

C.11 VISUAL RESOURCES

This chapter provides an update regarding the potential impacts of the Proposed Project and Alternatives on visual resources from those presented in the Final Environmental Impact Statement/Environmental Impact Report (FEIS/EIR) for the California-Oregon Transmission Project and the Los Banos-Gates Transmission Project (TANC/WAPA, 1988).

The Project area has not undergone substantial development since the 1988 FEIS/EIR was published. However, a considerable amount of open grazing land has been converted to irrigated agriculture, particularly along the southern half of the Proposed Western Corridor, and these changes are noticeable in the landscape. There has also been development of additional highway service establishments and some local roads have been improved to carry increasing traffic volumes. Also, State Highway 33 was identified as a county-designated scenic highway in the 1988 FEIS/EIR but presently is not. It is Highway 198 that is designated a scenic highway.

The regulator setting is unchanged. The Proposed Project passes adjacent to the U.S. Bureau of Land Management's (BLM) Panoche Hills Wilderness Study Area. After study, the BLM has determined that this area will not support Wilderness Area designation. However, the designations can be changed only by Congress, and that has not yet occurred.

The visual resource analytical methodology utilized in the original document was based on the U.S. Bureau of Land Management Visual Resource Management (VRM) system, which is used for the evaluation of public lands (and projects on public lands), administered by the Bureau of Land Management. However, the development of VRM classifications and subsequent VRM system-based analysis conducted for the 1988 FEIS/EIR is only marginally relevant to a project that is composed almost entirely of private and non-federal lands that would not be subject to BLM visual resource management prescriptions. While this approach was not uncommon in the 1980's, it is considerably less applicable than the more integrative approaches of current visual resource methodologies for projects on non-federal lands, such as that employed for the present analysis.

It is difficult to compare the conclusions of this SEIR with those of the FEIS/EIR because the conclusions of the earlier document are not entirely clear for visual resources. The previous analysis did identify significant visual impacts on scenic highways and recreation areas; this SEIR considers visual impacts to be less than significant (**Class III**). The FEIS/EIR identified several general mitigation measures, but there was no connection made between the mitigation measures and specific significant impacts. The measures were described as being "...intended to reduce high and moderate levels of visual impacts described as significant..." (1988 FEIS/EIR, p.4.7-20). Therefore, there was no indication within the Visual Resources section as to whether or not the significant impacts identified would remain significant following implementation of the suggested mitigation measures or would be mitigated to a level that was not significant. In Table 2B, Summary of Impacts, the FEIS/EIR did include "impacts on scenic quality" as a significant impact that could not be mitigated to less than significant. In contrast, this SEIR identifies a number of adverse but not significant (**Class III**) visual impacts and provides the back-up field analysis and simulations to substantiate those conclusions.

The conclusion of the visual resources analysis is that the Proposed Western Corridor is preferred over the Eastern Corridor Alternative.

C.11.1 ENVIRONMENTAL BASELINE

C.11.1.1 Regional Overview

The Proposed Project is located primarily in Merced and Fresno Counties in the western San Joaquin Valley. The landscape along the Proposed Project (Western Corridor) falls within the low coastal mountain landscape province of California. The landscape contains hilly terrain with varied landforms, primarily large rolling hills with gentle to moderately steep slopes. Vegetation is primarily grassland, with more diverse vegetation in the stream courses and drainage channels, most of which are inconspicuous from a distance. Larger and more visible water bodies include the Los Banos Reservoir and the Little Panoche Reservoir. Rock outcroppings occur on the hillslopes. Built elements within the study area include transmission towers, farm buildings, and occasional roadside commercial facilities. Views of these structural elements from Interstate 5 (I-5) are few and intermittent, with the exception of the 230 kV and 500 kV transmission towers, which are frequently although often inconspicuously visible from I-5 (the primary roadway in the study area), at varying distances up to three miles. Intensive agriculture in the form of row crops and orchards are becoming more prominent on the more level alluvial fans and western margin of the valley floor as the conversion from rangeland/grassland to irrigated agriculture continues. Views to the west from I-5 are typically dominated by the ridgelines of the Diablo Range that form much of the western boundary of the San Joaquin Valley. In some areas, a slightly elevated viewing perspective available from I-5 provides panoramic views to the east that encompass broad expanses of agricultural lands, the more distant of which are frequently obscured by haze.

C.11.1.2 Environmental Setting: Proposed Project

C.11.1.2.1 *Visual Setting Terminology*

Before addressing the environmental setting, it is important to briefly review the concepts and terminology that are commonly used in characterizing and evaluating existing landscapes and viewsheds.

The visual resources of a given area consist of the landforms, vegetation, water features, and cultural modifications (physical changes caused by human activities) that impart an overall visual impression of the area landscape. There are a number of factors that are considered in the evaluation of a landscape's visual resources in order to assess the potential for one or more visual impacts to occur (visual impact susceptibility), including: visual quality, visual absorption capacity, viewer sensitivity, and viewer exposure. Each of these factors is generally expressed as low, low-to-moderate, moderate, moderate-to-high, or high as discussed below.

