

## 4.1 Aesthetics

This section describes the visual resources in the vicinity of the Proposed Project and alternatives and the associated regulatory framework. The impact analysis presents the significance criteria used to evaluate impacts on identified resources as a consequence of implementing the Proposed Project or alternatives, the methods used in evaluating these impacts, and the results of the impact assessment based on the applied significance criteria.

### 4.1.1 Setting

The study area for visual resources encompasses the landscapes directly affected by facilities proposed under each of the project alternatives and the surrounding areas that would be within view of the project components. The visual analysis focuses on travel route views, and parks and recreational views.

### Definitions Related to Visual Resources

Visual resources consist of the landforms, vegetation, rock and water features, and cultural modifications that create the visual character and sensitivity of a landscape. A number of factors are documented for the existing visual resources of the study area in order to determine the manner in which those resources or characteristic landscapes may be modified by the Proposed Project and alternatives. The primary existing visual condition factors considered in this study are defined below and include: Visual Quality, Viewer Types and Volumes, Viewer Exposure, and Visual Sensitivity.

*Visual Quality* is defined as the overall visual impression or attractiveness of an area as determined by the particular landscape characteristics, including landforms, rock forms, water features, and vegetation patterns. The attributes of variety, vividness, coherence, uniqueness, harmony and pattern contribute to the overall visual quality of an area. For the purposes of this EIR, visual quality is defined according to three levels:

- Indistinctive, or industrial – defined as generally lacking in natural or cultural visual resource amenities typical of the region
- Representative – defined as visual resources typical or characteristic of the region's natural and/or cultural visual amenities
- Distinctive – defined as visual resources that are unique or exemplary of the region's natural or cultural scenic amenities

*Viewer Types and Volumes* of use pertain to the types and amounts of use that various land uses receive. Land uses that derive value from the quality of their settings are considered potentially sensitive to changes in visual setting conditions. Land uses within the study area that may be sensitive to change in visual conditions include major transportation systems such as designated scenic highways, designated scenic roads, and designated park, recreation and natural areas.

*Viewer Exposure* addresses the variables that affect viewing conditions from potentially sensitive areas. Viewer exposure considers the following factors:

- landscape visibility (the ability to see the landscape)
- viewing distance (i.e., the proximity of viewers to the project)
- viewing angle – whether the project would be viewed from above (superior), below (inferior) or from a level (normal) line of sight
- extent of visibility – whether the line of sight is open and panoramic to the project area or restricted by terrain, vegetation and/or structures
- duration of view

*Visual Sensitivity* is the overall measure of an existing landscape's susceptibility to adverse visual changes. This analysis of visual sensitivity is based on the combined factors of visual quality, viewer types and volumes, and visual exposure to the Proposed Project and alternatives. Visual sensitivity is reflected according to high, moderate and low visual sensitivity ranges.

## **Existing Visual Quality of the Region**

The visual character of northwestern Tulare County is characterized by features typical of the San Joaquin Valley, including: agricultural lands, grasslands, arid plains, orchards, oak savannah, vernal pools, valley sink scrub, saltbush, and freshwater marsh. Tulare County is typically rural in character, with open pastures and scattered ranches and residences. The San Joaquin Valley is bordered on the west by the coastal mountain ranges and on the east by the southern portion of the Sierra Nevada (CRA, 2008).

In the study area, much of the historic native grassland, woodland, and wetland have been converted to farmland, as a result of the growth of agriculture in the San Joaquin Valley. The agricultural landscape is dominated by crops and livestock (primarily oranges, grapes, alfalfa, corn, walnuts, peaches, almonds, plums, and cattle and calves) and other ancillary facilities including outbuildings, tractors, irrigation and drainage work (Tulare County Agricultural Commissioner, 2008).

Though the area is typically rural in character, in the vicinity are also several developed areas including the cities of Visalia and Farmersville in the southwest portion the study area, and the community of Lemon Cove in the eastern portion.

Topography in the valley is uniformly flat; as a result, human-made features (including poles and lines for electricity and phones, blow off and air valves for underground water pipelines, residential and agricultural structures, fencing, elevated roadway, bridges, levees, canals, highway and local road signage, and other commercial signage) are visible in both near-field and far-field distances. Existing transmission lines, as well as other existing utility structures, are established features within the study area's landscape setting.

Figure 4.1-1 is a viewpoint map that depicts, by photograph numbers, the location and directions from which photographs were taken. Figures 4.1-2a through 4.1-2e present a set of photographs taken from representative public vantage points in the vicinity of the Proposed Project and alternatives that portray the existing visual character of the area. The photographs were assigned numbers by order of mention in the following subsections which describe the existing visual character of the study area by component. The photographs depicting viewsheds are limited in the sense that they provide only several fixed viewpoints and cannot demonstrate all views of or from the project sites or along the site's perimeter.

### ***Rector Substation Area***

The Proposed Project alignment would begin at the existing Rector Substation, approximately one-quarter mile southeast of the City of Visalia in Tulare County. The visual character of the Rector Substation site is industrial, dominated by SCE's transmission and substation facilities (see Figure 4.1-2a, Photo 1). The substation facility includes an approximately 100 feet by 60 feet three-story control building, additional lower buildings, a paved parking area, as well as utility infrastructure, all located within a fenced area. Adjacent areas generally consist of agricultural land, with scattered single-family homes located less than one-quarter mile away both east and south of the substation. Views from these homes are generally limited due to screening of the site by surrounding trees on the southern and eastern border of the substation.

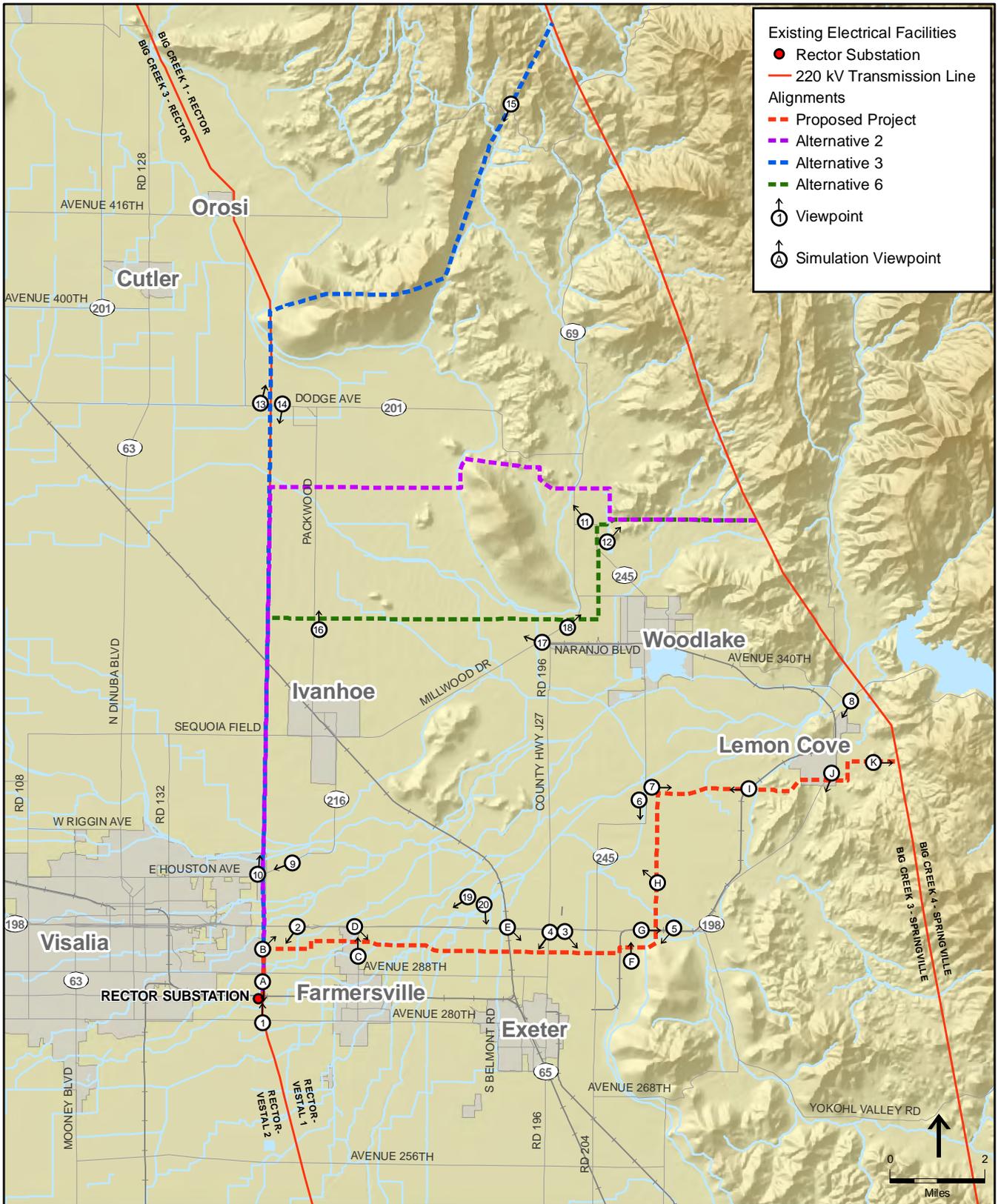
Viewers of the Rector Substation are generally limited to motorists traveling on Road 148, a north-south local roadway located adjacent to the substation. Road 148 is a two-lane road County road with no shoulders that had an estimated 1999 annual average daily traffic (ADT) level of 360 vehicles per day (TCAG, 2003). Views of the Proposed Project alignment from this roadway would be unobstructed for approximately one-half mile.

The first 1.1 miles of the Proposed Project alignment would lie within an existing SCE 150-foot transmission ROW and would replace the existing transmission lines. The visual character of this portion of the Proposed Project alignment is largely characterized by field crops, newly planted orchards, and scattered residences and farm buildings. In the northern portion of this area, the Proposed Project passes within a few hundred feet of several medium-density residential developments. The existing transmission lines are visible from the backsides of these developments. The Proposed Project alignment would cross Cameron Creek, a canal-like channel contained in concrete, between Structures 3 and 4.

### ***Transmission Line Parallel to State Route 198 from Visalia to Exeter***

At mile 1.1 of the Proposed Project alignment, the alignment would turn east, and would be located within a new 100-foot ROW to be acquired by SCE. From mile 1.1 to mile 9.6, the Proposed Project alignment would parallel State Route (SR) 198, an eligible State scenic highway, approximately 0.45 mile south of the highway. In this area, SR 198 is four-lane divided highway with a traffic speed of 65 miles per hour.

Until SR 198 reaches the foothills, the visual character of the landscape surrounding SR 198 is agricultural, composed of crops, homes/farms and associated out buildings and infrastructure



SOURCE: ESRI, 2008; SCE, 2008; Thomas Bros. Maps, 2008; ESA, 2008

San Joaquin Cross Valley Loop Transmission Project. 207584.01

**Figure 4.1-1**  
Viewpoint Map



Photo 1: View from Road 198 looking north toward Rector Substation



Photo 2: State Route 198 westbound looking southwest



Photo 3: State Route 198 westbound near Road 196 looking southeast



Photo 4: State Route 198 westbound near Road 196 looking southwest



Photo 5: State Route 198 looking southwest towards the base of Badger Hill



Photo 6: State Route 245 at Avenue 320 looking south



Photo 7: State Route 245 at Avenue 320 looking east



Photo 8: State Route 198 near Big Creek 3-Springville tie-in looking southwest



Photo 9: View from State Route 216 at Ivanhoe Drive looking southwest



Photo 10: View from State Route 216 at Ivanhoe Drive looking northeast



Photo 11: View from State Route 245 at Millwood Drive and Avenue 364 looking northwest



Photo 12: View from State Route 245 at Olivera Drive and Avenue 360 looking northeast



Photo 13: View from State Route 210 near Road 144 looking northeast



Photo 14: View from State Route 210 near Road 144 looking south

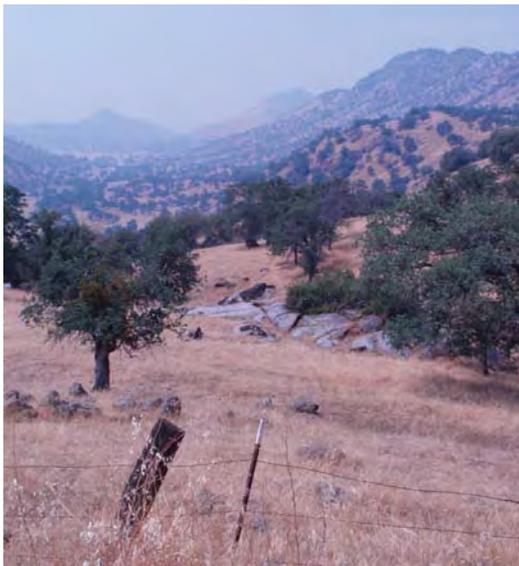


Photo 15: Mira Vista Drive looking southwest toward the Stone Corral Canyon



Photo 16: Road 156 approximately one-half mile north of Road 344, looking north



Photo 17: State Route 216 at Millwood Drive looking west



Photo 18: Millwood Drive at Road 348 looking northeast



Photo 19: Kaweah Oaks Preserve looking southwest



Photo 20: Kaweah Oaks Preserve looking south

SOURCE: ESA, 2008; SCE, 2008.

