and Standards

Regulations, plans, and standards that pertain to the Partial Underground Alternative include those previously identified for the Proposed Project in Table D.12-3. The Partial Underground Alternative's consistency with those planning policies would be as determined for the Proposed Project because of the commonality of the Project components between the Proposed Project and Partial Underground Alternative. No additional policies pertaining to the protection of visual resources were identified as applicable to the Partial Underground Alternative.

D.12.5.3 Partial Underground Alternative – Environmental Impacts and Mitigation Measures

Construction Impacts

Construction along the Partial Underground Alternative would be as described above for the Proposed Project in Section D.12.3.3 and would include the visual intrusion of construction vehicles, equipment, materials, and work force (Impact V-1) at the substations, Mill Creek Communication Site, along the underground subtransmission line route, and along the new fiber optic routes. Construction impacts on visual resources (for Project components other than the underground segment) would also result from the temporary alteration of landforms and vegetation clearance (Impact V-2) at the substation sites and along the ROW. Vehicles, heavy equipment, Project components, and workers would be visible during substation construction and modification, access and spur road clearing and grading, structure erection, conductor stringing, and site/ROW clean-up and restoration.

Mitigation Measures for Impact V-1: Short-term visibility of construction activities, equipment and night lighting

V-1a Reduce Visibility of Construction Activities and Equipment

V-1b Reduce Construction Night Lighting Impacts

Mitigation Measures for Impact V-2: Visibility of land scarring and vegetation clearance in arid and semi-arid landscapes

V-2a Reduce In-Line Views of Land Scars

V-2b Reduce Visual Contrast from Unnatural Vegetation Lines

Operational Impacts

The Partial Underground Alternative would result in visual impacts that would range from adverse but less than significant (Class III) to significant but mitigable (Class II – see Proposed Project discussion above). Long-term, operational visual impacts would be experienced by (a) travelers on adjacent local roads, (b) nearby residents, and (c) visitors to the Sun Lakes golf course, as well as viewers of the other components common to both the Proposed Project and the Partial Underground Alternative (substations, communications site, fiber-optic line). One representative Key Viewpoint (KVP 14) was selected to characterize the visual impacts that would occur from the underground segment of the Partial Underground Alternative.

Mitigation Measures for Impact V-3: Increased structure contrast, industrial character, view blockage, skylining, and glare when viewed from Key Viewpoint 1 on eastbound San Timoteo Canyon Road (Class II)

V-3a Reduce Visibility of the El Casco Substation Site

V-3b Reduce Operation Night Lighting Impacts

Mitigation Measures for Impact V-4: Increased structure contrast, industrial character, view blockage, skylining and glare when viewed from Key Viewpoint 2 in Norton Younglove Reserve (Class II)

V-3a Reduce Visibility of the El Casco Substation Site

V-3b Reduce Operation Night Lighting Impacts

Mitigation Measures for Impact V-5: Increased structure contrast, industrial character, view blockage and glare when viewed from Key Viewpoint 3 in the new residential development north of San Timoteo Canyon Road (Class III)

V-3a Reduce Visibility of the El Casco Substation Site

V-3b Reduce Operation Night Lighting Impacts

Mitigation Measure for Impact V-10: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 8 on North Juniper Avenue in the City of Yucaipa (Class II)

V-10 Reduce Visibility of the Zanja Substation Modifications

Impact V-16: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 14 on northbound South Highland Home Road (Class III).

Figure D.12-15A presents the existing view to the northwest from Key Viewpoint 14 on northbound South Highland Home Road, just south of the existing subtransmission line's span of the road. Figure D.12-15B presents a visual simulation that depicts the replacement of the existing wood pole subtransmission line with tubular steel poles east of the Sun Lakes development and the addition of a pair of transition structures that would take the subtransmission line underground through the Sun Lakes development. Figure D.12-16 presents a visual simulation that depicts the removal of the existing wood pole subtransmission line from within the Sun Lakes development (KVP 6 on Pine Valley Road). As shown in the simulation of the transition structures (Figure D.12-15B), the proposed transition structures would introduce considerable structural complexity and industrial character into a predominantly suburban and rural residential landscape lacking similar characteristics. However, the single-pole structures would also result in the removal of the existing dual wood pole "box-frame" subtransmission structure at the east end of the Sun Lakes development as well as the dual-pole H-frame structures east of the development. The two transition structures would also introduce additional visual contrast, structural prominence and view blockage. The resulting visual contrast would be moderate-to-high and the co-dominant structures would cause a moderate degree of additional view blockage. The overall visual change would be moderate when the three equally weighted factors of visual contrast, Project dominance, and view blockage are combined. In the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be adverse but less than significant (Class III) and no mitigation is proposed. This conclusion is substantially influenced by the structural prominence of the existing wood pole line and the removal of the structures within the Sun Lakes development. This viewpoint analysis is considered representative of views of the Partial Underground Alternative route from South Highland Home Road, adjacent residences and viewpoints external to the Sun Lakes development in general.

D.12.6 No Project Alternative

Under the No Project Alternative, the visual impacts associated with the Proposed Project or Project alternatives as described above would not occur. However, system operations would need to be modified and additional system improvements would need to be made. The changes that would be relative to the assessment of visual impacts include the following:

- The addition of a third 28 MVA transformer and two 12 kV distribution lines (each approximately 9 miles in length) at Maraschino Substation.
- Switchrack rebuilds at Banning and Zanja Substations would need to be completed.

D.12.6.1 No Project Alternative – Environmental Setting

The No Project Alternative would include system improvements and substation modifications within the same Project area as described above for the Proposed Project. Therefore, the environmental setting described above for the Proposed Project in Section D.12.1.3 would apply to the No Project Alternative as well.

D.12.6.2 Applicable Regulations, Plans, and Standards

Regulations, plans, and standards that pertain to the No Project Alternative include City of Yucaipa policies previously identified for the Proposed Project in Table D.12-3 and presented below in Table D.12-6. Other policies previously identified for the Proposed Project (Table D.12-3) may also apply to the No Project Alternative though these cannot be identified since the routes of the 12 kV distribution lines are not known and the affected jurisdictions have not been identified. However, it is likely that the distribution lines would be consistent with any additional applicable policies since the location of the 12 kV distribution lines would likely be in the urban or suburban landscapes that typically host such facilities.