Visual Quality is a measure of the overall impression or appeal of an area as determined by the particular landscape characteristics such as landforms, rockforms, water features, and vegetation

patterns, as well as associated public values. The attributes of variety, vividness, coherence, uniqueness, harmony, and pattern contribute to visual quality classifications of indistinctive (low), common (moderate), and distinctive (high). Visual quality is studied as a point of reference to assess whether a given project would appear compatible with the established features of the setting or would contrast noticeably and unfavorably with them.

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

Viewer Exposure describes the degree to which viewers are exposed to views of the landscape. Viewer exposure considers landscape visibility (the ability to see the landscape), distance zones (proximity of viewers to the subject landscape), number of viewers, and the duration of view. Landscape visibility can be a function of several interconnected considerations including proximity to viewing point, degree of discernible detail, seasonal variations (snow, fog, and haze can obscure landscapes), time of day, and presence or absence of screening features such as landforms, vegetation, and/or built structures. Even though a landscape may have highly scenic qualities, it may be remote, receiving relatively few visitors and, thus, have a low degree of viewer exposure. Conversely, a subject landscape or project may be situated in relatively close proximity to a major road or highway utilized by a substantial number of motorists and yet still result in relatively low viewer exposure if the rate of travel speed on the roadway is high and viewing times are brief, or if the landscape is partially screened by vegetation or other features. Frequently, it is the subject area's proximity to viewers, or *distance zone*, that is of particular importance in determining viewer exposure. Landscapes are generally subdivided into three or four distance zones based on relative visibility from travel routes or observation points. Distance zones typically include foreground, middleground, and background. The actual number of zones and distance assigned to each zone is dependent on the existing terrain characteristics and public policy, and is often determined on a project by project basis. For the present project, distance zones are defined as follows: Foreground = less than or equal to ½ mile; Middleground = ½ to 2 miles; and Background = 2 miles and beyond.

Overall Visual Sensitivity is a concluding assessment as to the degree of probability that a given landscape will demonstrate a noticeable visual impact with project implementation. Visual sensitivity is derived from a comparison of existing visual quality, viewer concern, and viewer exposure.

Key Viewpoints (KVPs) are locations from which the visual analysis is focused. KVPs are generally selected to be representative of the most critical locations from which the project will be seen. KVPs are often located in an effort to evaluate existing landscapes and potential impacts on visual resources with various levels of sensitivity, in different landscape types and terrain, and from various vantage points. Typical KVP locations for the Proposed Project include: (1) along major or significant travel corridors or points of visual access; (2) at key vista points; (3) at significant recreation areas; and (4) at locations that provide good examples of the existing visual context. Figure C.11-1 shows the location of each KVP selected for detailed analysis (all Figures for Visual Resources are presented at the end of

this section). A summary of the visual analysis conducted at each viewpoint is presented in the foldout table in Appendix VR-1 (at the end of this section). At each KVP, the existing landscape was photographed and in some cases, a visual simulation was prepared. All figures are provided in Appendix VR-2.

C.11.1.2.2 Segment 1

This segment is part of the Diablo Mountain Range and is within the Low Coastal Mountain Landscape province of California. The typical landforms consist of low, rolling hills with rounded or flat tops, some with steep side slopes, with drainage channels and small stream courses. Rocky outcrops dot the hills in some areas, and some bare soil is visible in eroded areas. Vegetation in this area consists primarily of grassland with some riparian growth in the stream channels. The vegetation pattern is generally uniform, dominated by smooth grassland, with variation resulting only from seasonal color changes. Cultural modifications in most of the area are few, and consist of roads, water conveyance facilities, and the 230 kV and 500 kV transmission lines and substation.

From Los Banos Substation, the Western Corridor would extend to the southwest, paralleling an existing 500 kV transmission line across level grassland for slightly less than one mile before turning south to ascend the rolling hills south of Los Banos Substation and eventually paralleling two 500 kV transmission lines down the west side of the San Joaquin Valley.

Figure C.11-2 presents an existing view from Gonzaga Road, approximately 0.85 mile west of Los Banos Substation. Viewing to the southeast, this viewpoint represents the eastbound view from State Route 152 (SR-152, a state-designated scenic highway), which is located immediately adjacent to the viewpoint. This location provides panoramic views of level grazing land and low, rolling, grass-covered hills to the south. Prominent in the landscape is the complex industrial appearance of Los Banos Substation and the profusion of electric transmission lines converging on the substation. As a result, visual quality is low-to-moderate. In spite of SR-152's status as a designated scenic highway, viewer concern is rated moderate as travelers anticipate a rather non-distinctive landscape with prominent energy transmission infrastructure in this vicinity. Overall viewer exposure is rated moderate, reflecting the moderate visibility of the proposed corridor in the middleground of views. Although the number of potential viewers is high, the duration of view is moderate reflecting the high rate of travel speed. The low-to-moderate visual quality of the existing landscape, moderate viewer concern, and overall moderate viewer exposure lead to a moderate rating for overall visual sensitivity.