San Joaquin Cross Valley Loop Transmission Project . 207584.01

**Figure 4.1-2e**  
Existing Setting

including farm roads, as well as existing utility structures (i.e., subtransmission, distribution, and communication) that include wood poles and lattice towers. However, viewers of the proposed transmission line in this area would generally be limited to motorists on SR 198. As noted above, the Proposed Project alignment would parallel SR 198, an eligible State scenic highway, for approximately 9.2 miles. Generally, views from SR 198 would be across young orchards or field crops that would provide open to partially obstructed views of the Proposed Project alignment (see Figure 4.1-2a, Photo 2). The visual quality of this area is representative of the agricultural area generally present along SR 198 throughout this area and throughout western Tulare County. The Proposed Project would also be visible to motorists traveling on Farmersville Boulevard. At mile 3.3 the alignment would cross Farmersville Boulevard, a local road with a 2006 annual ADT level of 7,950 vehicles per day (County of Tulare, 2007). Motorists would have open and unobstructed views of the Proposed Project as it crossed the roadway. The visual quality of this viewshed is considered representative, as views from the roadway include open space and orchards.

A limited number of residential viewers, including scattered rural residences and homes situated at the edge of the cities of Visalia and Farmersville, would have views of the transmission line. The Proposed Project alignment is within approximately 0.3 miles of a residential development situated at the edge of the City of Farmersville. Views from rural residences along this portion of the Proposed Project alignment would range from open to fully obstructed. At some locations, particularly at older residences, mature trees, including surrounding orchards, and large shrubs, would partially or fully obscure views of the Proposed Project. However, from other residences, views of the Proposed Project would be unobstructed due to surrounding open fields and/or roadways. The City of Exeter, with a population of approximately 9,800, is located approximately one mile south of the Proposed Project alignment.

Photos 3 and 4 represent motorists' views traveling on SR 198 at the SR 65 interchange looking southeast and southwest, respectively, towards the Proposed Project alignment. As depicted in Figure 4.1-4a, Photo 3, southeastern views of the Proposed Project alignment along this portion of SR 198 would be partially obstructed due to the existing overpass structure as well as existing utility structures located parallel to the roadway. As shown in Figure 4.1-4a, Photo 4, southwestern views of the Proposed Project from this viewpoint would provide open views of the proposed transmission line alignment; however, existing peaker plant facilities and other existing utility structures are located adjacent to SR 198. The visual quality from these viewsheds is considered indistinctive due to the industrial nature of the foreground views as well as the lack of natural or cultural resources that are typical of this region.

### ***Transmission Line North from Exeter toward Lemon Cove***

The Proposed Project alignment crosses SR 198 as it turns north at the toe of Badger Hill, a topographic feature to the southeast that ranges in elevation between 800 feet and 1,152 feet. In views from this portion of SR 198, existing utility lines run parallel to the roadway on both the north and south sides. The visual character of the landscape is generally made up of mature orange orchards that line the roadway, as well as scattered rural residences, farm buildings, and local roadways (see Figure 4.1-4b, Photo 5). The Proposed Project alignment would cross the

Friant-Kern Canal<sup>1</sup> between Structures #47 and #48. To the east, on clear days, distant views of the Sierra Nevada foothills are possible. The visual quality of the area, presented in Figure 4.1-4b, Photo 5, a view from SR 198 looking southwest towards the base of Badger Hill, is representative of the agricultural area adjacent to SR 198 and throughout western Tulare County.

Motorists traveling east on SR 198 in this area would have views of the Proposed Project alignment until it would pass out of visual range after crossing SR 198 near Exeter and head north. Motorists traveling west on SR 198 would face the proposed transmission line for approximately one-half mile before passing under the line. For approximately the next 9.2 miles, motorists traveling west would continue to have views of the Proposed Project alignment to the south.

A private residential development is located at the top of Badger Hill. Open views toward the Proposed Project alignment would be available from points along High Sierra Drive, a private roadway, where it descends the north side of Badger Hill. From this private roadway, views of a largely agricultural landscape are available against the backdrop of the foothills and the Sierra Nevada. A variety of vertical elements, including existing electrical distribution poles and wind machines at scattered intervals through orchards, are visible from this location. The closest residence in this development would be located approximately one-quarter mile from the Proposed Project alignment.

After the Proposed Project alignment crosses SR 198, the proposed transmission line would turn north-south, generally paralleling SR 245. The visual character of the landscape surrounding the north-south portion of the proposed transmission line is largely dominated by relatively flat topography and agricultural land uses. Along this portion, the Proposed Project alignment would be more than one-half mile from SR 198. Views of the proposed transmission line would generally be limited to SR 245, a north-south two-lane State highway that runs from near the City of Exeter to near Kings Canyon National Park. From many places, views in this area include mature orchards and trees in the foreground and middleground. While this intervening vegetation would help partially screen views of the Proposed Project alignment, open views of the alignment would be available from SR 245 for approximately one-half mile. In this area, the relatively flat terrain and low-lying vegetation and open space would not restrict the viewshed of the proposed alignment. Nonetheless, views of the proposed alignment from SR 245 would generally not be panoramic in scale, as motorists would generally be driving parallel to the alignment. Scattered rural residences in this area would also have open to partially obscured views of the proposed alignment. Figure 4.1-4b, Photo 6 presents a view from SR 245 at the corner of Avenue 320 looking south towards the Proposed Project alignment. The visual quality of this area, presented in Figure 4.1-4b, Photo 6, is considered representative of the agricultural area in the vicinity of SR 245 and northwestern Tulare County.

At mile 12.9, at the corner of SR 245 and Avenue 320, the Proposed Project alignment would turn east. The alignment would then parallel the north side of Avenue 320. Views in this area

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<sup>1</sup> The Friant-Kern Canal is a federal project (i.e., Central Valley Project) that delivers water from the San Joaquin River to contractors in Tulare County and further south.

generally include agricultural land, including mature orchards, rural residences, farm buildings, and local roadways. Generally, views of the proposed alignment in this area would be partially obstructed by mature orchards and trees that line the roadway on both sides; however, open views toward the proposed alignment would be available from various places along Avenue 320, as well as other local roadways (see Figure 4.1-4b, Photo 7). Several rural residences along Avenue 320 would have open to partially obstructed views of the Proposed Project alignment.

At mile 15.4, the Proposed Project would turn northeast and pass between grass-covered hillsides. The visual character of this area is characterized by more dramatic topography including foreground views of the foothills of the Sierra Nevada. The development pattern in this area includes farms that are smaller in scale than those found in other portions of the proposed alignment. The visual quality of the area is representative of the rolling grassland hills in the natural foothills interspersed with ranches, farms, and associated facilities.

### ***Transmission Line East through Lemon Cove to the Big Creek-Springville Line***

At mile 16.0, the Proposed Project alignment would turn east passing through the outskirts of the community of Lemon Cove, a small foothill community of approximately 300 residents. As the alignment approaches the community of Lemon Cove, the visual landscape contains more man-made features including various residences. Within the community of Lemon Cove, the proposed alignment would pass near some residences as well as Sequoia Union Elementary School (approximately 1,000 feet away). The alignment would also pass within one-half mile of the historic Pogue Home built in the 1870s, though views of the Proposed Project would be partially obstructed by mature orchards and trees.

The proposed alignment would cross SR 198, an eligible State scenic highway, approximately 0.3 miles south of Avenue 324 and approximately 0.7 miles from the center of the community of Lemon Cove (see Figure 4.1-4b, Photo 8). Views of the Proposed Project alignment from SR 198, a major thoroughfare for visitors headed to Sequoia National Park, would be partially obscured by existing utility poles and lines, as well as existing mature trees; nonetheless, views of the proposed alignment from SR 198 would be generally unobstructed. Because motorists would pass beneath the new transmission line, the view of the proposed alignment would be of short duration.

At mile 17.5, the Proposed Project alignment would head north for approximately 0.4 miles and then head east toward the foothills. Views in this area include both agricultural lands, including mature orchards and row crops, as well as grassy hills with scattered trees to the east. Viewers of this portion of the Proposed Project alignment would generally be limited to motorists on local, rarely traveled roadways, including Avenue 324 and Road 248. The visual quality is representative of the agricultural land and rolling grassland hills in the area.

At mile 18.5, the Proposed Project alignment would terminate at the Big Creek 3-Springville 220 kV transmission line. For approximately the last 0.2 miles of the Proposed Project alignment, the visual character of the landscape contains grassy hills and scattered trees of the foothills. The terminus would be at an elevation of approximately 600 feet, just south of the Lemon Cove

Granite Quarry. The visual quality of the area surrounding last 0.2 miles of the proposed alignment is distinctive because the natural foothills landscape has largely been preserved and unaltered.

### ***Other Substation Areas***

In addition to the construction of 18.5 miles of transmission line and modifications to the Rector Substation (described above), the Proposed Project would involve electrical and safety modifications at the Big Creek 3, Vestal, and Springville Substations. These three substations are located at:

- Big Creek 3 Substation – approximately 19 miles southwest of the town of Big Creek in Fresno County;
- Vestal Substation – approximately 3.5 miles northeast of the community of Richgrove in Tulare County; and
- Springville Substation – approximately 8.5 miles east of the community of Strathmore in Tulare County.

The visual character of all substation sites is industrial, dominated by SCE's transmission and substation facilities. All substations are located within a fenced area. Due to topography and obstruction by vegetation and existing industrial structures, modifications made to the substations from the Proposed Project would not be visible to the public.

### ***Alternative 2***

Alternative 2 would proceed north from the Rector Substation within existing SCE ROW for approximately 10.8 miles, generally paralleling Road 148, a local roadway with low traffic volumes. Approximately 1.5 miles from Rector Substation, the alignment would cross SR 198. The visual setting is generally characterized by agricultural land, both orchards and row crops, as well several residential subdivisions located within one-quarter mile to both the west and east of the ROW. The Eagle Glen development and the Casablanca development are located adjacent to the ROW to the west (Scheibel, 2009), between miles 0.5 and 1.5 of the alignment. At mile 2.7, Alternative 2 would cross SR 216, a regional road connecting the City of Visalia and the City of Woodlake. The visual setting is open agricultural space, walnut orchards, and the East Oak Estates residential subdivision. Between miles 3.0 and 3.6, Alternative 2 would traverse through several backyards of single-family homes in the Oak Ranch development. The visual quality of the ROW is considered representative of the agricultural and residential landscape of the area.

Viewers along Road 148, SR 198 and SR 216 would have views of Alternative 2. Depending on the location of the viewer, residential views of this ROW range from direct and unobstructed to fully screened. Motorists on Road 148 would have direct to partially screened views of the alignment for approximately 10.8 miles. Motorists on SR 198 would have views of the alignment for a short duration. Views of Alternative 2 from SR 216, would also be of short duration, limited to motorists passing beneath the transmission line. Figure 4.1-2c, Photo 9 presents the view motorists would have traveling west on SR 216, and Figure 4.1-2c, Photo 10 presents the view

looking northeast from where SR 216 traverses the Alternative 2 alignment. Views of Alternative 2 would be generally unobstructed, though partially obscured by existing mature trees, distribution lines, ancillary farming equipment and residences. As noted above, the visual quality of views from these travel routes is considered representative of the agricultural and residential landscape of the area

At mile 10.8, the alignment would turn and proceed in a generally easterly direction for approximately 12.2 miles of new ROW (requiring acquisition by SCE). The first four miles of the new ROW would be generally characterized by flat terrain, primarily used for orchards. Near mile 13.0, the Alternative 2 alignment would cross the Friant-Kern Canal. The alignment would then enter into an area with slightly hilly terrain that is primarily used for grazing; cows are often part of the landscape. For the next five miles, the alignment would follow the northern base of Colvin Mountain, passing near the community of Elderwood, traversing SR 245 and entering into the foothills of the Sierra Nevada. The alignment would then cross through the foothills for approximately three miles until reaching the existing Big Creek 3-Springville 220 kV transmission line. In summary, the visual quality is considered representative of the rolling grassland hills of the foothills.