Table D.12-6 Consistency with Applicable Land Use Plans and Policies

Agency Regulating Visual Resources	Regulation or Policy	Project Consistent?	Method of Consistency
City of Yucaipa	General Plan: Land Use Element. Infrastructure and Public. Section B: Existing Infrastructure and Future Needs. No. 6: Electricity.		
	Policy 6a: Electrical Transmission Lines – The aesthetic impacts of major transmission lines shall be addressed when considering the location, method and materials to be used. Generally, transmission line towers shall be located for minimal visibility. Proper use of backdrop, screening and weathering or non-reflective materials can help to reduce visibility. Where the transmission facilities cannot be hidden or their negative effects reduced by location or screening, the use of specifically designed aesthetic towers or undergroundings should be considered. At road crossings of two or more circuits and where only a portion of the line is visible from the highway, the use of multiple circuit towers shall be considered in minimizing the impact of the lines at that point...The joint use of electric transmission corridors by two or more utilities shall be encouraged when feasible in order to reduce the total number of corridors and service and access roads required. The relative advantages and disadvantages of locating a new line either adjacent to or widely separated from existing transmission lines shall be considered.	Yes	The No Project Alternative would include modifications to the existing Zanja Substation within the City of Yucaipa and all work would be confined to the existing substation area.

Table D.12-6 Consistency with Applicable Land Use Plans and Policies

Agency Regulating Visual Resources	Regulation or Policy	Project Consistent?	Method of Consistency
	Policy 6b: Electrical Substations – Locations of substations shall be coordinated with the needs of the utilities delivering power into or receiving power from the station. This is particularly important in the development of the site's electrical layout to minimize costly and unsightly transmission line crossovers or the unnecessary duplication of facilities.	Yes	The No Project Alternative would include modifications to the existing Zanja Substation within the City of Yucaipa and all work would be confined to the existing substation area.

D.12.6.3 Environmental Impacts of the No Project Alternative

Construction Impacts

Construction impacts associated with the No Project Alternative would be similar to those described above for the Proposed Project in Section D.12.3.3 and would include the visual intrusion of construction vehicles, equipment, materials, and work force (Impact V-1) at the substations and along the 12 kV distribution line routes. However, since the No Project Alternative components would likely be within existing substations and developed areas (for the distribution lines), it is unlikely that Impact V-2 (temporary alteration of landforms and vegetation clearance) would occur.

Mitigation Measures for Impact V-1: Short-term visibility of construction activities, equipment and night lighting

V-1a Reduce Visibility of Construction Activities and Equipment.

V-1b Reduce Construction Night Lighting Impacts.

Operational Impacts

The No Project Alternative would likely result in adverse but less than significant (Class III) visual impacts. Long-term, operational visual impacts would most likely be experienced by travelers on adjacent local roads and residents in close proximity to the substations and distribution line routes. Visual impacts would be differentiated into impacts associated with the existing substation modifications (Impact V-17) and impacts associated with the 12 kV distribution lines (Impact V-18).

Impact V-17: Increased structure contrast and industrial character associated with the modifications of existing substations (Class III).

The addition of a third 28 MVA transformer at Maraschino Substation and the switchrack rebuilds at Banning and Zanja Substations would be accommodated within the existing substation properties. In the context of the existing structural complexities and substantial industrial character at the substations, the new or rebuilt structures and equipment would be minimally noticeable to the casual observer. The resulting visual contrasts would be low and to the extent that the new equipment would be visible, it would appear subordinate to co-dominant. At most, view blockage would be low or low-to-moderate. The overall visual change would be low or low-to-moderate at each substation and in the context of the

existing overall visual sensitivities at the substations that would range from moderate (Banning and Maraschino) to moderate-to-high (Zanja), the resulting visual impact (assuming change is visible) would be adverse but less than significant (Class III).

Impact V-18: Increased structure contrast, industrial character, skylining, and view blockage associated with the addition of 12 kV distribution lines (Class III).

The addition of two wood pole, 12 kV distribution lines within established suburban/urban landscapes, while visible to travelers on local roads or residents in the immediate vicinity of the routes, would not appear out of character, particularly in landscapes with other utility infrastructure in the vicinity. Without knowing the actual location of the routes, it is reasonable to assume that the overall visual sensitivity along the ROWs would not exceed moderate-to-high in the Project vicinity. It is also reasonable to assume that the increased structure contrast, industrial character, skylining, and view blockage that would result from the distribution lines would cause a low to low-to-moderate visual contrast and that the subordinate to co-dominant structures and conductors would cause no greater than a moderate degree of view blockage of background sky and hills. The resulting visual change along these two routes would not exceed a moderate level and in the context of a moderate-to-high overall visual sensitivity (at the most), the resulting visual impacts would be adverse but less than significant (Class III).

D.12.7 Mitigation Monitoring, Compliance, and Reporting Table

Table D.12-7 on the following page presents the mitigation monitoring recommendations for Visual Resources. These measures would be applicable to construction and operation of the proposed and alternative route segments as noted.

Table D.12-7. Mitigation Monitoring Program – Visual Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<p>V-1: Short-term visibility of construction activities, equipment, and night lighting (Class II [Substation and Staging Areas] and Class III [Subtransmission Line, Loop-In, and Fiber Optic Routes])</p>	<p>V-1a: Reduce Visibility of Construction Activities and Equipment. Substation construction sites and all staging and material and equipment storage areas including storage sites for excavated materials shall be appropriately located away from areas of high public visibility. If visible from nearby roads; residences; public gathering areas; or recreational areas, facilities, or trails; construction sites and staging areas shall be visually screened using temporary screening fencing. Fencing will be of an appropriate design and color for each specific location. Additionally, avoid construction in areas visible from recreation facilities and areas during holidays and periods of heavy recreational use. SCE shall submit final construction plans demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction.</p>	<p>Entire Project alignment.</p>	<p>Review and approve final construction plans demonstrating compliance with this measure. Onsite monitor to verify effective use of screening fencing and compliance with additional requirements of this measure.</p>	<p>Ground-level clutter from equipment, materials, and vehicles will be effectively screened from views in areas of high public visibility.</p>	<p>CPUC</p>	<p>Prior to and during construction.</p>
	<p>V-1b: Reduce Construction Night Lighting Impacts. SCE shall design and install all lighting at construction sites, storage yards, and staging areas such that light bulbs and reflectors are not visible from public viewing areas and private residences; lighting does not cause reflected glare; and illumination of the Project facilities, vicinity, and nighttime sky is minimized. SCE shall submit a Construction Lighting Mitigation Plan to the CPUC for review and approval at least 90 days prior to the start of construction or the ordering of any exterior lighting fixtures or components, whichever comes first. SCE shall not order any exterior lighting fixtures or components until the Construction Lighting Mitigation Plan is approved by the CPUC. The Plan shall include but is not necessarily limited to the following:</p> <ul style="list-style-type: none"> • Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources are shielded to prevent light trespass outside the Project boundary • All lighting shall be of minimum necessary brightness consistent with worker safety • High illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied. 	<p>Construction sites, storage yards, and staging areas.</p>	<p>Review and approve Construction Lighting Mitigation Plan.</p>	<p>Light bulbs and reflectors will not be visible from public viewing areas (including roads) and private residences. Backscatter to the nighttime sky will be minimized and light trespass outside the Project boundary will be prevented.</p>	<p>CPUC</p>	<p>Prior to and during construction.</p>