C.11.1.2.3 Segment 2

The landscape along Segment 2 is similar to that described above for Segment 1. Segment 2 continues to parallel the existing two 500 kV transmission lines from approximately Milepost (MP) 1 to MP 14.5, crossing low, rounded to angular, grass-covered hills and ridges and incised drainages. Near MP 6, the corridor crosses the western end of Los Banos Reservoir.

Key Viewpoint 1 was established near the Los Banos Creek Recreation Area Day Use Area (Figure C.11-3A). The Segment 2 corridor is approximately 2.8 miles west of **Key Viewpoint 1**. Viewing to

the west, this viewpoint provides a representative view from a portion of the Recreation Area receiving substantial visitor use. Visual Quality is moderate because the panoramic view captures more visual variety and interest than found in much of the adjoining landscape. The golden grass-covered hills enclose the blue water of the reservoir with its border of green trees. The lavender, angular form of the Diablo Range to the west extends slightly above the rolling hills, adding color contrast and visual interest. However, the existing visual quality is affected by the presence of the two 500 kV transmission lines. Viewer concern is rated moderate, as viewers accustomed to a predominantly undeveloped rural landscape, would perceive the introduction of additional transmission line structures with industrial character as an adverse visual change. Corridor visibility is low given the background viewing distance. The number of viewers would be moderate, as would the duration of view. Overall viewer exposure would be low-to-moderate, which when combined with moderate visual quality and viewer concern, leads to an overall moderate visual sensitivity.

C.11.1.2.4 *Segment 3*

Segment 3 continues to parallel the existing two 500 kV transmission lines from approximately MP 14.5 to MP 20.5. The landscape along Segment 3 is similar to that described above for Segments 1 and 2 with the vegetative pattern being very uniform, with smooth grassland dominating. Riparian vegetation is located in drainage courses and variation occurs with seasonal color changes from buff and brown to green. Cultural modifications are limited to a few isolated farm buildings, fences, water reservoirs for cattle, and transmission line structures. Viewer exposure to this segment is low given the general absence of paved roads in the area and the relatively few visitors.

C.11.1.2.5 *Segment 4*

Segment 4 continues to parallel the exiting two 500 kV transmission lines from approximately MP 20.5 to MP 29, spanning east of the Little Panoche Reservoir dam near MP 23. The Panoche area consists of a large series of rounded rolling hills with gentle to moderately steep sides. The hills range in elevation from about 2,300 feet down to 500 feet where they meet the San Joaquin Valley floor. This landscape begins the transition from the rough, steep-sided slopes of the Diablo Range to the broad flat agricultural plains of the Central Valley. Vegetation consists primarily of valley grassland with scattered blocks of low growing shrubs speckling the area. Stream drainages support denser and more varied vegetation communities, and while their influence seldom produces dominant contrasts in the landscape, they do provide some relief to the nearly homogenous slopes surrounding the stream paths. Cultural modifications include infrequently traveled roads, scars from off-road vehicles (ORV) traffic on hillsides, utility structures, fences, a few scattered ranches, and landscape modifications from oil and gas exploration. However, none of the modifications significantly impairs the landscape except when in close proximity to those developments, and the impact lessens with increased distance from the modifications.

Key Viewpoint 2 was established on Little Panoche Road, just west of the Little Panoche Reservoir dam (Figure C.11-4A). Viewing to the east, this viewpoint provides a representative view from the reservoir area that would be experienced by visitors or motorists passing by. Although the reservoir

does add visual variety and provides some visual contrast to the otherwise monotone landscape, visual quality is relatively indistinctive and is rated low-to-moderate. Visible cultural modifications include the road, dam, and two existing 500 kV transmission lines to the east of the reservoir. Viewer concern is rated moderate as users of Little Panoche Reservoir and motorists on Little Panoche Road anticipate a relatively indistinctive rural landscape and the presence of existing transmission lines in the area, but would perceive the introduction of additional transmission line structures with industrial character as an adverse visual change. Route visibility is high given the foreground viewing distance. The number of viewers would be low, although the duration of view would be extended. Overall viewer exposure would be moderate-to-high, which when combined with low-to-moderate visual quality and moderate viewer concern, leads to an overall moderate visual sensitivity.

C.11.1.2.6 *Segment 5*

Segment 5 extends from approximately MP 29 to MP 71, paralleling the two existing 500 kV transmission lines until MP 69 when the existing lines cross to the east side of I-5. Segment 5 passes through both the low Coastal Mountain landscape province and the Greater Valley landscape province. The landscape along the northern one-third of Segment 5 is similar to that previously described for Segment 4. The southern two-thirds of Segment 5 pass through a landscape that is dominated by rounded hills with flat tops and steep to moderate slopes which transition to the flat agricultural fields of the valley floor. Vegetation in the lower hills consists mainly of savannah grasslands or no vegetation where erosion has left areas devoid of topsoil. Much of the rest of the area includes a series of oaks dotting the valleys and hillsides in scattered arrangements with some random dense patches where brush dominates. The agricultural lands extend along the valley floor often to the horizon with little perceptible topographic variation. The changing seasons provide color changes in the vegetation pattern, from buff to green for the grasslands and gray and brown to green and yellow for the croplands. Cultural modifications include scattered homes and ranches, travel corridors, fences, and in the southern portion of the segment, oil and gas field facilities.