Motorists along SR 245 would have views of Alternative 2. Figure 4.1-2c, Photo 11, presents the view from SR 245 at the corner of Millwood Drive and Avenue 364, looking northwest toward the Alternative 2 alignment. Views of the alignment would be partially obscured by terrain, vegetation, and existing poles and distribution lines, and would be of short duration. Figure 4.1-2c, Photo 12, presents the view from SR 245 at the corner of Olivera Drive and Avenue 360, looking northeast toward the Alternative 2 alignment. Views of the alignment would be partially obscured by terrain and would be of short duration. The visual quality is considered representative of the agricultural and grazing landscape of the area.

### ***Alternative 3***

Alternative 3 would proceed north from the Rector Substation within existing SCE ROW for approximately 14.6 miles, generally paralleling Road 148, a local roadway with low traffic volumes. Approximately 1.5 miles from Rector Substation, the alignment would cross SR 198. The visual setting is generally characterized by agricultural land, both orchards and row crops, as well several residential subdivisions located within one-quarter mile to both the west and east of the ROW. The Eagle Glen development and the Casablanca development are located adjacent to the ROW to the west (Scheibel, 2009), between miles 0.5 and 1.5 of the alignment. At mile 2.7, Alternative 3 would cross SR 216, a regional road connecting the City of Visalia and the City of Woodlake. The visual setting is open agricultural space, walnut orchards, and the East Oak Estates residential subdivision. Between miles 3.0 and 3.6, Alternative 3 would traverse through several backyards of single-family homes in the Oak Ranch development. North of the Oak Ranch development the visual quality is generally characterized by agricultural land, including mature orchards, row crops, rural residences, farm buildings, and local roadways. Near mile 12.3, Alternative 3 would cross the Friant-Kern Canal. The visual quality of the ROW is considered representative of the agricultural landscape of this area.

Viewers along Road 148, SR 198, SR 201 and SR 216 would have views of Alternative 3. Depending on the location of the viewer, residential views of this ROW range from direct and unobstructed to fully screened. Motorists on Road 148 would have direct to partially screened views of the alignment for approximately 14.6 miles. Motorists on SR 198 would have views of the alignment for a short duration. Views of the Alternative 3 alignment from SR 216, would also be of short duration, limited to motorists passing beneath the transmission line. Figure 4.1-2c, Photo 9 presents the view motorists would have traveling west on SR 216, and Figure 4.1-2c, Photo 10 presents the view looking northeast from where SR 216 traverses the Alternative 3 alignment. Views of the Alternative 3 alignment would be generally unobstructed, though partially obscured by existing mature trees, distribution lines, ancillary farming equipment and residences. Figure 4.1-2d, Photo 13, shows the view of Alternative 3 from SR 201 looking northeast, and Figure 4.1-2d, Photo 14, shows the view looking south. Views of Alternative 3 from SR 201 would be open and panoramic, but of short duration. As noted above, the visual quality of views from these travel routes is considered representative of the agricultural and residential landscape of the area.

At mile 14.6, Alternative 3 would turn east on Stokes Mountain, leaving the existing SCE ROW. The alignment would cross Stokes Mountain for approximately three miles and then descend from the Stokes Mountain ridgeline (one mile) and turn northeast to parallel the Stokes Mountain/Stone Corral Canyon interface for approximately four miles. The alternative would then continue in the same northeasterly direction to crest the Goldstein Peak ridgeline at mile 23.0. To the southeast, views are characterized by grassland ridges, interspersed with oak woodlands and rock outcroppings, declining in elevation and steepness as they progress toward the San Joaquin Valley. Some of the lands are used for livestock grazing. To the north, views are generally characterized by grassland ridges interspersed with oak trees. The alignment would then descend into the Rattlesnake Creek Valley until it reached the existing Big Creek 3-Springville 220 kV transmission line. Figure 4.1-4d, Photo 15 represents a view along Boyd Road looking southwest toward where the alignment would traverse Wilcox Canyon. The visual quality is considered distinct because the natural foothills landscape has been largely preserved and unaltered.

### **Alternative 6**

Alternative 6 would proceed north from the Rector Substation within existing SCE ROW for approximately 8.1 miles, generally paralleling Road 148, a local roadway with low traffic volumes. Approximately 1.5 miles from Rector Substation, the alignment would cross SR 198. The visual setting is generally characterized by agricultural land, both orchards and row crops, as well several residential subdivisions located within one-quarter mile to both the west and east of the ROW. The Eagle Glen development and the Casablanca development are located adjacent to the ROW to the west (Scheibel, 2009), between miles 0.5 and 1.5 of the alignment. At mile 2.7, Alternative 6 would cross SR 216, a regional road connecting the City of Visalia and the City of Woodlake. The visual setting is open agricultural space, walnut orchards, and the East Oak Estates residential subdivision. Between miles 3.0 and 3.6, Alternative 6 would traverse through several backyards of single-family homes in the Oak Ranch development. North of the Oak Ranch development the visual quality is generally characterized by agricultural land, including

mature orchards, row crops, rural residences, farm buildings, and local roadways; and is considered representative of agricultural landscape of the area.

Viewers along Road 148, SR 198 and SR 216 would have views of Alternative 6. Depending on the location of the viewer, residential views of this ROW range from direct and unobstructed to fully screened. Motorists on Road 148 would have direct to partially screened views of the alignment for approximately 14.6 miles. Motorists on SR 198 would have views of the alignment for a short duration. Views of the Alternative 6 alignment from SR 216, would also be of short duration, limited to motorists passing beneath the transmission line. Figure 4.1-2c, Photo 9 presents the view motorists would have traveling west on SR 216, and Figure 4.1-2c, Photo 10 presents the view looking northeast from where SR 216 traverses the Alternative 6 alignment. Views of the Alternative 6 alignment would generally be unobstructed, though partially obscured by existing mature trees, distribution lines, ancillary farming equipment and residences.

At mile 8.1, the alignment would head due east, paralleling a road located approximately one-half mile north of Avenue 344 for approximately 7.0 miles. At mile 9.1 the alignment would traverse Road 156 (also known as Packwood Road), in unincorporated Tulare County. Figure 4.1-2d, Photo 16 presents the view motorists would have traveling north on Road 156, where the alignment would cross the road. Approximately five miles east of the turnoff of the existing ROW, Avenue 344 turns into SR 216 (also known as Naranjo Boulevard within the City of Woodlake). Figure 4.1-2e, Photo 17, presents the motorists' view heading west on Avenue 344, as SR 216 becomes Avenue 344. The majority of the road is private; however, a small portion on the eastern side of the alignment parallels Avenue 348. At mile 14.6 the alignment would traverse Millwood Drive at Avenue 348. Figure 4.1-2e, Photo 18 presents motorists' views from Millwood Drive heading northeast. The visual setting of Road 156, Avenue 344 and Millwood Drive is characterized by agricultural land that is predominantly orange orchards, but also includes other fruit orchards, row crops, some farm buildings, and local roadways. The visual quality is representative of the area. Alternative 6 would cross the Friant-Kern Canal, approximately 5.6 miles east of where the alignment turns off of the existing SCE ROW. At mile 15, approximately one-half mile east of the City of Woodlake, the alignment would turn and head north for approximately two miles, continuing to pass through agricultural land and adjacent to dry pasture. From Road 360 to Road 364, the alignment would parallel the west side of State Route 245 for approximately one-half mile. Motorists on State Route 245 would have direct views of the alternative. Near mile 18.2 the alignment would turn northeast from State Route 245 for approximately 0.3 miles, traversing agricultural land and dry pasture, and then head due east where it would begin to follow the same alignment as Alternative 2 for approximately 3.0 miles until it reached the existing Big-Creek 3-Springville 220 kV transmission line. The visual quality of this portion of Alternative 6 is considered representative of the rolling grassland hills of the foothills.

## Viewer Types and Exposures

Viewer types and exposure conditions vary substantially in the study area. Public viewer groups evaluated include: motorists along SR 198 (a state eligible scenic highway), SR 65, SR 245, SR 201, and SR 216; and visitors to the Kaweah Oaks Preserve and Cutler Park, recreational areas.

For each of the viewer groups identified in the study area, viewer exposure conditions were determined based on knowledge of the project areas and a site visit conducted on November 25, 2008. Variables considered include the viewing distance, angle of view, the extent to which views are screened or open, and duration of view. Viewing distances are described according to whether the project activities would be viewed within a foreground (within one-half mile or 2,640 feet), middleground (one-half mile to two miles), or background (beyond two miles) zone. Viewing angle and extent of visibility considers the relative location of the project facility to the viewer and whether visibility conditions are open or panoramic, or limited by intervening vegetation, structures or terrain.

Duration of view pertains to the amount of time the project facilities or area would typically be seen from a sensitive viewpoint. In general, duration of view would be less in instances where the project facility would be seen for short or intermittent periods (such as from major travel routes and recreation destination roads) and greater in instances where the project facility would be seen regularly and repeatedly (such as from public use areas).

### ***Motorists on Regional or Scenic Travel Routes***

In the study area, SR 198 is eligible for state scenic highway designation. In addition, SR 65, SR 245, SR 201 and SR 216 are considered major roadways that provide regional access to the study area. Traffic volumes are classified as low (less than 10,000 vehicle trips per day), moderate (10,000 to 20,000) and high (over 20,000 vehicle trips per day). Table 4.1-1 summarizes major roads in the Proposed Project and alternatives study area. Because local roadways in the study area generally experience low traffic volumes, they are not evaluated individually in this section. For additional information on local roadways, see Section 4.14, *Transportation and Traffic*.

**TABLE 4.1-1  
MAJOR ROADS IN PROJECT AREA**

<b>State Route (SR)</b>	<b>Relation to Proposed Project and Alternatives</b>
SR 198	Proposed Project crosses twice and runs parallel within one-half mile for approximately 9.2 miles. Alternatives 2, 3, and 6 cross once.
SR 65	Proposed Project crosses once.
SR 245	Proposed Project runs parallel within two miles for approximately 2.5 miles, and runs parallel within a half mile for approximately one mile. Alternative 2 crosses once. Alternative 6 runs parallel and adjacent to road for approximately one-half mile.
SR 201	Alternative 3 crosses once.
SR 216	Alternatives 2, 3 and 6 cross once. Alternative 6 runs parallel within one-half mile for approximately 1.3 miles.

SOURCE: Thomas Bros. Maps, 2008.

### **State Route 198**

SR 198 is an important regional travel corridor within the study area. The portion of the highway between SR 99 near the community of Goshen, just west of the City of Visalia, to Sequoia National Park is eligible for designation as a California State Scenic Highway (Caltrans, 2008). Specifically, the portion of SR 198 between Road 248 (near the community of Lemon Cove) and the Sequoia National Park boundary is in the final stages of becoming officially designated, with official designation expected by the end of 2009 (Mills, 2009). Traffic volumes along SR 198 in the study area (east of Lovers Lane) have an annual ADT level of 30,000 vehicles per day (Caltrans, 2009).

As discussed above, the Proposed Project would parallel SR 198 for approximately 9.2 miles and would cross SR 198 twice. Views from SR 198 within the project area are generally dominated by an agricultural landscape, composed of walnut and citrus orchards, homes/farms and associated out buildings and infrastructure. Views also include light industrial and residential uses near the cities of Visalia and Farmersville and the community of Lemon Cove. In the area east of the community of Lemon Cove, views from SR 198 are generally comprised of the rolling foothills leading to the Sierra Nevada. Figure 4.1-2 presents photos taken from various places along SR 198 in the project area (see Photos 2, 3, 4, 5, and 8). As shown in these photographs, where not obstructed by roadside vegetation and landforms, distant mountain views are available along portions of the eastbound SR 198 corridor. Views of the Proposed Project alignment from SR 198 would range between open and panoramic to partially obstructed and would be generally of short duration. Specifically, with a traffic speed of 65 miles per hour, the approximately 9.2-mile segment of the Proposed Project that would parallel SR 198 would be visible from SR 198 for approximately 8.5 minutes.

### **State Route 65**

The Proposed Project alignment would be within foreground views from SR 65, where the proposed alignment would cross the highway. Traffic volumes are moderate (average 10,000 vehicles per day), and views are generally panoramic and open but of short duration (Caltrans, 2009).

### **State Route 245**

As noted above, the Proposed Project alignment would be within the foreground view from SR 245 for approximately one-half mile and within the middleground view for approximately 2.5 miles. Alternative 2 would also cross SR 245 once, and Alternative 6 would parallel SR 245 for approximately one-half mile. Traffic volumes on SR 245 are relatively low (average 3,300 vehicles per day). Views of the Proposed Project alignment from SR 245 would range between open to partially obscured and be of relatively short duration. Specifically, with a traffic speed of 55 miles per hour, the approximately three-mile segment of the Proposed Project that would parallel SR 245 would be visible from SR 245 for approximately three minutes and fifteen seconds. Figure 4.1-4b, Photo 6 represents a view from SR 245 at the corner of Avenue 320 looking south towards the Proposed Project alignment. Views of Alternative 2 would be open and panoramic but of short duration. Views of Alternative 6 would be open and panoramic and, assuming a traffic speed of 55 miles per hour, would last for just over 30 seconds.