Table D.12-7. Mitigation Monitoring Program – Visual Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
V-2: Long-term visibility of land scarring and vegetation clearance in arid and semi-arid landscapes (Class II)	V-2a: Reduce In-Line Views of Land Scars. Construct access or spur roads at appropriate angles from the originating, primary travel facilities to minimize extended, in-line views of newly graded terrain. Contour grading should be used where possible to better blend graded surfaces with existing terrain. SCE shall submit final construction plans demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction. Construction plans will include sufficient photo-documentation to document pre-construction conditions.	Entire Project alignment.	Review Construction Plans to confirm appropriateness of angle for any proposed roads or access. Confirm effectiveness of contour grading.	New access and spur roads will be constructed such that no in-line views of those facilities will be available. Contour grading will effectively blend graded surfaces with the existing terrain.	CPUC	Prior to and during construction.
	V-2b: Reduce Visual Contrast from Unnatural Vegetation Lines. In those areas where views of land scars are unavoidable, the boundaries of disturbed areas shall be aggressively revegetated to create a less distinct and more natural-appearing line to reduce visual contrast. If necessary to ensure vegetative success, plantings will be watered. If Measure V-2b is not successful within two years following the completion of construction, a new plant palette will be developed in consultation with an approved restoration ecologist. Furthermore, all graded roads and areas not required for on-going operation, maintenance, or access shall be returned to pre-construction conditions. SCE shall submit final construction and restoration plans demonstrating compliance with this measure to the CPUC for review and approval at least 60 days prior to the start of construction. Construction plans will include sufficient photo-documentation to document pre-construction conditions.	Entire Project alignment.	Review construction plans to confirm compliance with this measure. CPUC-approved biologist to review and approve restoration plans. Onsite monitor to verify compliance with plans and to record status of revegetation efforts two years after construction.	The occurrence of unnatural vegetation lines and associated visual contrast will be either prevented or minimized. All graded roads and areas not required for on-going operation will be returned to pre-construction conditions.	CPUC	Prior to, during, and after construction.

Table D.12-7. Mitigation Monitoring Program – Visual Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<p>V-3: Increased structure contrast, industrial character, view blockage, skylining and glare when viewed from Key Viewpoint 1 on eastbound San Timoteo Canyon Road (Class II)</p>	<p>V-3a: Reduce Visibility of the El Casco Substation Site. SCE shall submit to CPUC an El Casco Screening Plan that reduces visibility of the proposed El Casco Substation and connecting subtransmission line structures when viewed from San Timoteo Canyon Road, the Norton Younglove Reserve, and the new residential development on the north side of the road. Starting from the previously submitted El Casco Substation Preliminary Site Development Plan, SCE shall increase the density of Coast Live Oak (<i>Quercus agrifolia</i>) and Black Willow (<i>Salix gooddingii</i>) along the north to east boundaries of the site. Additional understory shrubs shall also be planted to intersect lower sightlines. Also, the existing gaps in the riparian vegetation must be filled with the appropriate riparian plant species to match the maximum heights of the densest riparian vegetation along San Timoteo Canyon Road. SCE shall submit the Plan to CPUC for review and approval at least 90 days prior to installing the landscape screening. If CPUC notifies SCE that revisions to the Plan are needed before the Plan can be approved, within 30 days of receiving that notification, SCE shall prepare and submit for review and approval a revised Plan. The Plan shall include but not necessarily be limited to:</p> <ul style="list-style-type: none"> • 11"x17" color simulations of the proposed landscaping at 5 years when viewed from Key Viewpoints 1, 2, and 3. • Plan view to scale depicting the Project and the location of screening elements. • A detailed list of any plants to be used; their size and age at planting; the expected time to maturity, and the expected height at five years and at maturity. • SCE shall complete installation of the screening prior to the start of project operation. SCE shall notify CPUC within seven days after completing installation of the screening, that the screening components are ready for inspection. 	<p>El Casco Substation</p>	<p>CPUC to review and approve El Casco Screening Plan. Onsite monitor to verify implementation following construction.</p>	<p>Substation visibility and the occurrence of structure contrast, industrial character, and view blockage impacts will be minimized.</p>	<p>CPUC</p>	<p>Prior to and after construction.</p>

Table D.12-7. Mitigation Monitoring Program – Visual Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	<p>V-3b: Reduce Operation Night Lighting Impacts. SCE shall design and install all permanent lighting such that light bulbs and reflectors are not visible from public viewing areas; lighting does not cause reflected glare; and illumination of the project facilities, vicinity, and nighttime sky is minimized. SCE shall submit a Lighting Mitigation Plan to the BLM and CPUC for review and approval at least 90 days prior to ordering any permanent exterior lighting fixtures or components. SCE shall not order any exterior lighting fixtures or components until the Lighting Mitigation Plan is approved by the CPUC. The Plan shall include but is not necessarily limited to the following:</p> <ul style="list-style-type: none"> • Lighting shall be designed so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. The design of the lighting shall be such that the luminescence or light sources are shielded to prevent light trespass outside the project boundary; • All lighting shall be of minimum necessary brightness consistent with worker safety; and <p>High illumination areas not occupied on a continuous basis shall have switches or motion detectors to light the area only when occupied.</p>	El Casco Substation	CPUC to review Lighting Mitigation Plan prior to start of construction and verify implementation following construction.	Light bulbs and reflectors at construction yards and staging areas would not be visible from public viewing areas and night lighting would not cause reflected glare and illumination beyond the construction site and into the nighttime sky.	CPUC	Prior to and during construction.
V-4: Increased structure contrast, industrial character, view blockage, skylining and glare when viewed from Key Viewpoint 2 in Norton Younglove Reserve (Class II).	V-3a: Reduce Visibility of the El Casco Substation Site.	El Casco Substation	CPUC to review and approve El Casco Screening Plan. Onsite monitor to verify implementation following construction.	Substation visibility and the occurrence of structure contrast, industrial character, and view blockage impacts will be minimized.	CPUC	Prior to and after construction.

Table D.12-7. Mitigation Monitoring Program – Visual Resources

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
	V-3b: Reduce Operation Night Lighting Impacts.	El Casco Substation	CPUC to review Lighting Mitigation Plan prior to start of construction and verify implementation following construction.	Light bulbs and reflectors at construction yards and staging areas would not be visible from public viewing areas and night lighting would not cause reflected glare and illumination beyond the construction site and into the nighttime sky.	CPUC	Prior to and during construction.
V-5: Increased structure contrast, industrial character, view blockage and glare when viewed from Key Viewpoint 3 in the new residential development under construction north of San Timoteo Canyon Road (Class III)	V-3a: Reduce Visibility of the El Casco Substation Site.	El Casco Substation	CPUC to review and approve El Casco Screening Plan. Onsite monitor to verify implementation following construction.	Substation visibility and the occurrence of structure contrast, industrial character, and view blockage impacts will be minimized.	CPUC	Prior to and after construction.
	V-3b: Reduce Operation Night Lighting Impacts.	El Casco Substation	CPUC to review Lighting Mitigation Plan prior to start of construction and verify implementation following construction.	Light bulbs and reflectors at construction yards and staging areas would not be visible from public viewing areas and night lighting would not cause reflected	CPUC	Prior to and during construction.