Key Viewpoint 3 was established on northbound I-5, approximately 1.5 miles north of Russell Avenue (Figure C.11-5). Viewing to the west, Segment 5 would be located along the base of the hills, beyond the two existing 500 kV transmission lines. Views from I-5 in this area are open and panoramic, encompassing agricultural and grazing lands, and the rolling grass-covered Panoche Hills. The green agricultural crops provide some seasonal visual variety and contrast to the monotone coloration of the nearby hills. The existing utility lines are minimally noticeable at this middleground viewing distance. Viewer concern is moderate as motorists on I-5 anticipate a relatively uniform landscape of agricultural lands and uses backdropped by grass-covered hills. The existing transmission lines are frequently visible throughout this portion of Segment 5 and partially condition viewer landscape expectations. Route visibility is low-to-moderate in the middleground of views while the number of viewers is high and the duration of view is moderate. Overall viewer exposure would be moderate, which when combined with low-to-moderate visual quality and moderate viewer concern, leads to an overall moderate visual sensitivity.

C.11.1.2.7 *Segment 6*

Segment 6 extends from approximately MP 71 to MP 79. The landscape along Segment 6 is similar to that described above for the southern two-thirds of Segment 5 with the exception that Segment 6 does not contain the vertical forms of transmission line towers in the landscape as do the northerly five segments. Much of the northern portion of Segment 6 passes through irrigated agricultural fields as shown in Figure C.11-6, while the southern portion crosses more open grassland.

Key Viewpoint 4 was established on northbound I-5, approximately 8.25 miles north of Jayne Avenue (Figure C.11-6). Viewing to the west from I-5, much of the northern portion of Segment 6 would pass through irrigated agricultural fields located along alluvial fans and the western margin of the valley floor. From this viewpoint, Segment 6 would be visible at a distance similar to the existing transmission lines shown in Figure C.11-5. Views from I-5 in this area are open and panoramic, encompassing agricultural and grazing lands, and the rolling grass-covered Panoche Hills. The green agricultural crops provide some seasonal visual variety and contrast to the monotone coloration of the nearby hills. Aside from the apparent agricultural modifications, the landscape is predominantly natural in appearance with a general absence of the industrial character that is typically associated with transmission lines. Viewer concern is moderate as motorists on I-5 anticipate a relatively uniform landscape of agricultural lands and uses backdropped by grass-covered hills. The introduction of electric transmission structures would be perceived as an adverse visual change. Route visibility is low in the middleground of views while the number of viewers is high and the duration of view is moderate. Overall viewer exposure would be moderate, which when combined with low-to-moderate visual quality and moderate viewer concern, leads to an overall moderate visual sensitivity.

Key Viewpoint 5 was established on southbound El Dorado Avenue, just south of the I-5 overpass (Figure C.11-7). From this viewpoint, Proposed Segment 6 would pass through open grasslands dotted with scrub vegetation in the middleground of views. Views from El Dorado Avenue in this area are open and panoramic, encompassing a rural, agricultural landscape dominated by the flat landform of Upper Pleasant Valley and the Gujarral Hills, and more distant southern extension of the Diablo Range in the background. There are few structures of industrial character visible in the landscape. Residents and motorists along El Dorado Avenue anticipate a rural landscape with minimal industrial character. Although resource extraction facilities are present in the area, they are for the most part, not noticeable. The addition of transmission structures would be perceived as an adverse change and viewer concern is rated moderate-to-high. Route visibility is moderate in the middleground of views while the number of viewers is low-to-moderate and the duration of view is extended. Overall viewer exposure would be moderate, which when combined with low-to-moderate visual quality and moderate-to-high viewer concern, leads to an overall moderate visual sensitivity.

C.11.1.2.8 *Segment 7*

Segment 7 extends east from approximately MP 79 to the Gates Substation, just south of MP 83. Segment 7 passes through both open grasslands west of I-5 and irrigated croplands west and east of I-5. The landscape along the western one-half of this segment is similar to that previously described for

Segment 6. The landscape along the eastern half of this segment can be characterized as flat agricultural land stretching to the horizon with little perceptible topographical variation and the only noticeable changes associated with vegetation patterns. Although the vegetation patterns provide little variety, the color of the landscape does exhibit some seasonal variation when the dominant buff to brown color changes to green, or when areas of cultivated bare soil provide striated linear contrast with adjacent, solid vegetative cover. Cultural influences include Jayne Avenue and I-5, the existing Gates Substation and the numerous transmission lines converging on the substation, a few scattered farmhouses and agricultural buildings, fences, and some landscaping around farms.