### **State Route 201**

SR 201, an east-west highway that connects SR 99 in Kingsburg, Fresno County with SR 245, would be crossed by Alternative 3. Traffic volumes on SR 201 in the study area are low (1,150 vehicles per day) and views are generally panoramic and open but of short duration.

### **State Route 216**

SR 216, an east-west two-lane State highway which stretches from the City of Visalia to City of Woodlake in Tulare County would be crossed by Alternatives 2, 3 and 6. Traffic volumes on SR 216 in the study area are moderate (11,000 vehicles per day) and views of the proposed alignments are generally panoramic and open but of short duration. Located approximately one-half mile north of SR 216, Alternative 6 would run parallel for approximately 1.3 miles. However, orchards, crops, and several buildings are located along the north side of SR 216. Consequently, vegetation and structures in the foreground would partially to fully screen views of Alternative 6 from motorists on SR 216. As discussed earlier in the *Setting*, Avenue 344 is an east-west County road that becomes SR 216 approximately five miles east of the turnoff from the existing ROW. Alternative 6 would run parallel approximately one-half mile to the north of Avenue 344 for roughly 5.7 miles before Avenue 344 becomes SR 216. However, SR 344 is a local road with a low traffic volume of 1,500 vehicles per day (TCAG, 2003); as such, SR 344 is not discussed further in the analysis.

### **Park and Recreation Areas**

Parks and recreational areas in the study area include the Kaweah Oaks Preserve and Cutler Park. The entrance to Kaweah Oaks Preserve, a 324-acre property, is located approximately one-half mile north of the Proposed Project. As depicted in Figure 4.1-2e (Photos 19 and 20), recreational viewers, including hikers using trails that traverse the Preserve, would have limited views of the Proposed Project alignment due to intervening park vegetation, including a grove of mature trees located between the Preserve entrance and SR 198. Recreational use is low along trails within the Preserve, with approximately 10,000 visitors per year (Tootle, 2009). Viewer exposure would be considered low due to the low number of views, low view duration and limited visibility.

Cutler Park, a 50-acre property, is located approximately two miles north of the Proposed Project and approximately one-quarter mile east of Alternatives 2 and 3 near the community of Ivanhoe. Attendance is generally highest during the summer when there is flow in the river, as locals use the park for swimming, inner-tubing and wading. Recreational users would have no views of the Proposed Project. Views of Alternatives 2 and 3 alignments would generally be obstructed by vegetation and terrain. Despite the moderate number of views, viewer exposure would be considered low due to the limited visibility and low view duration.

## **Visual Sensitivity**

Visual sensitivity is a composite measurement of the overall susceptibility of an area or viewer group to adverse visual or aesthetic impacts, given the combined factors of landscape visual quality, viewer types, and exposure conditions. Table 4.1-2 summarizes the visual sensitivity of the major viewer types that would be affected by the Proposed Project and alternatives.

**TABLE 4.1-2  
SUMMARY OF VISUAL SENSITIVITY FINDINGS  
VIEWER TYPES, VISUAL EXPOSURES, AND VISUAL QUALITY**

Viewer Type	Visual Quality	View Exposure	Visual Sensitivity	Project Component
<b>Travel Routes</b>				
Road 148	Industrial/ Indistinctive	Foreground Distance Unobstructed Views Low Number of Viewers Low View Duration	Low	Rector Substation; Proposed Project generally runs parallel for approximately 1.1 miles. Alternatives 2, 3 and 6 generally run parallel for 10.8, 14.6, and 8.1 miles, respectively.
SR 198	Representative	Middle/Background Distance (except two crossings) Unobstructed Views High Number of Viewers Low View Duration	Moderate-High	Parallel (within one-half mile) to Proposed Project alignment for approximately 9.2 miles. Alternatives 2, 3, and 6 cross once.
SR 245	Representative	Foreground Distance Unobstructed Views Low Number of Viewers Low View Duration	Moderate	Proposed Project runs parallel within two miles for approximately 2.5 miles, and runs parallel within a half mile for approximately one mile. Alternative 2 crosses once. Alternative 6 runs alongside for approximately one-half mile.
SR 201	Representative	Foreground Distance Obstructed Views Low Number of Viewers Low View Duration	Low	Crossed by Alternative 3
SR 65	Representative	Foreground/Midground Distance Unobstructed Views Moderate Number of Viewers Long View Duration	Low	Crossed by Proposed Project
SR 216	Distinct	Foreground Distance Obstructed Views Moderate Number of Viewers Low View Duration	Moderate	Crossed by Alternatives 2, 3 and 6. Alternative 6 runs parallel within one-half mile for approximately 1.3 miles.
<b>Park/Recreation</b>				
Kaweah Oaks Preserve	Distinct	Fore, Middle and Background Distances: Obstructed Views Low Number of Viewers Low View Duration	Low	One-half mile north of the Proposed Project alignment
Cutler Park	Distinct/ Representative	Foreground Distance Partially obstructed Views Low Number of Viewers Low View Duration	Low	Approximately two miles north of the Proposed Project and approximately one-quarter mile east of Alternatives 2, 3 and 6

## Regulatory Setting

### **State**

#### **California Scenic Highway Program**

In 1963, the California legislature created the Scenic Highway Program to protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to the highways. The state regulations and guidelines governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq. A highway may be designated as “scenic” depending on how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the travelers’ enjoyment of the view.

No portion of the Proposed Project or alternatives would be visible from a designated State Scenic Highway; however, as noted above, portions of the Proposed Project and alternatives lie in proximity or would cross SR 198 which is listed by Caltrans as an eligible State scenic highway between SR 99 and Sequoia National Park. A portion of SR 198 between Road 248 (near the community of Lemon Cove) and the Sequoia National Park boundary is in the final stages of becoming officially designated, with official designation of this 16-mile stretch expected by the end of 2009 (Mills, 2009).

#### **California Public Utilities Commission**

California Public Utilities Code Section 320 requires that all new or relocated electric and communication distribution facilities within 1,000 feet of an officially-designated scenic highway and visible from that highway be buried underground where feasible and not inconsistent with sound environmental planning. GO 131-D defines distribution as “...a line designed to operate under 50kV”.<sup>2</sup> The Proposed Project would be within 1,000 feet of an eligible State scenic highway (SR 198); however, this code is not applicable as the proposed transmission line would be 220 kV, over the 50 kV threshold.

### **Local**

#### **Tulare County General Plan (Proposed Project and Alternatives 2, 3 and 6)**

The following goals and policies identified in the Tulare County General Plan would be applicable to the Proposed Project and alternatives:

##### Scenic Highways Element

*Goal 5.A:* To protect scenic routes in Tulare County.

##### Environmental Resources Management Element

*Goal 6.A.4:* To seek to increase the appreciation of local residents of their natural environment, to deepen their appreciation of it as a source of human enrichment vital to their existence, and to elicit their constructive support for policies and programs developed

<sup>2</sup> The CPUC has implemented PU Code §320 via Tariff Rule 20. While Tariff Rule 20 does not disallow the funding of undergrounding transmission lines, the specific mandate of PU Code §320 is limited to distribution lines. (CPUC, D.85497.)

in support of the goals for Tulare County. It should be a further goal of the County to assume its share of responsibility in preserving adequate examples of the natural (or near-natural) landscape – to assume initiative in identifying and preserving those ecological units which warrant preservation in the national, state, regional and local interest.

*Policy 6.G.5.:* Effort should be made to protect the large grove of mature oak trees east of Visalia along Scenic Highway 198 through agreements with the owner until such time as the County can purchase the land.

(Tulare County, 2001).

### **Tulare County Foothill Growth Management Plan (Proposed Project and Alternatives 2, 3 and 6)**

The following goals and policies identified in the Tulare County Tulare County Foothill Growth Management Plan would be applicable to the Proposed Project and alternatives:

*Scenic Corridors Goal:* Provide local protection of scenic highways and roads within the Foothills.

*Scenic Corridors Policy 4:* Projects located within a scenic corridor shall be designed in a manner which does not detract from the visual amenities of that thoroughfare.

(Tulare County, 1981).

### **Tulare County Zoning Ordinance (Proposed Project and Alternatives 2, 3 and 6)**

The Tulare County Zoning Ordinance uses overlay zones to protect particular natural or cultural features, including scenic views. Overlay zones build on the underlying zoning, by establishing additional or stricter standards and criteria that apply in addition to the standards of the underlying zone districts. The *Scenic Corridor (SC)* overlay zone is used as the primary means of corridor protection. The intent of a *SC* overlay zone is to preserve the scenic quality of the immediately visible land area and to prevent visual obstruction of the extended view (Tulare County, 2001). The Proposed Project would traverse parcels zoned *SC*; the alternatives would not.

### **Fresno County General Plan (Proposed Project and Alternatives 2, 3 and 6)**

The following goal identified in the Open Space and Conservation Element of the Fresno County General Plan would be applicable to the Proposed Project and alternatives:

*Goal OS-K:* To conserve, protect, and maintain the scenic quality of Fresno County and discourage development that degrades areas of scenic quality.

(County of Fresno, 2000).

### **City of Visalia General Plan (Proposed Project and Alternatives 2, 3 and 6)**

The three mile stretch of highway along west SR 198 between SR 99 and Akers Road is designated as a scenic corridor by the City of Visalia General Plan. This “rural gateway” to Visalia contributes to the City’s unique image as a “non-Highway 99” Valley-town. Comprised of Municipal Airport lands, Plaza Parks lands and rural landscapes, the corridor’s predominant land

use is agriculture and its character consequently changes between seasons and years. The scenic corridor is considered a highly-regarded community value, to be protected from urban development pressures (City of Visalia, 1996).

The City of Visalia General Plan has additional goals and policies relating to scenic resources that may be applicable to the Proposed Project and alternatives:

Historic Preservation Element

*Goal II, Policy 2:* The undergrounding of utility lines shall be pursued and encouraged.

(City of Visalia, 1979).

Land Use Element

*Implementing Policy 1.1.4:* Work with utilities and transportation companies to landscape power line and railroad right-of-ways throughout the community and to underground utilities and abandoned railroad spurs where possible.

*Implementing Policy 1.1.5:* Develop land use and site design measures for areas adjacent to high-voltage power facilities.

*Implementing Policy 1.1.11:* Develop scenic entryways (gateways) and roadway corridors into the City through special setback and landscape standards, open space and park development, and/or land use designations. Gateways and entryways to be considered should include: Avenue 272/Lovers Lane; St. John's River/Dinuba Highway; State Highway 198/Road 152; Caldwell/Parkway; State Highway 198 (Mcauliff to Road 152); Caldwell (Divisadero to Road 152); Avenue 272 (Akers to Road 152);

(City of Visalia, 1996).

**City of Farmersville General Plan (Proposed Project)**

The following goal, objective, and policy identified in the Land Use Element of the City of Farmersville General Plan may be applicable to the Proposed Project:

*Issue Fourteen: Special Issues—State Highway 198, Goal I:* The City shall take actions to establish an attractive development pattern along lands fronting State Highway 198.

*Objective 2:* Require attractive landscape and building design that will reflect positively on Farmersville. *Policy a:* Establish a special “Highway 198” overlay zone that incorporates special building, landscaping, screening and signage requirements.

(City of Farmersville, 2002).

## 4.1.2 Significance Criteria

According to Appendix G of the CEQA Guidelines, significant aesthetic effects on the environment include substantial, demonstrable negative aesthetic effects, conflicts with adopted environmental plans and goals of the community, substantial degradation of scenic vistas or highways, and/or the creation of light or glare.

Using the criteria above, this analysis evaluates the impact of implementation of the Proposed Project and alternatives on the visual character of the study area. The evaluation of potential impacts is based on the potential to change the visual character of the area if implementation of the Proposed Project or alternatives would:

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

### **Definition and Use of Significance Criteria**

An adverse visual impact may occur when: (1) an action perceptibly changes the existing physical features of the landscape that are characteristic of the region or locale; (2) an action introduces new features to the physical landscape that are perceptibly uncharacteristic of the region or locale, or become visually dominant in the viewshed; or (3) an action blocks or totally obscures aesthetic features of the landscape. The degree of visual impact depends on how noticeable the adverse change is. The noticeability of a visual impact is a function of the project features, context, and viewing conditions (angle of view, distance, and primary viewing directions). The key factors in determining the degree of visual change are visual contrast, project dominance, and view blockage.