Impact	Mitigation Measure	Location	Monitoring / Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
				glare and illumination beyond the construction site and into the nighttime sky.		
V-10: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 8 on North Juniper Avenue in the City of Yucaipa (Class II).	<p>V-10: Reduce Visibility of the Zanja Substation Modifications. SCE shall submit to CPUC a Zanja Substation Screening Plan that reduces visibility of Zanja Substation and connecting transmission line structures when viewed from existing residences along North Juniper Avenue and Juniper Avenue, and the new residential subdivision north and west of the substation. SCE shall plant habitat-appropriate species of trees and shrubs to intersect sightlines of the substation and screen substation components and the lower portions of the connecting transmission line structures from residential views. SCE shall submit the Plan to CPUC for review and approval at least 90 days prior to installing the landscape screening. If CPUC notifies SCE that revisions to the Plan are needed before the Plan can be approved, within 30 days of receiving that notification, SCE shall prepare and submit for review and approval a revised Plan. The plan shall include but not necessarily be limited to:</p> <ul style="list-style-type: none"> • 11"x17" color simulations of the proposed landscaping at 5 years when viewed from Key Viewpoint 8 and a new viewpoint that is representative of views from the new residential subdivision under construction north and west of the substation. • Plan view to scale depicting the Project and the location of screening elements • A detailed list of any plants to be used; their size and age at planting; the expected time to maturity, and the expected height at five years and at maturity. <p>SCE shall complete installation of the screening prior to the start of project operation. SCE shall notify CPUC within seven days after completing installation of the screening, that the screening components are ready for inspection.</p>	Zanja Substation	Review and approve Zanja Substation Screening Plan. Onsite monitor to verify implementation following construction.	Substation visibility and the occurrence of structure contrast, industrial character, and view blockage impacts will be minimized.	CPUC	Prior to and after construction.

[Click here for Figure D.12-1](#)

[Click here for Figure D.12-2A](#)

[Click here for Figure D.12-2B](#)

[Click here for Figure D.12-3A/3B](#)

[Click here for Figure D.12-4A](#)

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[Click here for Figure D.12-8](#)

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ATTACHMENT VR-1 EXPLANATION OF VISUAL SENSITIVITY (VS)-VISUAL CHANGE (VC) SUMMARY TABLE (SEE ATTACHMENT VR-2 FOR COMPLETED SUMMARY TABLE)

VIEWPOINT		EXISTING VISUAL SETTING								VISUAL CHANGE					IMPACT SIGNIFICANCE	
Key Viewpoint (KVP)	Description	Visual Quality	Viewer Concern	Viewer Exposure					Overall Visual Sensitivity	Description of Visual Change	Visual Contrast	Project Dominance	View Blockage	Overall Visual Change	Before Mitigation	Mitigation
				Visibility	Distance Zone	Number of Viewers	Duration of View	Overall Viewer Exposure							After Mitigation	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

<p>1. Key Viewpoint (KVP). The key viewpoint column identifies (a) the viewpoint number, (b) the viewpoint name, (c) whether the viewpoint is for the Proposed Project or an Alternative, and (d) the figure(s) that correspond to the viewpoint.</p>	<p>5. Visibility. Visibility is one of four factors contributing to the overall assessment of viewer exposure. As for visual quality, visibility is assigned one of five ratings (low to high). Visibility is determined by analyst judgment, based on field evaluation of viewing proximity, visible detail, seasonal variations, air quality, lighting, and presence or absence of screening features (land and vegetation).</p>	<p>9. Overall Viewer Exposure. This is a summation of the four contributing and equally weighted factors of visibility, distance zone, number of viewers, and duration of view. The determination is based on analyst judgment. It is intuitive that if all contributing factors are rated high, the summation will also be high. It is similarly true if all four inputs are moderate or all four are low. However, analyst experience becomes key when the inputs are mixed values.</p>	<p>13. Project Dominance. Project dominance is the second of three factors contributing to the overall assessment of visual change and is assigned one of five ratings (subordinate, subordinate to co-dominant, co-dominant, co-dominant to dominant, or dominant). Project dominance is a qualitative assessment made by the analyst and is a measure of feature's apparent size relative to other visible landscape features and the total field of view.</p>	<p>17. Mitigation. This column lists any mitigation measures that have been identified (in the text) as applicable to the impact.</p>
<p>2. Description. The description column describes the location of the viewpoint and direction of view with reference to roads or other landmarks.</p>	<p>6. Distance Zone. Distance zone is the second of four factors contributing to the overall assessment of viewer exposure and is assigned one of three ratings (foreground, middleground, or background). The viewing distance zone for the El Casco Project (the distance from the viewpoint to the project feature) is determined by map analysis and is defined as foreground = 0 to 0.5 mile; middleground = 0.5 to 2 miles; and background = greater than 2 miles.</p>	<p>10. Overall Visual Sensitivity. This is a summation of the three contributing and equally weighted factors of visual quality, viewer concern, and overall viewer exposure. The determination is based on analyst judgment. As with overall viewer exposure, it is intuitive that if all contributing factors are rated high, the summation will also be high. It is similarly true if all three inputs are moderate or all three are low. However, analyst experience becomes key when the inputs are mixed values.</p>	<p>14. View Blockage. View blockage is the third of three factors contributing to the overall assessment of visual change and is assigned one of five ratings ranging from low to high. View blockage is a qualitative assessment made by the analyst and describes the extent to which any previously visible landscape features are either blocked from view or the views of those features are in some way impaired, as a result of the project's scale and/or position.</p>	<p style="text-align: center;">SOURCE OF COLUMN DATA</p> <p><u>Column</u></p> <ol style="list-style-type: none"> 1. Analyst assigned 2. Analyst determination 3. Analyst determination 4. Analyst determination 5. Analyst determination 6. Analyst determination 7. Analyst determination 8. Analyst determination 9. 5 + 6 + 7 + 8 + Analyst Interpretation 10. 3 + 4 + 9 + Analyst Interpretation 11. Analyst determination 12. Analyst determination 13. Analyst determination 14. Analyst determination 15. 12 + 13 + 14 + Analyst Interpretation 16. 10 + 15 + Analyst Interpretation 17. Determination based on analysis
<p>3. Visual Quality. The visual quality column describes the quality of the existing landscape and can be rated low, low-to-moderate, moderate, moderate-to-high, or high. Additional guidance for each of these ratings is provided in Tables D.12-1 and D.12-2. Visual quality is one of three equally weighted contributing factors (along with viewer concern [Column 4] and viewer exposure [Column 9]) to the assessment of overall visual sensitivity (Column 10). While the assessment of visual quality considers several factors, ultimately, the rating is determined by analyst judgment.</p>	<p>7. Number of Viewers. Number of viewers is the third of four factors contributing to the overall assessment of viewer exposure and can range from low to high. Number of viewers is generally a qualitative assessment made by the analyst though it can draw from quantitative data such as amount of use information for roads and highways, rivers and trails, and recreation sites. It also includes field observations and a general understanding of potential residential viewers.</p>	<p>11. Description of Visual Change. This column provides a brief description of the change that would be caused by the proposed or subject action. It may include a description of the components contributing to the change as well as the effects on the existing landscape. Often, the description will reference visual contrast, project dominance and/or view blockage—the three factors contributing to overall visual change. The format is typically a narrative of the ratings identified in the subsequent three columns (#'s 12, 13, and 14).</p>	<p>15. Overall Visual Change. This is a summation of the three contributing and equally weighted factors of visual contrast, project dominance, and view blockage. The determination is based on analyst judgment. As with overall visual sensitivity, it is intuitive that if all contributing factors are rated high, the summation will also be high. It is similarly true if all three inputs are moderate or all three are low. However, analyst experience becomes key when the inputs are mixed values.</p>	
<p>4. Viewer Concern. Viewer concern is assigned a rating hierarchy similar to visual quality (low to high) and is based on any known information about the viewing population, existing land uses, and plan or policy designations that might indicate public importance. Ultimately, the rating is determined by analyst judgment.</p>	<p>8. Duration of View. Duration of view is the fourth of four equally weighted factors contributing to the overall assessment of viewer exposure. The duration of view is a qualitative assessment made by the analyst and essentially denotes the relative length of the viewing experience (brief, brief-to-moderate, moderate, moderate-to-extended, or extended).</p>	<p>12. Visual Contrast. Visual Contrast is the first of three, equally weighted factors contributing to the overall assessment of visual change and is assigned one of five ratings (low, low-to-moderate, moderate, moderate-to-high, or high). Visual contrast is a qualitative assessment made by the analyst and describes the degree to which a project's visual characteristics differ from those established in the existing landscape.</p>	<p>16. Impact Significance Before/After Mitigation. This column identifies impact significance (as a function of overall visual sensitivity and visual change). This determination is based on analyst judgment though Table D.12-4 does illustrate the general interrelationships between overall visual sensitivity ratings and overall visual change ratings.</p>	