Key Viewpoint 6 was established on northbound I-5, just north of Jayne Avenue (Figure C.11-8). Viewing to the northwest, Segment 7 would span I-5 from west to east in the foreground of the view. Views from I-5 in this area are panoramic, encompassing a wide field of view from the hills along the western border of the valley, sweeping to the east across the expansive agricultural fields of the valley floor. Overall visual quality is low-to-moderate as this rural landscape is dominated by foreground to middleground agricultural fields and the I-5 corridor, with the southern extension of the Diablo Range providing a backdrop to the west. Viewer concern is moderate as motorists on I-5 anticipate panoramic landscapes of rural agricultural character with minimal industrial intrusion in this area. The addition of prominent transmission structures would be perceived as an adverse visual change. Route visibility is high as the route spans I-5 and would be visible from foreground to middleground viewing distances in the primary direction of view for both north and southbound motorists. The number of viewers is high and the duration of view is extended. Overall viewer exposure would be high, which when combined with low-to-moderate visual quality and moderate viewer concern, results in an overall moderate visual sensitivity.

C.11.1.3 Environmental Setting: Western Corridor Alternative Segments

C.11.1.3.1 Segment 2A

The landscape along Alternative Segment 2A is similar to that described above for Proposed Segments 1 and 2. As with Segment 2, Segment 2A would parallel the existing two 500 kV transmission lines from approximately MP 1 to MP 14.5, crossing low, rounded to angular, grass-covered hills and ridges and incised drainages. However, near MP 6, the Segment 2A would cross the western end of Los Banos Reservoir approximately one mile further to the west than Segment 2. Figure C.11-3A shows the view from **Key Viewpoint 1**, established for Proposed Segment 2. This viewpoint is near the Los Banos Creek Recreation Area Day Use Area. Segment 2A would be approximately 3.6 miles from the viewer (to the west) in this image or approximately 1.8 miles beyond the existing 500 kV transmission lines visible in the distance. Viewed from this vantagepoint, visual quality is moderate because the panoramic view captures more visual variety and interest than found in much of the adjoining landscape. The golden grass-covered hills enclose the blue water of the reservoir with its border of green trees. The lavender, angular form of the Diablo Range to the west extends slightly above the rolling hills, adding color contrast and visual interest. However, the existing visual quality is affected by the presence of the two 500 kV transmission lines. Viewer concern is rated moderate-to-high as the recreational visitors visiting the area are accustomed to a predominantly undeveloped rural landscape

and would perceive the introduction of additional transmission line structures with industrial character as an adverse visual change. Route visibility is low given the background viewing distance. The number of viewers would be moderate, as would the duration of view. Overall viewer exposure would be low-to-moderate, which when combined with moderate visual quality and viewer concern, leads to an overall moderate visual sensitivity.

C.11.1.3.2 Segment 4A

As for Proposed Segment 4, Alternative Segment 4A would continue to parallel the exiting two 500 kV transmission lines from approximately MP 20.5 to MP 29, but diverging from the existing lines and the Segment 4 route to cross Little Panoche Creek approximately 1.3 miles to the west of Segment 4. The landscape along Segment 4A exhibits the transition from the Diablo Range to the Central Valley. The Panoche area is a large series of rounded rolling hills with gentle to moderately steep sides. The hills range in elevation from about 2,300 feet down to 500 feet where they meet the San Joaquin Valley floor. These hills begin the transition from the rough, steep-sided slopes of the Diablo Range to the broad flat agricultural plains of the Central Valley. Vegetation consists primarily of valley grassland with scattered blocks of low growing shrubs speckling the area. Stream drainages support denser and more varied vegetation communities, but their influence seldom produces dominant contrasts in the landscape though they do provide some relief to the nearly homogenous slopes surrounding the stream paths. Cultural modifications include infrequently traveled roads, scars from ORV traffic on hillsides, utility structures, fences, a few scattered ranches, and landscape modifications from oil and gas exploration. However, none of the modifications significantly impairs the landscape except when in close proximity to those developments, and the impact lessens with increased distance from the modifications.

Key Viewpoint 7 was established on Little Panoche Road, just west of the Little Panoche Reservoir dam (Figure C.11-9). Viewing to the southwest, this viewpoint provides a representative view from the reservoir area that would be experienced by visitors or motorists passing by. Although the riparian vegetation along the creek and the steep slopes of the banks on the south side of the creek do add visual variety and provide some visual contrast to the otherwise monotone landscape, visual quality is relatively indistinctive and is rated low-to-moderate. Visible cultural modifications are limited to the road and adjacent fence. Viewer concern is rated moderate as users of Little Panoche Reservoir and motorists on Little Panoche Road anticipate a relatively indistinctive rural landscape and the presence of existing transmission lines in the area, but would perceive the introduction of additional transmission line structures with industrial character as an adverse visual change. Route visibility is moderate-to-high given the unobstructed middleground viewing distance and skylining that occurs when the structures extend above the horizon south of the creek. The number of viewers would be low, although the duration of view would be extended. Overall viewer exposure would be moderate-to-high, which when combined with low-to-moderate visual quality and moderate viewer concern, leads to an overall moderate visual sensitivity.

C.11.1.3.3 *Segment 6A*

Alternative Segment 6A extends from approximately MP 69 to MP 79. The landscape along Proposed Segment 6 is similar to that described above for the southern two-thirds of Proposed Segment 5, with the exception that Segment 6A does not contain the vertical forms of transmission lines in the landscape as do the northerly five segments. Much of the northern portion of Segment 6 passes through irrigated agricultural fields as shown in Figure C.11-6 while the southern portion crosses more open grassland.