#### ***Visual Contrast***

Visual contrast is a measure of the degree of change in line, form, color, and texture that the project will create, when compared to the existing landscape. Visual contrast ranges from none to strong, and is defined as:

- None –The element contrast is not visible or perceived
- Weak –The element contrast can be seen but does not attract attention
- Moderate –The element contrast begins to attract attention and begins to dominate the characteristic landscape
- Strong – The element contrast demands the viewer’s attention and cannot be overlooked

#### ***Project Dominance***

Visual dominance is a measure of a project feature’s apparent size relative to other visible landscape features in the viewshed, or seen area. A feature’s dominance is affected by its relative location in the viewshed and the distance between the viewer and feature. The level of dominance can range from subordinate to dominant.

### **View Blockage or Impairment**

View blockage or impairment is a measure of the degree to which project features would obstruct or block views to aesthetic features due to the project’s position and/or scale. Blockage of aesthetic landscape features or views can cause adverse visual impacts, particularly in instances where scenic or view orientations are important to the use, value or function of the land use.

### **Overall Adverse Visual Impact**

Overall adverse visual impact reflects the composite visual changes to both the directly affected landscape and from sensitive viewing locations. The visual impact levels referenced in this EIR indicate the relative degree of overall change to the visual environment that the project alternatives would create, considering visual sensitivity, visual contrast, view blockage, and project dominance.

In general, the determination of impact significance is based on combined factors of Visual Sensitivity and the Degree of Visual Change that the Proposed Project would cause. The inter-relationship of these two overall factors in determining whether adverse visual impacts are significant is shown in Table 4.1-3.

**TABLE 4.1-3  
GUIDELINES FOR DETERMINING ADVERSE VISUAL IMPACT SIGNIFICANCE**

Overall Visual Sensitivity	Overall Visual Change				
	Low	Low to Moderate	Moderate	Moderate to High	High
<b>Low</b>	Not Significant	Not Significant	Adverse, but Not Significant	Adverse, but Not Significant	Adverse, but Not Significant
<b>Low to Moderate</b>	Not Significant	Adverse, but Not Significant	Adverse, but Not Significant	Adverse, but Not Significant	Adverse, but Not Significant
<b>Moderate</b>	Adverse, but Not Significant	Adverse, but Not Significant	Adverse, but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant
<b>Moderate to High</b>	Adverse, but Not Significant	Adverse, but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant	Significant
<b>High</b>	Adverse, but Not Significant	Adverse and Potentially Significant	Adverse and Potentially Significant	Significant	Significant

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

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

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

**Significant impacts** with feasible mitigation may be reduced to less than significant levels or avoided all together. Without mitigation or avoidance measures, significant impacts would exceed environmental thresholds.

## Visual Simulations

Visual simulations, presented as part of this aesthetic analysis, illustrate representative “before” and “after” visual conditions in the Proposed Project area. In the text below, the evaluation of potential impacts associated with the Proposed Project is based, in part, on comparing the “before” and “after” visual conditions as portrayed in the set of simulations and assessing the degree of visual change that the Proposed Project would bring about. The significance determination is based on the evaluation criteria described above.

The simulations presented in this section illustrate the location, scale, and conceptual appearance of the Proposed Project as seen from 11 key viewing locations. The set of images shows views from various places along the Proposed Project alignment, beginning with a view of the Rector Substation continuing to the end where the Proposed Project would connect to the Big Creek-Springville 220 kV transmission line. Figure 4.1-1 depicts the simulation photo viewpoint locations for the visual simulations in Figures 4.1-3 through 4.1-13.

These visual simulations are presented in color, two images per page with the existing visual condition photograph on top of the page and with a photo rendering visual simulation depicting the Proposed Project on the bottom of the page. These images were photographed in June of 2006 using a single lens reflex (SLR) camera. All but two of the images use a 50mm lens which represents a horizontal view angle of 40 degrees, which is the “normal” field of view for the average human observer. The simulation from Avenue 304 (Figure 4.1-10 a and b) was photographed with a 28mm lens representing a horizontal view angle of 65 degrees, and the simulation from Avenue 320 (Figure 4.1-11 a and b) uses a 35mm lens representing a view angle of 54 degrees (SCE, 2008). The visual simulations of the Proposed Project portray representative public views. The simulation vantage points are as follows:

1. View from Road 148 at Cameron Creek looking south toward Rector Substation (Figures 4.1-3a and b)
2. View from South Rio Linda Street looking northeast (Figures 4.1-4a and b)
3. View from Farmersville Boulevard north of Terry Avenue looking north (Figures 4.1-5a and b)
4. View from Farmersville Boulevard at Noble (near SR 198) looking southeast (Figures 4.1-6a and b)
5. View from SR 198 at Southern Pacific (SP) Railroad crossing looking southeast (Figures 4.1-7a and b)
6. View from Road 210 near Avenue 292 looking north (Figures 4.1-8a and b)
7. View from SR 198 near Road 212 looking east (Figures 4.1-9a and b)
8. View from Avenue 304 looking northwest (Figures 4.1-10a and b)
9. View from Avenue 320 looking west (Figure 4.1-11a and b)
10. View from SR 198 near Avenue 324 looking south (Figure 4.1-12a and b)
11. View from Avenue 324 looking east toward proposed connection point (Figure 4.1-13a and b)



Existing view from Road 148 at Cameron Creek looking south toward Rector Substation



Simulation A: View from Road 148 at Cameron Creek looking south toward Rector Substation



Existing view from South Rio Linda Street looking northeast



Simulation B: View from South Rio Linda Street looking northeast



Existing view from Farmersville Boulevard north of Terry Avenue looking north



Simulation C: View from Farmersville Boulevard north of Terry Avenue looking north



Existing view from Farmersville Boulevard at Noble near SR 198 looking southeast



Simulation D: View from Farmersville Boulevard at Noble near SR 198 looking southeast



Existing view from SR 198 at Southern Pacific Railroad crossing looking southeast



Simulation E: View from SR 198 at Southern Pacific Railroad crossing looking southeast



Existing view from Road 210 near Avenue 292 looking north



Simulation F: View from Road 210 near Avenue 292 looking north

SOURCE: SCE, 2008.



Existing view from SR 198 near Road 212 looking east



Simulation G: View from SR 198 near Road 212 looking east

SOURCE: SCE, 2008.



Existing view from Avenue 304 looking northwest



Simulation H: View from Avenue 304 looking northwest



Existing view from Avenue 320 looking west



Simulation I: View from Avenue 320 looking west



Existing view from SR 198 near Avenue 324 looking south



Simulation J: View from SR 198 near Avenue 324 looking south

SOURCE: SCE, 2008.



Existing view from Avenue 324 looking east toward proposed connection point



Simulation K: View from Avenue 324 looking east toward proposed connection point

SOURCE: SCE, 2008.

### 4.1.3 Applicant Proposed Measures

No Applicant Proposed Measures have been identified by SCE to reduce project impacts on aesthetic resources.

### 4.1.4 Impacts and Mitigation Measures

**a) *Have a substantial, demonstrable negative aesthetic effect on a scenic vista.***

There are no designated scenic vistas in the vicinity of the Proposed Project. Therefore, there would be no impacts to scenic vistas from construction, operation, and maintenance of the Proposed Project (No Impact).

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**b) *Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.***

**Impact 4.1-1: The Proposed Project would substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. *Less than significant with mitigation (Class II)***

As indicated in the visual setting, there are no officially designated federal or State scenic highways within the vicinity of the Proposed Project; therefore, the Proposed Project would not affect scenic resources within a federal or State scenic highway. However, SR 198 is an eligible State scenic highway. The project area does not include rock outcroppings or historic buildings that would be affected by the Proposed Project.

The Proposed Project would be located parallel to, but approximately 0.45 mile distant from, SR 198 for approximately 9.2 miles. The proposed alignment would also cross SR 198 twice, near mile 10 and mile 16.5. Views would range from open and panoramic to partially and fully screened by existing vegetation and utility infrastructure. The portion of the proposed alignment along SR 198 would generally involve placing a 220 kV transmission line, including a set of new tubular steel poles in the straight segments and lattice steel towers at the turning points as well as overhead conductors, in new SCE ROW. As noted above, views of the Proposed Project alignment from SR 198 would range between open and panoramic to partially obstructed and would be generally of short duration. Specifically, with a traffic speed of 65 miles per hour, the approximately 9.2-mile segment of the Proposed Project that would parallel SR 198 would be visible from SR 198 for approximately 8.5 minutes. The following viewpoint analysis is representative of views from or of SR 198 where the Proposed Project would be in close proximity to or would cross SR 198.

Figure 4.1-7a and Figure 4.1-7b show an existing and a simulated view of the Proposed Project from SR 198 looking southeast. From this vantage point, the Proposed Project would appear against a landscape backdrop at a distance of about one-third mile. An existing 66 kV subtransmission line running parallel to the south side of SR 198 would appear prominently in the

foreground. Structure #41, a 130-foot-tall structure, would be closest structure visible in this view. Overall, given the proximity to the existing subtransmission line and given the landscape backdrop, the new poles and overhead conductors would appear as an incremental change in structure prominence and industrial character within the landscape; therefore, the Proposed Project would not substantially alter scenic views from SR 198 from this area.

When seen without a landscape backdrop, the Proposed Project would be more noticeable from SR 198. Figure 4.1-9a and Figure 4.1-9b depicts “before” and “after” views of the Proposed Project as seen from SR 198 looking east. This visual simulation portrays a close range view of the Proposed Project as it would cross SR 198, a vantage point where the Proposed Project would appear most visible to the public. The simulation portrays an unobstructed close range view of Structure #56, a 120-foot tubular pole, and new conductors in the skyline. The new structure would cause a noticeable increase in structure prominence and industrial character within the landscape. The resulting visual contrast would range from moderate-to-high in consideration of the amount of view blockage of background sky. Although the Proposed Project would not obstruct views of the landscape backdrop, it would contrast with the form of natural landscape features. In consideration of the landscape’s moderate-to-high visual sensitivity (i.e., SR 198 is a frequently traveled eligible State scenic route), the resulting visual impact would be potentially significant. However, implementation of Mitigation Measure 4.1-1a, which would provide additional detail pertaining to structure design, is recommended for structures visible from sensitive viewing locations. Additionally, implementation of Mitigation Measure 4.1-1a requires the use of non-specular and non-reflective materials for lattice towers, insulators and conductors. Implementation of these measures would reduce visual impacts from SR 198 to less than significant.

Figure 4.1-12a and 12b presents a “before” and “after” view from SR 198 near Avenue 324 looking south towards the Proposed Project. Background elements include the rolling foothills on either side of the Allen Gap. As seen in the simulation, the Proposed Project would cross SR 198 approximately 500 feet from this viewing location. Structure #94, a 120-foot tall tubular steel pole, would appear prominently at the left side of the view. The new structure would also appear visually prominent from a nearby residence. From this area of southbound SR 198, existing vegetation and structures would not substantially screen views of the Proposed Project. However, in views from the south, topography would partially block views from SR 198 toward the Proposed Project. Because this stretch of SR 198 begins to enter the foothills to the Sierra Nevada, it is considered more visually sensitive than the area where the Proposed Project first parallels and crosses the highway. Therefore, the overall visual change would be moderate resulting in a potentially significant impact to motorists that would pass beneath the new transmission line. Implementation of Mitigation Measure 4.1-1a would reduce this potential impact to less than significant.

Portions of the Proposed Project would be located within 1,000 feet of SR 198; however, the California Public Utilities Code Section 320, which would require undergrounding of new transmission facilities within 1,000 feet of state scenic highways, is not applicable to the Proposed Project. This code does not apply because the Proposed Project would involve construction of a 220 kV transmission line which is over the 50 kV threshold.

Since no scenic resources are located on the project sites, and since it is expected that the Proposed Project would not substantially impacts views from SR 198 (an eligible State scenic highway) with implementation of Mitigation Measures 4.1-1a and 4.1-1b, impacts to SR 198 would be considered less than significant.

**Mitigation Measure 4.1-1a: Treat Surfaces with Appropriate Colors, Finishes, and Textures.** For all structures that are visible from moderate to highly sensitive viewing locations (e.g., SR 198 [Structures #20, #55A, #56, #93 and #94] and SR 245 [Structures #69 through #73]), SCE shall apply surface coatings with appropriate colors, finishes, and textures to most effectively blend the structures with the visible backdrop landscape. For structures that are visible from more than one sensitive viewing location, if backdrops are substantially different when viewed from different vantage points, the darker color shall be selected, because darker colors tend to blend into landscape backdrops more effectively than lighter colors, which may contrast and produce glare. At locations where a lattice steel tower or tubular steel pole would be silhouetted against the skyline, non-reflective, light-gray colors shall be selected to blend with the sky.