ATTACHMENT VR-2 EL CASCO SYSTEM PROJECT: VISUAL RESOURCES – SUMMARY OF KEY VIEWPOINT ANALYSES

VIEWPOINT		EXISTING VISUAL SETTING							VISUAL CHANGE					IMPACT SIGNIFICANCE		
Key Viewpoint (KVP)	Description	Visual Quality	Viewer Concern	Viewer Exposure					Overall Visual Sensitivity	Description of Visual Change	Visual Contrast	Project Dominance	View Blockage	Overall Visual Change	Before Mitigation	Mitigation
				Visibility	Distance Zone	Number of Viewers	Duration of View	Overall Viewer Exposure							After Mitigation	
<p>KVP 1 San Timoteo Canyon Road</p> <p>Proposed Project</p> <p>Figures D.12-2A / 2B</p>	View to the south toward proposed El Casco Substation, from eastbound San Timoteo Canyon Road, immediately north of the substation site.	<p>Moderate</p> <p>Predominantly rural landscape, much of which is natural in appearance with rolling, grass- and shrub-covered hills with minimal visual variety. Electric transmission facilities with structurally complex forms and lines and substantial industrial character are prominently visible, particularly along the southern ridges. Skylining exacerbates structure prominence. The hills and ridges north of San Timoteo Canyon Road are transitioning to a suburban residential landscape.</p>	<p>High</p> <p>Although energy transmission infrastructure features prominently in the foreground to middleground landscape, particularly in the vicinity of the proposed substation site and along the southern ridges, travelers on San Timoteo Canyon Road would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (hills, ridgelines, and background sky) an adverse visual change.</p>	Moderate	Foreground	Moderate	Moderate	Moderate	Moderate to High	El Casco Substation would be located immediately south of San Timoteo Canyon Road, a Southern Pacific rail line, and a riparian corridor. While much of the low-profile substation components would be screened from view by existing riparian vegetation, some of the taller transmission components most-closely located to the road would be prominently visible, particularly through gaps in the vegetation. The new structures would introduce additional industrial character into the landscape and cause additional view blockage of background hills and sky.	Moderate to High	Co-Dominant	Moderate	Moderate	<p>BEFORE: Significant (Class II)</p> <p>AFTER: Less than Significant</p>	<p>Measure V-3a (Reduce visibility of the El Casco Substation site)</p> <p>Measure V-3b (Reduce Night Lighting Impacts)</p>
<p>KVP 2 Norton Younglove Reserve</p> <p>Proposed Project</p> <p>Figures D.12-3A / 3B</p>	View to the west toward the proposed El Casco Substation site, from the access road within Norton Younglove Reserve, immediately south of San Timoteo Canyon Road.	<p>Moderate</p> <p>Predominantly rural landscape, much of which is natural in appearance with rolling, grass- and shrub-covered hills with minimal visual variety. Electric transmission facilities with structurally complex forms and lines and substantial industrial character are prominently visible, particularly along the southern ridges. Skylining exacerbates structure prominence. Views of the hills and ridges north of San Timoteo Canyon Road encompass a landscape that is rapidly transitioning from a rural to suburban residential character.</p>	<p>High</p> <p>Although energy transmission infrastructure features prominently in the foreground to middleground landscape, particularly in the vicinity of the proposed substation site and along the southern ridges, visitors to the Reserve would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (hills, ridgelines, and background sky) an adverse visual change.</p>	High	Foreground	Very Low	Extended	Moderate	Moderate to High	El Casco Substation would be prominently visible on the flats north of the southern ridges. The new facility would appear structurally complex and exhibit considerable industrial character. The co-dominant to dominant structures would introduce additional visual contrast and cause additional view blockage of background hills and sky.	High	Co-Dominant to Dominant	Moderate	Moderate to High	<p>BEFORE: Significant (Class II)</p> <p>AFTER: Less than Significant</p>	<p>Measure V-3a (Reduce visibility of the El Casco Substation site)</p> <p>Measure V-3b (Reduce Night Lighting Impacts)</p>