Figure C.11-6 shows the view from northbound I-5, approximately 8.25 miles north of Jayne Avenue. Viewing to the west from I-5, much of the northern portion of Alternative Segment 6A would pass through irrigated agricultural fields located along alluvial fans and the western margin of the valley floor. From this viewpoint, Segment 6A would be visible at a middleground distance of slightly less than one mile, appearing closer to the viewer than the existing transmission lines shown in Figure C.11-5. Views from I-5 in this area are open and panoramic, encompassing agricultural and grazing lands, and the rolling grass-covered Panoche Hills. The green agricultural crops provide some seasonal visual variety and contrast to the monotone coloration of the nearby hills. Aside from the apparent agricultural modifications, the landscape is predominantly natural in appearance with a general absence of industrial character that would typically be associated with transmission lines. Visual quality is low-to-moderate. Viewer concern is moderate as motorists on I-5 anticipate a relatively uniform landscape of agricultural lands and uses backdropped by grass-covered hills. The introduction of electric transmission structures would be perceived as an adverse visual change. Route visibility is moderate in the middleground of views while the number of viewers is high and the duration of view is moderate. Overall viewer exposure would be moderate, which when combined with low-to-moderate visual quality and moderate viewer concern, leads to an overall moderate visual sensitivity.

Further south, Segment 6A is visible from El Dorado Avenue, just south of the I-5 overpass at a close middleground distance of just over one-half mile (Figure C.11-7). From this viewpoint, Segment 6A would pass through open grasslands dotted with scrub vegetation. Views from El Dorado Avenue in this area are open and panoramic, encompassing a rural, agricultural landscape dominated by the flat landform of Upper Pleasant Valley, the Gujarral Hills to the south, and more distant southern extension of the Diablo Range in the background. There are few structures of industrial character visible in the landscape. Residents and motorists along El Dorado Avenue and motorists along I-5 anticipate a rural landscape with minimal industrial character. Although resource extraction facilities are present in the area, they are for the most part, distant and not noticeable. The addition of transmission structures would be perceived as an adverse change and viewer concern is rated moderate-to-high. Route visibility is moderate in the close middleground of views while the number of viewers is low-to-moderate for El Dorado Road (but high for nearby I-5) and the duration of view is extended. Overall viewer exposure would be moderate, which when combined with low-to-moderate visual quality and moderate-to-high viewer concern, leads to an overall moderate visual sensitivity.

C.11.1.3.4 Segment 6B

Similar to Segments 6 and 6A, Alternative Segment 6B extends from approximately MP 69 to MP 79. The landscape along Segment 6B is similar to that described above for Segments 6 and 6A.

Figure C.11-10 shows the view from Jayne Avenue, approximately 4.5 miles west of I-5. Viewing to the north from Jayne Avenue, Alternative Segment 6B would pass through undeveloped grasslands of Upper Pleasant Valley (see also Figure C.11-7). From Jayne Avenue, visual quality is low-to-moderate, characterized by foreground to middleground monotonal, flat grasslands and low rolling hills. The predominantly horizontal landforms generally lack distinguishing features and visual variety. However, few cultural modifications are noticeable in the landscape. Motorists on Jayne Avenue anticipate a relatively indistinctive rural landscape that lacks the presence of industrial features. The introduction of prominent vertical structures with industrial character would be perceived as an adverse visual change and viewer concern is rated moderate. Visibility of Segment 6B would be high as the route converges on Jayne Avenue and then turns to parallel Jayne Avenue in the foreground, east to Gates Substation, approximately 2.2 miles east of I-5. The number of viewers along Jayne Avenue is moderate with durations of view ranging from moderate to extended. Overall viewer exposure would be moderate-to-high, which when combined with low-to-moderate visual quality and moderate viewer concern, leads to an overall moderate visual sensitivity.

C.11.1.4 Environmental Setting: Eastern Corridor Alternative

C.11.1.4.1 Segment 1

Segment 1 of the Eastern Corridor Alternative would exit Los Banos Substation, paralleling two existing 230 kV transmission lines south and then southeast to MP 2. In Figure C.11-2, the two 230 kV lines are visible in the right side of the photograph (in the saddle of two hills). The landscape description and visual setting for this corridor segment is the same as that provided above for Segment 1 of the Western Corridor.

C.11.1.4.2 Segment 2

Segment 2 continues to parallel the existing 230 kV lines southeast from MP 2 to MP 9, spanning the Dam at Los Banos Creek Recreation Area near MP 6.5. The general landscape description along Segment 2 is similar to that presented above for Proposed Segment 2 of the Western Corridor, with the exception that the Eastern Corridor Alternative parallels two 230 kV lines instead of two 500 kV lines which have taller structures.