SCE shall develop a SCE Structure Surface Treatment Plan for the lattice steel towers, tubular steel poles, and any other visible structures in consultation with a visual specialist designated by the CPUC, as appropriate, to ensure that the objectives of this measure are achieved. SCE shall submit the Structure Surface Treatment Plan to the CPUC for review and approval at least 90 days prior to the start of construction.

**Mitigation Measure 4.1-1b: Use of Non-Specular and Non-Reflective Materials.** The transmission line conductors shall be non-specular and non-reflective, the insulators shall be non-reflective and non-refractive and the lattice structures shall be non-reflective.

**Significant after Mitigation:** Less than Significant.

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***c) Substantially degrade the existing visual character or quality of the site and its surroundings.***

The proposed upgrades and reconfigurations to the majority of the Proposed Project would generally represent an incremental change to the visual character or quality of views currently experienced by the public in the vicinity of the proposed alignment. A site specific discussion of each of the Proposed Project components is provided below.

## **Construction**

### ***Transmission Line Portion***

Construction-related impacts to visual quality would result from the presence of construction equipment, materials, and work crews along the transmission line corridor and on local access roads and staging areas. Crews would be required to maintain clean work areas as they proceed along the line and would not leave any debris behind at any stage of the project. The construction

impacts to visual quality would be relatively short-term (approximately nine to 12 months) spread out along different portions of the Proposed Project alignment.

**Impact 4.1-2: Use of temporary staging area during the construction period could result in adverse impacts to visual quality. *Less than significant with mitigation (Class II)***

It is anticipated that at least two staging areas for project construction activities would be located at existing commercial facilities near the Proposed Project. All staging areas, up to five acres in size, would be located within the perimeter fences and screened from adjacent residences and businesses. Material and equipment staged at these substations would include poles, wire reels, insulators, hardware, heavy equipment, light trucks, construction trailers, and portable sanitation facilities. The staging areas would be generally effectively screened from the public by the fences surrounding the staging area; nonetheless, portions of the staging areas could be visible above the fences and/or through the fences. Therefore, while the staging area would only be used on a temporary basis, adverse visual impacts associated with operation of these temporary sites could occur during the approximately nine to 12-month construction period.

**Mitigation Measure 4.1-2: Reduce visibility of staging areas.** All staging areas including storage sites for excavated materials, and helicopter fly yards, 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 and fly yards shall be visually screened using temporary screening fencing. Fencing shall incorporate aesthetic treatment through use of appropriate, non-reflective materials, such as chain link fence with light brown vinyl slats. 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.

**Significant after Mitigation:** Less than Significant.

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**Impact 4.1-3: Use of temporary construction pulling/splicing sites during the approximately nine to 12-month construction period could result in adverse impacts to visual quality. *Less than significant with mitigation (Class II)***

Temporary pulling/splicing sites would be staged at approximately 32 locations along the Proposed Project alignment. These sites would vary in size, but would typically be about 200 feet by 500 feet for tensioning equipment set-up sites, about 200 feet by 200 feet for pulling equipment set-up sites, and about 150 feet by 100 feet for splicing equipment set-up sites. Each pull site would be cleaned up and restored to preconstruction conditions after construction. The pulling/splicing sites would likely be visible from adjacent roads, such as Road 148, Avenue 292, Farmersville Boulevard, Road 208, High Sierra Drive, Avenue 300, and Avenue 320; however, views would be of short duration. Nonetheless, while the pulling/splicing sites would only be used on a temporary basis, adverse visual impacts associated with operation of these temporary sites could occur during the approximately nine to 12-month construction period.

**Mitigation Measure 4.1-3:** SCE shall not place equipment on the pulling/splicing sites any sooner than two weeks prior to the required use. After each pulling/splicing site is no longer being used, SCE and/or its contractors shall clean up the site and restore to preconstruction conditions and in accordance with the Storm Water Pollution Prevention Plan (SWPPP).

**Significant after Mitigation:** Less than Significant.

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**Impact 4.1-4: Temporary construction of proposed substation modifications could result in adverse impacts to visual quality. *Less than significant (Class III)***

Construction of the proposed substation modifications would include vehicles, heavy equipment, and workers that could be visible during construction activities. All construction activities would take place within the existing substation fences or walls. Walls, fences, and vegetation surrounding these sites would limit visibility of construction activities. It is anticipated that substation-related construction effects would be less noticeable as compared to the proposed transmission line work since the substation modifications would occur within an area that is currently occupied by existing facilities and where maintenance and repair equipment routinely operates. Furthermore, due to the temporary nature of the construction activities at the substations (up to nine to 12 months), the impact to the existing visual character in the substations' vicinity would be less than significant.

**Mitigation:** None required.

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## Operations

**Impact 4.1-5: The Proposed Project could substantially degrade the existing visual character or quality of the Proposed Project site and its surroundings from public views. *Less than significant with mitigation (Class II)***

### ***Rector Substation Area***

As noted above, the Proposed Project alignment begins at the existing Rector Substation. Operational impacts associated with the proposed substation modifications would be viewed in the context of the existing substation equipment. Modifications to Rector Substation include relocation of the terminations of existing transmission lines, installation of two new circuit breakers, replacement of two existing circuit breakers, and installation of a new mechanical and electrical equipment room (MEER). All of these modifications would involve minimal physical changes, occurring within the existing fenceline and footprint of the existing substation. Changes could be visible from a limited portion of Road 148; however, these minor equipment improvements would be generally imperceptible to viewers. Furthermore, because the new

equipment would be of the same nature as the existing facilities, it would blend in with the existing view which includes not only the substation facilities, but also existing electricity infrastructure not related to the project (i.e., existing transmission alignments). Therefore, this incremental change to the existing visual quality from the proposed substation modifications would be inconsequential and would have a less than significant impact.

The first 1.1 miles of the Proposed Project alignment lies within an existing SCE 150-foot transmission ROW and would replace the existing transmission lines. Viewers primarily affected in this area would be nearby residents and local roadway motorists. The existing SCE ROW lies within 300 feet of approximately 52 residential properties abutting the existing ROW. Existing views encompass existing transmission structures, including wood poles and lattice towers. Figures 4.1-3a and 3b present an existing view and visual simulation of the Proposed Project as seen from Road 148 at Cameron Creek looking south through a recently planted orchard toward the Rector Substation. In this viewshed, an existing wood pole distribution line is located on the east side of the roadway and the existing lattice steel towers are located along the west side. The Proposed Project generally involves replacing the set of existing lattice steel towers (approximately 63 feet tall) with approximately 120-foot-tall tubular steel poles with the exception of Structure #7 where the proposed alignment would turn and require replacement with a lattice steel tower (see Figure 4.1-4a and 4b, described below). These structures would then be paralleled by new double-circuit transmission structures on the east side of ROW that would continue east to the connection point in the foothills. As shown in the visual simulation, the placement of the new poles would follow the centerline of the existing transmission line. The replacement poles would extend further into the sky than the existing poles, as they would be almost twice the existing height; however, the new tubular poles would be fewer in number and would have a simpler, more streamlined profile. As a general rule, when transmission line structures are viewed from “immediate foreground” (0 to 300 feet) or “foreground” viewing distances (300 feet to one-half mile) from developed or urbanized sensitive receptor locations, such as residential areas, city parks, or pedestrian environments, tubular steel poles have a smaller visual impact than lattice steel towers. Lattice steel towers have a greater visual impact because of their large base area and geometric forms, especially when seen at foreground distances. Furthermore, as the surrounding orchard trees mature over time, they would partially screen views of the Proposed Project from adjacent residences and roadways.

As noted above, in this portion of the proposed alignment, the existing approximately 63-foot tall lattice steel towers near Structure #7 of the Proposed Project, would be replaced with new 122-foot-tall lattice steel towers. Figures 4.1-4a and 4.1-4b show a “before” and “after” view of Structure #7 and Replacement Structure #7, respectively, as seen from a representative residential and roadway view on South Rio Linda Street in the Los Rios residential subdivision at the eastern edge of the City of Visalia looking northeast. Presently, the existing towers appear above the side yard wall of the single family residence seen in the foreground. The new structures would be placed in a slightly different location within the existing ROW, and in this case, approximately 50 feet farther from the viewpoint than the existing towers. A comparison of the “before” and “after” images shows that the installation of the new lattice steel towers would result in a noticeable change to the nearby residences and local roadway motorists as the new towers would

appear taller and more prominent than the existing towers. However, the new towers would be seen in context of the existing facilities. Therefore, while impacts from replacement of existing structures near Proposed Project Structure #7 to local motorists and residential viewers would be adverse, impacts would be less than significant as the proposed transmission line would result in an incremental visual effect which would not substantially alter the intrinsic character or composition of the existing view.

In addition, because most of the new structures along this portion of the Proposed Project would be tubular steel poles, the new poles would appear more streamlined than the existing lattice towers. In these respects, this portion of the Proposed Project would represent an incremental change which would not substantially degrade the existing visual character or quality of the site and its surroundings. This impact would be less than significant.

### ***Transmission Line Parallel to State Route 198 from Visalia to Exeter***

At mile 1.1 of the Proposed Project, the alignment would turn east, and would be located within a new 100-foot ROW to be acquired by SCE. From mile 1.1 to mile 9.6, the Proposed Project alignment would parallel SR 198, an eligible State scenic highway, approximately 0.45 miles south of the highway. In this area, SR 198 is four-lane divided highway with a traffic speed of 65 miles per hour. The Proposed Project would pass within 300 feet of approximately 20 residences along this portion of the new ROW (ESA, 2009).

In this area of the Proposed Project, motorists along SR 198 and Farmersville Boulevard would be the primary affected viewer group. As shown in the photographs in Figure 4.1-9, where not obstructed by roadside vegetation and landforms, distant mountain views are available along portions of the eastbound SR 198 corridor. The introduction of approximately 9.2 miles of new transmission line along this portion of the Proposed Project alignment would noticeably affect views from a substantial portion of SR 198. Potential visual impacts to SR 198, an eligible State scenic highway, are discussed above under Impact 4.1-1. Potential impacts to Farmersville Boulevard are discussed below.

This portion of the Proposed Project would also affect views from a limited number of small, local roadways as well as private residential properties located within one-quarter mile of the new line. Potential impacts to these receptors are discussed below.

### **Farmersville Boulevard**

The Proposed Project would cross Farmersville Boulevard in the northern portion of the City of Farmersville. Farmersville Boulevard is the primary north-south corridor within the City of Farmersville and provides the primary access to SR 198. Figures 4.1-5a and 5b present an existing and simulated view of the Proposed Project from Farmersville Boulevard north of Terry Avenue looking north to where the proposed alignment would cross Farmersville Boulevard. The Proposed Project is located approximately one-quarter mile from the viewpoint. This viewpoint is representative of some of the open landscape conditions present in this area. Motorists traveling north on Farmersville Boulevard would have views of the proposed alignment for approximately one-half mile until passing below the proposed alignment. A comparison of the existing view and

the visual simulation image demonstrates that the proposed transmission line would appear visible in this middleground viewshed, as both conductors and new Structure #20, a 130-foot tubular steel pole, would be visible. However, the proposed alignment would not appear visually prominent as the viewshed has been highly modified with existing utility infrastructure, including wood poles along the left side of the roadway and utility poles in the background.

Figures 4.1-6a and 6b present “before” and “after” views of the proposed alignment as seen from Farmersville Boulevard north of Noble Avenue looking southeast (near SR 198 off-ramp) towards where the alignment would cross Farmersville Boulevard. The proposed alignment would be moderately discernable in the background of this viewshed, as seen in Figure 4.1-6b. The Proposed Project would be approximately one-quarter mile away from this viewpoint. Motorists traveling south on Farmersville Boulevard would have views of the proposed alignment for approximately one-quarter mile until crossing below the alignment. Similar to Figure 4.1-5a and 5b, the open landscape conditions allow unobstructed views of the Proposed Project. The new Structures #20 and #21, 130-foot tubular steel poles, would appear most visible. The simulation indicates that given the presence of existing utility poles and overhead conductors in the foreground, the Proposed Project would not substantially alter the visual character experienced from this portion of Farmersville Boulevard.

Furthermore, Mitigation Measure 4.1-5 would require surface treatment measures (i.e., appropriate colors, finishes, textures) to reduce visibility of the Proposed Project from sensitive viewers, including visibility of new Structures #20 and #21 from Farmersville Boulevard. With implementation of Mitigation Measures 4.1-5, impacts to Farmersville Boulevard would be less than significant, because the proposed transmission line would result in an incremental visual effect that would not substantially alter the intrinsic character of the existing roadway view in terms of its composition and the general scale of landscape elements.