ATTACHMENT VR-2 EL CASCO SYSTEM PROJECT: VISUAL RESOURCES – SUMMARY OF KEY VIEWPOINT ANALYSES

VIEWPOINT		EXISTING VISUAL SETTING								VISUAL CHANGE					IMPACT SIGNIFICANCE	
Key Viewpoint (KVP)	Description	Visual Quality	Viewer Concern	Viewer Exposure					Overall Visual Sensitivity	Description of Visual Change	Visual Contrast	Project Dominance	View Blockage	Overall Visual Change	Before Mitigation	Mitigation
				Visibility	Distance Zone	Number of Viewers	Duration of View	Overall Viewer Exposure							After Mitigation	
KVP 3 and KVP 3 Alt. San Timoteo Canyon Residential Development Proposed Project Figures D.12-4A - 4C	View to the southwest toward the proposed El Casco Substation site, from the new residential development (under construction) to the immediate northeast, on the north side of San Timoteo Canyon Road.	Moderate Predominantly rural landscape, much of which is natural in appearance with rolling, grass- and shrub-covered hills with minimal visual variety. Electric transmission facilities with structurally complex forms and lines and substantial industrial character are prominently visible, particularly along the western edge of the residential development and along the southern ridges. Skylining exacerbates structure prominence. Much of the landscape north of San Timoteo Canyon Road and to the east is rapidly transitioning from a rural to suburban residential character.	High Although energy transmission infrastructure features prominently in the foreground to middleground landscape, future residents north of San Timoteo Canyon Road would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (hills, ridgelines, and background sky) an adverse visual change.	Moderate	Foreground	Low	Extended	Moderate	Moderate to High	El Casco Substation would be prominently visible on the flats north of the southern ridges. The new facility would appear structurally complex and exhibit considerable industrial character. The co-dominant structures would introduce additional visual contrast though they would share attributes with the existing transmission infrastructure adjacent to the site. The structures would also cause additional view blockage of background hills and sky.	Moderate	Co-Dominant	Low to Moderate	Moderate	BEFORE: Adverse but Less Than Significant (Class III) AFTER: Same	Measure V-3a (Reduce visibility of the El Casco Substation site) Measure V-3b (Reduce Night Lighting Impacts)
KVP 4 Eastbound SR 60 Proposed Project Figures D.12-5A / 5B	View to the east toward the existing 115 kV transmission line to be replaced by the Proposed Project, from eastbound SR 60, just east of the project's convergence on SR 60.	Moderate Foreground to middleground rural landscape with grass- and shrub covered hillsides and rolling to angular ridgelines. An existing wood-pole, H-frame transmission line is a contrasting built feature along the north side of the highway and compromises the otherwise predominately natural appearing landscape. The transmission line along with the linear highway feature reduces landscape coherence and overall visual quality to a moderate level.	High Travelers on SR 60 anticipate a predominantly rural landscape setting. Repeat drivers on the highway would also anticipate the prominent presence of the existing transmission line. However, any addition of developed industrial features to the landscape or blockage of views to higher quality landscape features (hills and background sky) would be perceived as an adverse visual change in the landscape.	High	Foreground	High	Extended	High	Moderate to High	The proposed tubular steel poles (TSPs) would have a more simple structural design compared to the H-frame structures they would replace, but the TSPs would be noticeably taller. Also, the TSPs would have a more industrial metallic gray appearance compared to the more natural, rough-hewn wood-poles to be replaced. The new structures and additional conductors would also result in a slight increase in view blockage of background hills and sky.	Moderate	Co-Dominant	Low to Moderate	Moderate	BEFORE: Adverse but Less Than Significant (Class III) AFTER: Same	None

**ATTACHMENT VR-2
EL CASCO SYSTEM PROJECT: VISUAL RESOURCES – SUMMARY OF KEY VIEWPOINT ANALYSES**

VIEWPOINT		EXISTING VISUAL SETTING								VISUAL CHANGE					IMPACT SIGNIFICANCE	
Key Viewpoint (KVP)	Description	Visual Quality	Viewer Concern	Viewer Exposure					Overall Visual Sensitivity	Description of Visual Change	Visual Contrast	Project Dominance	View Blockage	Overall Visual Change	Before Mitigation	Mitigation
				Visibility	Distance Zone	Number of Viewers	Duration of View	Overall Viewer Exposure							After Mitigation	
KVP 5 Faircliff Street, Seneca Springs Development Proposed Project Figures D.12-6A / 6B	View to the west-southwest toward the existing 115 kV transmission line to be replaced by the Proposed Project, from Faircliff Street, just west of Finley Avenue in the Seneca Springs residential development.	Moderate Foreground to middleground rural landscape with grass- and shrub covered hillsides and rolling to angular ridgeline, transitioning to suburban residential development. An existing wood-pole, H-frame transmission line is a contrasting built feature along the south side of the residential development and compromises the otherwise predominately natural appearing landscape visible to the south.	High Although residents of the adjacent residential development anticipate the prominent presence of the existing H-frame transmission line, any increase in industrial character or blockage of views to higher quality landscape features (hills and background sky) to the south would be perceived as an adverse visual change in the landscape.	High	Foreground	Low	Extended	Moderate to High	Moderate to High	The proposed tubular steel poles (TSPs) would have a more simple structural design compared to the H-frame structures they would replace, but the TSPs would be noticeably taller. Also, the TSPs would have a more industrial metallic gray appearance compared to the more natural, rough-hewn wood-poles to be replaced. The new structures and additional conductors would also result in a slight increase in view blockage of background hills and sky.	Moderate	Co-Dominant	Low to Moderate	Moderate	BEFORE: Adverse but Less Than Significant (Class III) AFTER: Same	None
KVP 6 Pine Valley Road, Sun Lakes Development Proposed Project Figures D.12-7A / 7B	View to the east-northeast toward the existing 115 kV transmission line to be replaced by the Proposed Project, from Pine Valley Road in the Sun Lakes residential and golf development.	Moderate Foreground to middleground residential and golf community landscape characterized by well-maintained grass-covered fairways with strategic placement of trees and sand features, integrated with newer single-family residential structures. Also prominently visible is an existing wood-pole, H-frame transmission line passing through the residential development and reducing the visual quality of the landscape to a moderate level.	High Although residents of the surrounding residential development anticipate the prominent presence of the existing H-frame transmission line, any increase in industrial character, structural prominence, or blockage of views to higher quality landscape features (hills and background sky) would be perceived as an adverse visual change in the landscape.	High	Foreground	Low to Moderate	Extended	Moderate to High	Moderate to High	The proposed tubular steel poles (TSPs) would have a more simple structural design compared to the H-frame structures they would replace, but the TSPs would be noticeably taller. Also, the TSPs would have a more industrial metallic gray appearance compared to the more natural, rough-hewn wood-poles to be replaced. The new structures and additional conductors would also result in a slight increase in view blockage.	Moderate	Co-Dominant	Low to Moderate	Moderate	BEFORE: Adverse but Less Than Significant (Class III) AFTER: Same	None