Key Viewpoint 8 was established near the Los Banos Creek Recreation Area Day Use Area (Figure C.11-11A). Segment 2 is slightly more than one-half mile east of **Key Viewpoint 8**. Viewing to the east, this viewpoint provides a representative view from a portion of the Recreation Area receiving substantial visitor use. As shown in Figure C.11-11A, views toward Segment 2 are open and unobstructed. Visual Quality is moderate as the panoramic view captures more visual variety and interest than found in much of the adjoining landscape. The golden grass-covered hills enclose the blue

water of the reservoir with a scattering of green trees bordering the reservoir. This viewpoint offers a vista view to the east over the agricultural fields of the western valley floor, which adds visual variety and interest to the landscape. However, the existing visual quality is affected by the presence of the two 230 kV transmission lines, which are clearly visible as they span the spillway to the immediate east of the dam. Viewer concern is rated moderate-to-high as visitors to the Recreation Area anticipate a primarily undeveloped rural landscape dominated by natural forms and characteristics. The introduction of more prominent transmission structures in close proximity to the reservoir would be perceived as an adverse visual change. Route visibility is high given the near middleground viewing distance and the skylining effect that would occur since the new structures would extend above the horizon line. The number of viewers would be moderate and the duration of view would be extended with visitors at the day use area and on the reservoir having clear and unobstructed views of the span. Overall viewer exposure would be high, which when combined with moderate visual quality and moderate-to-high viewer concern, leads to an overall moderate-to-high visual sensitivity.

C.11.1.4.3 *Segment 3*

Segment 3 continues to parallel the existing 230 kV lines southeast from MP 9 to MP 17. The entire length of this segment (and existing 230 kV transmission lines) would be located immediately adjacent and to the west of I-5. The general landscape description along Segment 3 is similar to that presented above for Proposed Segments 2 and 3 of the Western Corridor, with the exception that the Eastern Corridor Alternative parallels two 230 kV lines instead of two 500 kV lines, and I-5 with its two linear ribbons of dark asphalt has a significant influence on the immediate route landscape.

Key Viewpoint 9 was established on northbound I-5, just north of the existing 230 kV line crossing of I-5 near MP 16. As shown in Figure C.11-12, the two existing 230 kV lines are dominant features in the I-5 landscape that also includes the prominent angular to rounded landforms of the adjacent grass-covered hills. Although panoramic views of the hills are available along this portion of I-5, the landscape to the west of the freeway is monotonal. Visual Quality of the highly modified landscape is low-to-moderate, reflecting the dominance of both the existing transmission lines and I-5. Viewer concern is rated moderate as motorists on I-5 anticipate a relatively uniform landscape of grass covered rolling hills to the west and irrigated agricultural fields to the east, with prominent utility infrastructures in the foreground of views. Despite the prominence of the existing 230 kV lines, the introduction of additional structures into the foreground would be perceived as an adverse visual change. Route visibility is high given the foreground viewing distance and the skylining effect that would occur, as the new structures would extend above the horizon line. The number of viewers would be high and the duration of view would be extended. Overall viewer exposure would be high, which when combined with low-to-moderate visual quality and moderate viewer concern, leads to an overall moderate visual sensitivity.

C.11.1.4.4 *Segment 4*

Segment 4 continues to parallel the existing 230 kV lines southeast from MP 17 to MP 47. The entire length of this segment (and existing 230 kV transmission lines) would be located east of I-5 at varying

distances ranging from immediately adjacent to the freeway to approximately 2.5 miles east. All of Segments 4, 5, and 6 are located within the Great Valley landscape province which consists of flat agricultural land stretching to the horizon with little perceptible topographical variation beyond that exhibited by changes in crop patterns and seasonal colors. Areas of cultivated bare soil also exhibit striated lines that provide some contrast with adjacent planted fields. Cultural modifications include the 230 kV transmission lines, scattered farmhouses and buildings, fences, roads, and landscaping around farms. From I-5, which provides the primary visual access to the area, the landscape appears as a flat plane with the few isolated vertical elements (transmission towers, trees, and buildings) skylined as they extend above the low horizon line of the valley floor. Most cultural modifications are subordinate to the broad landform of the valley floor. The exception is the 230 kV transmission line corridor when it approaches within the foreground of views from I-5. As discussed below for Segment 5, Segment 4's low-to-moderate visual quality and moderate viewer concern, when combined with a high overall viewer exposure, leads to an overall moderate visual sensitivity.

C.11.1.4.5 *Segment 5*

Segment 5 continues to parallel the existing 230 kV lines southeast from MP 47 to MP 69.5, adjacent and to the east of I-5. The general landscape description along Segment 5 is similar to that presented above for Segment 4.

Figure C.11-13 shows the view to the north from the Derrick Avenue / I-5 overpass near MP 55. Segment 5 would be located adjacent to but on the freeway side of the existing 230 kV transmission lines faintly visible in the photograph. Visual quality along this segment is low-to-moderate reflecting open, panoramic views that encompass irrigated fields and grazing lands, scattered agricultural facilities, energy transmission infrastructure, and the I-5 transportation corridor. Green agricultural crops provide some seasonal visual variety and color contrast in a landscape that is relatively uniform in landscape composition from horizon to horizon. The predominantly flat valley floor is punctuated by the numerous vertical structures of the two existing 230 kV transmission lines, which impart a degree of industrial character to the landscape. Viewer concern is moderate as motorists on I-5 anticipate a relatively uniform landscape of flat agricultural lands and uses, as well as numerous transmission structures. The addition of a more prominent foreground transmission line with substantial skylining would be seen as an adverse visual change. Visibility of this foreground segment is high, as is the number of viewers with extended durations of view. Overall viewer exposure is high, which when combined with low-to-moderate visual quality and moderate viewer concern, leads to an overall moderate visual sensitivity.