**Mitigation Measure 4.1-5:** Implement Mitigation Measure 4.1-1.

**Significant after Mitigation:** Less than Significant.

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### Local Roadways and Private Residents

Figures 4.1-8a and 8b portray an existing and simulated view of the Proposed Project from Road 210 near Avenue 292 looking north to where the proposed alignment would cross Road 210. This viewpoint is representative of viewshed from local north-south roadways along this portion of the alignment, as well as from the limited number of private residential roadways. The viewpoint is located adjacent to an existing single family residence. As seen in the “before” and “after” view, an existing utility line with dark wood poles runs parallel to Road 210 on the right side. In this area, as seen in the simulation, citrus orchards would partially screen the lower portion of the new tubular steel poles. From this viewpoint, Structure #52, a 120-foot tall tubular steel pole, would be visible, as well as conductors that would span the roadway. While the Proposed Project would be visually prominent above the existing citrus orchards, it would

represent an incremental visual change to a landscape setting in which existing utility poles prominently appear. Visual impacts to local roadways and private residences in this portion of the Proposed Project would be less than significant requiring no mitigation (Class III).

### ***Transmission Line North from Exeter toward Lemon Cove***

In this portion of the proposed alignment, the Proposed Project would cross SR 198 where the line would turn north at the toe of Badger Hill. The proposed transmission line would then run north-south, generally paralleling SR 245. At mile 12.9, at the corner of SR 245 and Avenue 320, the Proposed Project alignment would turn east. The alignment would then parallel the north side of Avenue 320. At mile 15.4, the Proposed Project would turn northeast and pass between grass-covered hillsides toward the community of Lemon Cove. The Proposed Project would pass within 300 feet of approximately one residence along this portion of the new ROW (ESA, 2009).

Roadway motorists on SR 198, SR 245, as well as motorists on local roadways, including Avenue 320 and Avenue 304, would be the primary affected viewers along this portion of the Proposed Project alignment. This portion of the Proposed Project could also affect views from approximately 120 private residential properties located within one-quarter mile of the new line. Potential visual impacts to SR 198, an eligible State scenic highway, are discussed above under Impact 4.1-1. Potential impacts to other visual receptors are discussed below.

### **State Route 245**

As noted above, the Proposed Project alignment would be within the foreground view from SR 245 for approximately one-half mile and within the middleground view for approximately 2.5 miles. New tubular steel poles would introduce vertical lines into this horizontal landscape (i.e. relatively flat terrain and low-lying vegetation and open space) and would interrupt views to the skyline to the east. This would create moderate view blockage, and increased structural prominence would result in a high degree of visual contrast. The Proposed Project would appear co-dominant with the existing agricultural landscape character and would introduce additional industrial character features into the landscape. Views from SR 245 would range between open to partially obscured and be of relatively short duration (i.e., approximately three and a half minutes with a traffic speed of 55 miles per hour for the approximately three mile stretch). Referring to Table 4.1-3, the overall visual change would be moderate-to-high and in the context of the existing landscape's low-to-moderate visual sensitivity, the resulting visual impact would be adverse, and potentially significant. Implementation of Mitigation Measures 4.1-1a and 4.1-1b would reduce visual impacts from SR 245 and the private residential views in this area to less than significant (Class II). Mitigation Measures 4.1-1a and 4.1-1b would improve the visual environment of the new 220 kV transmission line.

### **Local Roadways and Private Residents**

As noted above, at mile 9.6, the Proposed Project would turn to the north at the toe of Badger Hill. A private residential development is located at the top of Badger Hill. Open views toward the Proposed Project alignment would be available from points along High Sierra Drive, a private roadway, where it descends the north side of Badger Hill, as well as from approximately

24 single-family homes in the private residential development. As noted in the *Setting*, the closest residence in this development would be located approximately one-quarter mile from the Proposed Project alignment. Neither the structures nor conductors would block the skyline or views, and would remain subordinate-to/co-dominant compared to the existing agricultural landscape characteristics that include a variety of vertical elements, including existing electrical distribution poles and wind machines present at scattered intervals through orchards. However, the new transmission line would appear taller and more prominent than existing utility infrastructure. The Proposed Project alignment would not affect views of the foothills to the Sierra Nevada seen in the backdrop. Referring to Table 4.1-3, the overall visual change would be low-to-moderate and in the context of the existing landscape's moderate visual sensitivity, the resulting visual impact would be adverse, but not significant (Class III).

Figure 4.1-10a and Figure 4.1-10b show "before" and "after" views from a vantage point located along Avenue 304 looking northwest toward the Proposed Project. As shown in the simulation, the overhead conductors would be visually prominent from this viewpoint, as they would be located within the foreground view. The new tubular poles would not be as visually prominent from this perspective, as they would be located more than 400 feet from the private residence. While the Proposed Project would appear prominent from this viewshed, visual impacts would be less than significant for the following reasons: the viewpoint is from a local infrequently traveled roadway, a limited number of private residences (approximately two) would be impacted, and the viewshed is indistinct. This impact would be less than significant requiring no mitigation (Class III).

Figures 4.1-11a and 11b present an existing and simulated view of the Proposed Project from Avenue 320 (Cottage PO Drive) looking west. At this location, the Proposed Project would parallel Avenue 320 on the north. As shown in the simulation, the new structure (Structure #82, a 120-foot tubular steel pole) and conductors would be prominently visible from Avenue 320, and would introduce additional industrial character into the area. The new transmission line would appear noticeably taller and more visually prominent than the existing wood poles that parallel both sides of the roadway. In addition, the residence located on the south side of the roadway would be located in relatively close proximity to Structure #82. The structures and conductors would skyline (extend above the horizon line) and cause limited view blockage of background sky when viewing to the north. As a result, visual contrast would be moderate-to-high and the Proposed Project would appear co-dominant with the existing agricultural landscape features (primarily the citrus orchards and associated equipment and infrastructure). View blockage of background sky would be low to moderate. The overall visual change would be moderate and in the context of the landscape's moderate visual sensitivity (i.e., Avenue 320 is an infrequently traveled local roadway with approximately 13 private residences), the resulting visual impact would be adverse but less than significant (Class III).

### ***Transmission Line East through Lemon Cove to the Big Creek-Springville Line***

In this portion of the Proposed Project, the new transmission line would run east passing through the outskirts of the community of Lemon Cove, a small foothill community of approximately 300 residents. The proposed alignment would cross SR 198, an eligible State scenic highway,

approximately 0.7 miles from the center of the community of Lemon Cove. The proposed alignment would continue in a generally easterly direction until it would terminate at the Big Creek 3-Springville 220 kV transmission line. The Proposed Project would pass within 300 feet of approximately 13 residences along this portion of the new ROW (ESA, 2009).

The primary affected viewers along this portion of the Proposed Project alignment would be motorists on SR 198 and other local roadways, as well as a limited number of residential viewers in the community of Lemon Cove area. Potential visual impacts to SR 198, an eligible State scenic highway, are discussed above under Impact 4.1-1. Potential impacts to other visual receptors are discussed below.

### **Local Roadways and Private Residents**

Within the community of Lemon Cove, the proposed alignment would be within the middleground and background of viewsheds from some residences as well as Sequoia Union Elementary School (approximately 1,000 feet away). Views of the proposed alignment from these residences and school would generally be partially to fully obstructed by intervening vegetation (i.e., ornamental and natural trees and shrubs) and the hilly topography. However, from a few residences, views of the Proposed Project would be unobstructed due to surrounding open fields and/or roadways. Nonetheless, the new tubular steel poles would not be visible against the skyline and therefore would not contribute to skyline or view blockage. Furthermore, the proposed alignment would be seen in context with an existing transmission line in which the Proposed Project would parallel through this area. The Proposed Project would introduce additional industrial character features into the existing landscape and would be subordinate to/co-dominant in visual dominance, as compared to existing homesteads and vegetation. Referring to Table 4.1-3, the overall visual change seen from the community of Lemon Cove would be moderate and in the context of the existing landscape's low-to-moderate visual sensitivity, the resulting visual impact would be adverse, but less than significant (Class III).

Figures 4.1-13a and 13b present a "before" and "after" view from Avenue 324 looking east towards the location where the new transmission line would connect to the existing Big Creek-Springville 220 kV transmission line. The surrounding area is largely undeveloped with the natural foothills landscape generally preserved and unaltered. As seen in the simulation, the existing view encompasses existing distribution wood poles in the foreground and middleground with several lattice steel towers of the existing 220kV transmission line seen against the grass covered hillside in the middleground. In addition, an existing gravel road is visible running partway up the hillside. Structure #102, a 130-foot tall tubular steel pole would be located approximately 475 feet from this viewpoint. In this viewshed, the upper portion of this pole would skyline (extend above the horizon line). This structure would appear visually prominent from Avenue 320 as it would be located less than 200 feet away from the local roadway. The other structures and conductors in this viewshed, including Structure #102A (a 130-foot tall tubular steel pole approximately a quarter of a mile away), Structure #103 (a 120-foot tubular steel pole approximately one-half mile away), as well as six single-phase poles ranging between 120 and 145 feet in height at the connection point, would not be as visible as neither the towers nor conductors would block the skyline or views, and would remain subordinate to co-dominate

compared to the existing landscape characteristics. The new transmission line would appear more prominent due to its noticeably taller poles than the existing wood poles, but overall, the proposed alignment would not substantially impact a visually sensitive area, as the roadway is infrequently traveled and motorists would have a view of relatively short duration. Referring to Table 4.1-3, the overall visual change would be moderate and in context of the existing landscape's low-to-moderate visual sensitivity, the resulting visual impact would be adverse, but not significant (Class III).

### ***Other Substation Areas***

Substation modifications at the Big Creek 3, Vestal, and Springville Substations would consist solely of electrical system and safety upgrades. Specifically, modifications at the substations would involve installation of new cable, conduit, and protective relays, as well as the removal of a wave trap and line tuner from each substation. All substation work would occur on previously disturbed areas within the current footprint of the substations, within existing fence lines. The overall visual change to the substations would be negligible, and the visual character would not be altered. Modifications to the substations would not be noticeable to the public. Therefore, impacts would be less than significant (Class III).

### ***Park and Recreation Areas***

Parks and recreational areas in the project area include the Kaweah Oaks Preserve and Cutler Park. As described in the *Setting*, recreational users would have limited views of the Proposed Project from Kaweah Oaks Preserve due to intervening vegetation. Viewer exposure would be considered low due to the low number of views, low view duration and limited visibility. Recreational users would have no views of the Proposed Project from Cutler Park. Therefore, installation of a new transmission line would result in a weak visual contrast and would not dominate nor obstruct views from park and recreation areas in the project area; impacts would be less than significant (Class III).

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### ***d) The Proposed Project could create a new source of light and glare that could adversely affect views in the area.***

**Impact 4.1-6: If night lighting is required during construction, the Proposed Project could adversely affect nighttime views in the project area. *Less than significant with mitigation* (Class II)**

Construction activities generally would be scheduled during daylight hours (7:00 am to 5:00 pm), minimizing the need for lighting. However, night construction activity may be required. If night construction is required, temporary lighting would be required for security, safety, and operational reasons at the project facilities, including the staging areas and pull/tensions sites. Night lighting could potentially result in impacts to visual resources by increasing ambient light to surrounding areas, creating distracting glare, and reducing sky or star visibility. Nearby land

uses, including residences and businesses, provide some lighting of their own. However, a large portion of the Proposed Project would be located in a relatively undeveloped area with features that would result in increased lighting contrast when compared to the lighted areas of the developed areas. Therefore, nighttime lighting could have a potentially significant impact to nighttime views in the project vicinity; however, this impact would be temporary due to the relatively short duration of project construction (nine to 12 months), the fact that work in any one location would be of much shorter duration (i.e., on order of several days to two weeks), and that nighttime work would not be a routine occurrence. Furthermore, with implementation of Mitigation Measure 4.1-6, which requires a *Construction Lighting Mitigation Plan* with the use of shielded lighting elements, directed fixtures, and motion or timing sensors, this impact would be reduced to less than significant.

**Mitigation Measure 4.1-6: Reduce construction night lighting impacts.** SCE shall design and install all lighting at project facilities, including construction and storage yards and staging areas, 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 *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 measures:

- Lighting shall be designed so exterior lighting is 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.

**Significant after Mitigation:** Less than Significant.

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**Impact 4.1-7: The Proposed Project could create new sources of glare. *Less than significant with mitigation* (Class II)**

#### **Rector Substation**

As discussed above, new equipment would be installed at Rector Substation including: relocation of the terminations of existing transmission lines, installation of two new circuit breakers, replacement of two existing circuit breakers, and installation of a new MEER. Additional lighting would be limited to the new MEER which would be equipped with a light that would be manually

switched on and off, and shielded to reduce glare. Because the new equipment and lighting to be installed at Rector Substation would be of the same nature as the existing Substation, it would blend in with the existing facilities. Additionally, this Substation is already visible to nearby residents and motorists traveling along the local roadway adjacent to the Substation. Existing vegetation at the Rector Substation would continue to provide some screening from potential glare created by the new equipment and lighting that could adversely affect day or nighttime views in the area. Therefore, the installation of new equipment at Rector Substation would not create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area.