ATTACHMENT VR-2 EL CASCO SYSTEM PROJECT: VISUAL RESOURCES – SUMMARY OF KEY VIEWPOINT ANALYSES

VIEWPOINT		EXISTING VISUAL SETTING								VISUAL CHANGE					IMPACT SIGNIFICANCE	
Key Viewpoint (KVP)	Description	Visual Quality	Viewer Concern	Viewer Exposure					Overall Visual Sensitivity	Description of Visual Change	Visual Contrast	Project Dominance	View Blockage	Overall Visual Change	Before Mitigation	Mitigation
				Visibility	Distance Zone	Number of Viewers	Duration of View	Overall Viewer Exposure							After Mitigation	
KVP 7 East Lincoln Street Proposed Project Figure D.12-8	View to the northeast, toward Banning Substation, from East Lincoln Street, adjacent to the substation.	Low to Moderate Predominantly suburban commercial and industrial landscape, dominated by the highly industrial-appearing Banning Substation with its structurally complex forms and lines. The substation causes substantial view blockage of the background mountains when viewed from the south. Skylining exacerbates structure prominence of the steel lattice and wood-pole transmission towers that feed into the substation.	Moderate Although energy transmission infrastructure features prominently in the foreground landscape visible from East Lincoln Street, particularly in the vicinity of Banning Substation, some travelers on East Lincoln Street would consider a noticeable increase in industrial character, structure prominence, or view blockage of higher value landscape features (mountains and background sky) an adverse visual change.	High	Foreground	Low to Moderate	Moderate to Extended	Moderate to High	Moderate	Modifications to Banning Substation would include the addition of a new switchrack, two low-profile transformer racks, additional communications equipment, and replacement of a capacitor bank. However, all of the modifications would be accommodated within the existing substation property. In the context of the existing structural complexity and substantial industrial character, the new structures and equipment would be minimally noticeable to the casual observer.	Low	Subordinate to Co-Dominant	Low to Moderate	Low to Moderate	BEFORE: Adverse but Less Than Significant (Class III) AFTER: Same	None
KVP 8 North Juniper Avenue Proposed Project Figures D.12-9A – 9C	View to the west toward Zanja Substation, from North Juniper Avenue, immediately east of the substation.	Low to Moderate Predominantly non-descript rural landscape consisting of a flat, grass-covered valley floor and rolling, grass- and shrub-covered bordering hills, with minimal visual variety. The existing Zanja Substation with its structurally complex facilities and substantial industrial character is prominently visible from North Juniper Avenue and the adjacent residential developments.	High Although the existing substation features prominently in the foreground views from North Juniper Avenue and the adjacent residences, residents and travelers on North Juniper Avenue would consider a noticeable increase in industrial character, structure prominence, or view blockage of higher value landscape features (mountains, hills, and background sky) an adverse visual change.	High	Foreground	Low	Moderate to Extended	Moderate to High	Moderate to High	Modifications to Zanja Substation would include the addition of a new switchrack and communications equipment. However, all of the modifications would be accommodated within the existing substation property. In the context of the existing structural complexity and industrial character, the modifications, while visible, would be minimally noticeable to the casual observer.	Low	Subordinate to Co-Dominant	Low to Moderate	Low to Moderate	BEFORE: Adverse but Less Than Significant (Class III) AFTER: Same	Measure V-10 (Reduce visibility of the Zanja Substation modifications)

**ATTACHMENT VR-2
EL CASCO SYSTEM PROJECT: VISUAL RESOURCES – SUMMARY OF KEY VIEWPOINT ANALYSES**

VIEWPOINT		EXISTING VISUAL SETTING								VISUAL CHANGE					IMPACT SIGNIFICANCE	
Key Viewpoint (KVP)	Description	Visual Quality	Viewer Concern	Viewer Exposure					Overall Visual Sensitivity	Description of Visual Change	Visual Contrast	Project Dominance	View Blockage	Overall Visual Change	Before Mitigation	Mitigation
				Visibility	Distance Zone	Number of Viewers	Duration of View	Overall Viewer Exposure							After Mitigation	
KVP 9 Carter Street Proposed Project Figures D.12-10A / 10B	View to the north-northeast toward the Mill Creek Communication site, from Carter Street, just west of Fremont Street in the City of Yucaipa.	Moderate Foreground to middleground rural residential to suburban residential landscape, backdropped by the rolling to angular forms of the southern foothills of the San Bernardino Mountains. The foreground rural to suburban residential landscape is relatively non-descript and the existing vertical forms of a wood-pole utility line are prominent features in the landscape. The background landforms are natural appearing with minimal evidence of built structures.	High Residents in the Yucaipa area with views of the San Bernardino Mountains would consider any noticeable built structures or increase in industrial character along the undeveloped mountain ridgelines to the north, an adverse visual change in the landscape.	High	Middle-ground	High	Extended	High	Moderate to High	The proposed lattice-steel antenna tower and attached microwave antennas would appear as a faintly visible, simple vertical structure situated on the ridgeline to the north. The microwave antennas would appear as light-colored circular discs on the neutral gray structure. However, at a viewing distance of approximately 1.5 to 5 miles (depending on location in the immediate Yucaipa area), the structure would be minimally noticeable along the ridgeline though it could be visible.	Low	Subordinate	Low	Low	BEFORE: Adverse but Less Than Significant (Class III) AFTER: Same	None
KVP 10 Live Oak Canyon Road Proposed Project Figures D.12-11A / 11B	View to the southwest along Live Oak Canyon Road and an existing utility line, from southbound Live Oak Canyon Road, south of I-10.	Moderate Foreground to middleground rural landscape with grass- and shrub covered valley floor and rolling hills. An existing wood-pole utility line with attached cable parallels the west side of the road and is a prominent built feature in the landscape. The vertical form of the utility poles contrasts with the predominantly horizontal forms of the natural features, which reduces landscape coherence and overall visual quality to a moderate level.	High Travelers on Live Oak Canyon Road anticipate a predominantly rural landscape setting. Repeat drivers on this road would also anticipate the prominent presence of the existing utility line. However, any addition of developed industrial features to the landscape or blockage of views to higher quality landscape features (hills and background sky) would be perceived as an adverse visual change in the landscape.	High	Foreground	Moderate	Extended	High	Moderate to High	The proposed fiber optic line would appear very similar to the cable that is already present on the existing wood-pole utility line. While the additional cable would slightly increase the view blockage caused by the existing line, it is unlikely that the additional cable would be noticed by travelers on Live Oak Canyon Road or casual observers along other portions of the fiber optic route.	Low	Subordinate	Low	Low	BEFORE: Adverse but Less Than Significant (Class III) AFTER: Same	None

ATTACHMENT VR-2 EL CASCO SYSTEM PROJECT: VISUAL RESOURCES – SUMMARY OF KEY VIEWPOINT ANALYSES

VIEWPOINT		EXISTING VISUAL SETTING								VISUAL CHANGE					IMPACT SIGNIFICANCE	
Key Viewpoint (KVP)	Description	Visual Quality	Viewer Concern	Viewer Exposure					Overall Visual Sensitivity	Description of Visual Change	Visual Contrast	Project Dominance	View Blockage	Overall Visual Change	Before Mitigation	Mitigation
				Visibility	Distance Zone	Number of Viewers	Duration of View	Overall Viewer Exposure							After Mitigation	
KVP 11 Summit Drive Northerly Alternative Figures D.12-12A / 12B	View to the west along Summit Drive and an existing distribution line, from just east of North Alessandro Street in the City of Banning.	Moderate Foreground established, suburban residential landscape with older homes and mature vegetation. An existing wood-pole utility line with attached cable and electric distribution lines are noticeable overhead features, though not out of place in this typical neighborhood setting. The vertical forms of the utility wood-poles blend relatively well with the vertical forms of the natural features (trees).	High Residents along Summit Drive anticipate a predominantly suburban residential setting. Although residents anticipate the noticeable presence of the existing wood-pole utility line, it is not out of place in a residential landscape and does not exhibit substantial industrial character. Any addition of developed industrial features to the landscape or blockage of views to higher quality landscape features (hills and background sky) would be perceived as an adverse visual change in the landscape.	High	Foreground	Low	Extended	Moderate to High	Moderate to High	The proposed 115 kV transmission line would introduce taller structures with more substantial industrial character into the residential setting. The taller structures would increase view blockage of background sky and hills. The taller structures and additional conductors would exacerbate structure prominence in the landscape and would increase visual contrast.	Moderate	Co-Dominant	Low to Moderate	Moderate	BEFORE: Significant (Class II) AFTER: Same	Measure V-13 (Relocate alternative route from North Florida Road)
KVP 12 Cedar Hollow Road Northerly Alternative Figures D.12-13A / 13B	View to the west-southwest along Cedar Hollow Road and an existing transmission line corridor, from about mid-block on Cedar Hollow Road, which is located immediately south of Beaumont High School in the City of Beaumont.	Low to Moderate Foreground suburban residential landscape of one and two-story single-family homes, dominated by an adjacent energy transmission infrastructure corridor (towers and conductors). Generally lacking distinctive features or elements of visual interest.	High Although energy transmission infrastructure features prominently in the foreground of views from the adjacent neighborhood, residents would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky) an adverse visual change.	High	Foreground	Low	Extended	Moderate to High	Moderate to High	The proposed 115 kV transmission line would introduce additional vertical (tubular steel poles) and curvilinear (conductors) elements into the already dominant and structurally complex electric transmission line corridor. The new facility would increase visual contrast, project dominance, and view blockage of background sky. However, in the visual context of the existing facilities, the degree of visual change would not be substantial.	Low	Subordinate to Co-Dominant	Low to Moderate	Low to Moderate	BEFORE: Adverse but Less Than Significant (Class III) AFTER: Same	None

ATTACHMENT VR-2 EL CASCO SYSTEM PROJECT: VISUAL RESOURCES – SUMMARY OF KEY VIEWPOINT ANALYSES

VIEWPOINT		EXISTING VISUAL SETTING								VISUAL CHANGE					IMPACT SIGNIFICANCE	
Key Viewpoint (KVP)	Description	Visual Quality	Viewer Concern	Viewer Exposure					Overall Visual Sensitivity	Description of Visual Change	Visual Contrast	Project Dominance	View Blockage	Overall Visual Change	Before Mitigation	Mitigation
				Visibility	Distance Zone	Number of Viewers	Duration of View	Overall Viewer Exposure							After Mitigation	
KVP 13 San Timoteo Canyon Road Northerly Alternative Figures D.12-14A / 14B	View to the southeast along eastbound San Timoteo Canyon Road and the potential span of San Timoteo Canyon Road, from just west of the span location.	Moderate Predominantly rural landscape, much of which is natural in appearance with rolling, grass- and shrub-covered hills with minimal visual variety. Electric transmission facilities with structurally complex forms and lines and substantial industrial character are prominently visible, particularly along the ridges and at the span of San Timoteo Canyon Road. Skylining exacerbates structure prominence. The hills and ridges north of San Timoteo Canyon Road are transitioning to a suburban residential landscape.	High Although energy transmission infrastructure features prominently in the foreground of views from San Timoteo Canyon Road, travelers would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky and hills) an adverse visual change.	High	Foreground	Moderate	Moderate to Extended	Moderate to High	Moderate to High	The proposed 115 kV transmission line would introduce additional vertical (tubular steel poles) and curvilinear (conductors) elements into the already dominant and structurally complex electric transmission line corridor. The new facility would increase visual contrast, project dominance, and view blockage of background sky. However, in the visual context of the existing facilities, the degree of visual change would not be substantial.	Low to Moderate	Subordinate to Co-Dominant	Moderate	Low to Moderate	BEFORE: Adverse but Less Than Significant (Class III) AFTER: Same	None
KVP 14 South Highland Home Road Partial Underground Alternative Figures D.12-15A / 15B 15C	View to the northwest toward the proposed transition structure location at the eastern end of the Sun Lakes Golf Resort and residential development, from northbound South Highland Home Road, just south of the span of South Highland Home Road.	Moderate Predominantly rural landscape in transition to a suburban landscape, much of which is natural in appearance with rolling, grass- and shrub-covered hills. The rooflines of the Sun Lakes development are slightly visible above the rise to the west. An existing wood-pole electric transmission line with simple, structural forms and lines and exhibiting minimal industrial character is prominently visible, particularly along the hilltops to the west and at the span of South Highland Home Road. Skylining exacerbates structure prominence.	High Local residents and travelers on South Highland Home Road anticipate a predominantly transitional rural landscape setting and the noticeable presence of the existing utility line. However, any addition of developed industrial features to the landscape or blockage of views to higher quality landscape features (hills and background sky) would be perceived as an adverse visual change in the landscape.	High	Foreground	Low	Moderate to Extended	Moderate to High	Moderate to High	The proposed transition structures would introduce considerable structural complexity and industrial character into a predominantly suburban and rural residential landscape lacking similar characteristics. However, the structures would also result in the removal of the existing dual wood-pole "box-frame" transmission structure. The two transition structures would introduce additional visual contrast, structural prominence, and view blockage.	Moderate to High	Co-Dominant	Moderate	Moderate	BEFORE: Adverse but Less Than Significant (Class III) AFTER: Same	None