#### **Other Substation Areas**

As discussed above, substation modifications at the Big Creek 3, Vestal, and Springville Substations would consist solely of electrical system and safety upgrades. Modifications at the substations would involve installation of new cable, conduit, and protective relays, as well as the removal of a wave trap and line tuner from each substation. Modifications would not require installation of additional lighting. Because the new equipment to be installed would be of the same nature as the existing substations, it would blend in with the existing facilities and not result in a new source of glare. Therefore, new equipment at the Big Creek 3, Vestal and Springville Substations would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

#### **Transmission Line**

The Proposed Project does not propose new lighting along the transmission line corridor. Therefore, no new sources of light would occur. However, the introduction of new poles/towers and overhead conductors where none currently exist could be a noticeable visual change as seen from some viewing locations during the daytime. The new poles would be treated in a non-reflective finish. The new lattice towers, new conductors and new insulators would be a potentially reflective surface which could cause glare. This effect could result in the new facilities appearing visible or prominent. This would be a potentially significant impact.

**Mitigation Measure 4.1-7:** Implement Mitigation Measure 4.1-1b.

**Significant after Mitigation:** Less than significant.

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### **4.1.5 Cumulative Impacts**

The geographic scope of the cumulative impacts to visual quality is the viewsheds that could be affected by the Proposed Project from public roadways, trails, open space, and residential areas. Viewsheds of the project vicinity are extensive, given the extensiveness of the landscapes traversed, general lack of vegetative screening, and moderate number of people who reside in northwestern Tulare County.

As discussed above, Mitigation Measures 4.1-1a through 4.1-7 would ensure that the Proposed Project would not result in significant individual effects on visual resources. The past, present, and reasonably foreseeable future projects described in Section 3.6, *Cumulative Projects*, includes numerous major development projects in northwestern Tulare County that could substantially alter the visual character of areas within the project vicinity. Many of these projects would have the potential to create new visual impacts within the viewsheds that could be affected by the Proposed Project from public roadways, trails, open space, and residential areas. However, the projects would generally be located in urbanized, developed areas and would therefore not be likely to affect the area's visual character. Additionally, future development within the project vicinity is guided by the applicable city and county General Plans, and associated planning and environmental documents. Furthermore, new development would be subject to the applicable city and county design review process.

The Proposed Project would add new or upgraded electrical infrastructure to the overall visual setting of the project area. The Proposed Project would contribute to cumulative adverse influences where aboveground facilities or evidence of underground facilities (e.g., cleared ROWs) occupy the same field of view as other built facilities or impacted landscapes that are currently in the viewsheds of sensitive viewers in the project area. Existing utility infrastructure (described in the impact analysis above), including transmission lines and substations, have compromised the existing visual setting in the project vicinity. However, the Proposed Project, along with the past, present, and reasonably foreseeable projects, would not create a cumulatively significant effect because it would not dominate the landscape setting.

When considered with the existing visual setting, the Proposed Project's contribution would not be cumulatively considerable because it would not significantly alter existing scenic quality or viewsheds (Class II).

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## 4.1.6 Alternatives

### No Project Alternative

Under the No Project Alternative, no new facilities would be constructed, and existing facilities would not be altered, expanded, or demolished. Implementation of this alternative would not affect scenic vistas, scenic resources, or the existing visual character of the surrounding area, and would not create any additional source of light or glare (No Impact).

### Alternative 2

Construction-related impacts associated with this alternative would be similar to the Proposed Project. This alternative would not require additional staging areas; therefore, implementation of Mitigation Measure 4.1-2 would reduce visual impacts from staging areas to less than significant (Class II). Additional temporary pulling/splicing sites may be required to accommodate the additional length of the transmission line. However, with implementation of Mitigation Measure 4.1-3, temporary adverse visual impacts associated with these temporary sites would be

reduced to less than significant (Class II). Alternative 2 would result in a greater possibility of nighttime construction work due to potential outage conditions resulting from the replacement of the existing Big Creek 1-Rector and Big Creek 3-Rector 220 kV transmission lines. As a result, impacts from night lighting would be greater than those for the Proposed Project. Nonetheless, with implementation of Mitigation Measure 4.1-6, impacts would remain less than significant (Class II).

For operations, visual impacts from Alternative 2 would generally be similar to or less than those for the Proposed Project. The Alternative 2 alignment would replace existing structures of similar height and width within existing SCE ROW for a significant portion of this alternative (approximately 10.8 miles). Within this existing ROW, Alternative 2 would pass within 300 feet of approximately 213 residences; in the new ROW it would pass within 300 feet of three residences (ESA, 2009).

While the Proposed Project would be visible from SR 198 for 9.2 miles, Alternative 2 would be visible from SR 198, an eligible State scenic highway, only where the alignment would cross the highway in the existing SCE ROW on the eastern outskirts of the City of Visalia. Motorists' views of the Alternative 2 power lines as they cross SR 198 would be similar to the simulation in Figure 4.1-9b (though surrounding vegetation would be less agricultural than in Figure 4.1-9b, and more urban.) As such, operation of Alternative 2 would have less impact to the visual quality of SR 198 than the Proposed Project. Furthermore, Alternative 2 would cross SR 245 only once, whereas the Proposed Project would be visible from SR 245 for several miles. Views of Alternative 2 from SR 245 would be similar to those in Figure 4.1-5b, though the terrain would be more agricultural with fewer man-made features. Alternative 2 would cross SR 216 once, though that crossing would be within the existing SCE ROW (the Proposed Project would not cross SR 216). Alternative 2 further differs from the Proposed Project in that it would not traverse Farmersville Boulevard, or SR 65. With the implementation of Mitigation Measure 4.1-1a and 4.1-1b for all structures that are visible from moderate to highly sensitive viewing locations (e.g., SR 198 [Structures #9 and #10], SR 216 [Structures #14, #15, and #16], and SR 245 [Structures #95, #96, and #97]), visual impacts from Alternative 2 would be reduced to less than significant (Class II).

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### Alternative 3

Construction-related impacts associated with this alternative would be similar to the Proposed Project. This alternative would not require additional staging areas; therefore, implementation of Mitigation Measure 4.1-2 would reduce visual impacts from staging areas to less than significant (Class II). Additional temporary pulling/splicing sites may be required to accommodate the additional length of the transmission line. However, with implementation of Mitigation Measure 4.1-3, temporary adverse visual impacts associated with operation of these temporary sites would be reduced to less than significant (Class II). Alternative 3 would result in a greater possibility of nighttime construction work due to potential outage conditions resulting from the replacement of the existing Big Creek 1-Rector and Big Creek 3-Rector 220 kV transmission

lines. As a result, impacts from night lighting would be greater than those for the Proposed Project. Nonetheless, with implementation of Mitigation Measure 4.1-6, impacts would remain less than significant (Class II).

For operations, visual impacts from Alternative 3 would generally be similar to or less than those for the Proposed Project. The proposed alignment would replace existing structures of similar height and width within existing SCE ROW for a significant portion of this alternative (approximately 14.6 miles). Within this existing ROW, Alternative 3 would pass within 300 feet of approximately 214 residences; it would not pass within 300 feet of any residences along the new ROW (ESA, 2009).

The new ROW for Alternative 3 would skyline along portions of the Stoke Mountain ridgeline, resulting in potentially significant impacts to visual quality, and would traverse a distinct natural foothills landscape, visible from Mira Vista Drive. In the existing ROW, Alternative 3 would be visible from SR 198 only where the alignment would cross the highway on the eastern outskirts of the City of Visalia, whereas the Proposed Project would be visible from SR 198 for 9.2 miles. As discussed above, motorists' views of the Alternative 3 power lines as they cross SR 198 would be similar to the simulation in Figure 4.1-9b (though surrounding vegetation would be less agricultural than in Figure 4.1-9b, and more urban). As such, Alternative 3 would have less impact to visual quality of SR 198 than the Proposed Project. Furthermore, Alternative 3 would not cross SR 245, whereas the Proposed Project would be visible from SR 245 for several miles. Alternative 3 would cross SR 216 once, though that crossing would be within the existing SCE ROW (the Proposed Project would not cross SR 216). Alternative 3 would also cross SR 201 once, in a similar fashion as the simulation in Figure 4.1-8b (although the road in Figure 4.1-8b is unpaved, whereas SR 201 is paved). Alternative 3 further differs from the Proposed Project in that it would not traverse Farmersville Boulevard or SR 65. With the implementation of Mitigation Measure 4.1-1a and 4.1-1b for all structures that are visible from moderate to highly sensitive viewing locations (e.g., SR 198 [Structures #9 and #10] and SR 216 [Structures #14, #15, and #16]), visual impacts from Alternative 3 would be reduced to less than significant (Class II).

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## Alternative 6

Construction-related impacts associated with Alternative 6 would be similar to the Proposed Project. This alternative would not require additional staging areas; therefore, implementation of Mitigation Measure 4.1-2 would reduce visual impacts from staging areas to less than significant (Class II). Additional temporary pulling/splicing sites may be required to accommodate the additional length of the transmission line. However, with implementation of Mitigation Measure 4.1-3, temporary adverse visual impacts associated with operation of these temporary sites would be reduced to less than significant (Class II). Alternative 6 would result in a greater possibility of nighttime construction work due to potential outage conditions resulting from the replacement of the existing Big Creek 1-Rector and Big Creek 3-Rector 220 kV transmission lines. As a result, impacts from night lighting would be greater than those for the Proposed

Project. Nonetheless, with implementation of Mitigation Measure 4.1-6, impacts would remain less than significant (Class II).

For operations, the proposed alignment would replace existing structures of similar height and width within existing SCE ROW for a significant portion of this alternative (approximately 8.1 miles). Within this existing ROW, Alternative 6 would pass within 300 feet of approximately 202 residences; in the new ROW it would pass within 300 feet of 11 residences (ESA, 2009).

While the Proposed Project would be visible from SR 198, an eligible State scenic highway, for 9.2 miles, Alternative 6 would be visible from SR 198 only where the alignment would cross the highway in the existing SCE ROW on the eastern outskirts of the City of Visalia. As discussed above, motorists' views of Alternative 6 power lines as they cross SR 198 would be similar to the simulation in Figure 4.1-9b (though surrounding vegetation would be less agricultural than in Figure 4.1-9b, and more urban). As such, operation of Alternative 6 would have less impact to visual quality of SR 198 than the Proposed Project.

While the Proposed Project would have no intersection with SR 216, Alternative 6 would cross SR 216 once (within the existing SCE ROW), and it would run parallel roughly one-half mile to the north of SR 216 for approximately 1.3 miles. Figure 4.1-7b shows a simulation of a transmission line located approximately one-half mile from a road (in this case SR 198). This figure provides an example of the approximate distance that Alternative 6 would be from SR 216; however, in Figure 4.1-7b the road is elevated, giving motorists an enhanced view of the transmission line, whereas SR 216 is at or below ground-level. In addition, as discussed in the *Setting*, the portion of SR 216 that parallels Alternative 6 is lined with orchards that would effectively screen most views of the transmission line. Figure 4.1-8b provides an example of orchard trees obscuring views of poles. In this figure the transmission line running east-west is located within a few hundred feet of viewer, and represents a viewer looking straight at the line. Alternative 6 would be located one-half mile from motorists and would be screened by orchards proportionately more. In addition, motorists would be travelling parallel to Alternative 6 instead of perpendicular to it. Consequently, views of Alternative 6 would be generally obscured, with intermittent glimpses of poles/towers or conductors.

Alternative 6 would parallel SR 245 for approximately one-half mile, running adjacent to the road. Motorists views would be similar to those shown in Figure 4.1-11b, though Alternative 6 would be located closer to the road. Consequently, impacts to motorists along SR 245 would be greater than those for the Proposed Project. Nevertheless, views of Alternative 6 would be of short duration, lasting approximately 30 seconds. Alternative 6 further differs from the Proposed Project in that it would not traverse Farmersville Boulevard or SR 65. With the implementation of Mitigation Measure 4.1-1a and 4.1-1b for all structures that are visible from moderate to highly sensitive viewing locations (e.g., SR 198 [Structures #9 and #10], SR 216 [Structures #14, #15, and #16], and SR 245 [where Alternative 6 runs parallel for approximately one-half mile]), visual impacts from Alternative 6 would be reduced to less than significant (Class II).

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