C.11.1.4.6 *Segment 6*

At MP 69.5, Segment 6 diverges eastward from the 230 kV transmission lines for a distance of approximately 5.5 miles, turning south near MP 75 to connect to Gates Substation, near MP 85. The landscape along Segment 5 is similar to that described above for Segment 4.

Key Viewpoint 10 was established on Jayne Avenue, just southeast of Gates Substation. Figure C.11-14A presents the view to the northwest, which includes a portion of Gates Substation and some of

the numerous transmission lines that radiate out from the substation. Views from **Key Viewpoint 10** are open and panoramic, encompassing the flat agricultural lands consisting of row crops that extend from horizon to horizon. Dominant in the foreground landscape is the substantial amount of electric transmission infrastructure with industrial character that is associated with Gates Substation. The coloration of the row crops provides some seasonal variation in color contrast as it transitions from tan to brown exposed soils, to the green foliage of mature crops. Visual quality is rated low-to-moderate. Viewer concern is low as local motorists on Jayne Avenue anticipate the dominance of electric transmission infrastructure in the regional landscape. Route visibility is high given the foreground viewing distance and the skylining effect that would occur with the new structures extending above the horizon line. The number of viewers would be moderate and the duration of view would be extended. Overall viewer exposure would be high, which when combined with low-to-moderate visual quality and low viewer concern, leads to an overall moderate visual sensitivity.

C.11.2 APPLICABLE REGULATIONS, PLANS AND STANDARDS

Public agencies and planning policy establish visual resource management objectives in order to protect and enhance public scenic resources. Goals, objectives, policies, and implementation strategies and guidance are typically contained in resource management plans, comprehensive plans and elements, and local specific plans. This section identifies relevant goals, objectives, and policies, and states whether the Proposed Project complies with each.

C.11.2.1 Federal

Segments 4, 5, and 6 of the Proposed Project (Western Corridor) cross small parcels of land administered by the U.S. Department of Interior, Bureau of Land Management (BLM). These public lands are subject to visual resource management (VRM) objectives established by the BLM. The BLM system identifies four VRM classes (I through IV), with specific management prescriptions for each class. The system is based on an assessment of scenic quality, viewer sensitivity, and viewing distance zones. All of the BLM parcels that are crossed have been assigned the lowest scenic quality class C, which is assigned to landscapes that have features that are common to the region. The parcels crossed by Segments 4 and 5 have been assigned VRM Class III. The objective of Class III is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate at most. The Proposed Project/activity may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominantly natural features of the characteristic landscape.

Both Segments 4 and 5 parallel the existing 500 kV transmission lines in an established corridor and would not appear as prominent landscape features. Therefore, Segments 4 and 5 would be consistent with the applicable BLM VRM objective. The parcels crossed by Segment 6 have been assigned VRM Class IV. The objective of Class IV is to allow projects or activities, which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. The project/activity may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful

location, minimal disturbance, and repeating the basic elements. The introduction of a 500 kV line in the area of the BLM parcels would not substantially alter the character or visual quality of the existing landscape. Therefore, the Proposed Project would be consistent with the applicable BLM VRM objective.

C.11.2.2 State

In the project vicinity, State Route 152 (SR-152) east of I-5 (and north of Los Banos Substation) is the only state-designated scenic highway. State Route 198 (SR-198) from State Route 33 (SR-33) to I-5 has been designated “eligible” for state scenic highway status. Although the proposed corridor would be visible from SR-152 as shown in Figure C.11-2, in the context of the adjacent 500 kV and 230 kV transmission lines and Los Banos Substation, the new project would not adversely effect views from SR-152 and the scenic quality experienced from SR-152 would not be diminished.

C.11.2.3 Regional and Local

Public agencies and planning policy establish visual resource management objectives in order to protect and enhance public scenic resources. Goals, objectives, policies, and implementation strategies and guidance are typically contained in resource management plans, comprehensive plans and elements, and local general and specific plans. The Proposed Project is located primarily in Merced and Fresno Counties and would be subject to local laws, ordinances, regulations and standards pertaining to the protection and maintenance of visual resources. Within Fresno and Merced Counties, visual resource goals and policies strive to preserve panoramas, protect the landscape character of the west side rangelands, discourage the proliferation of new transmission lines, and minimize impacts to scenic quality along scenic corridors. Within Fresno County, SR-33 west of I-5 and all of I-5 are County-designated Scenic Corridors.

Throughout the study area, I-5 provides the greatest degree of visual access to the project for the most number of people. The proposed corridor of the new transmission line primarily adjacent to and west of an established utility corridor, would keep the route at a middleground to background viewing distance from major roads for most of the Proposed Project’s length. The proposed corridor would also minimize the visual impact on vista views and scenic corridors (particularly views from I-5). Two exceptions occur in Fresno County where the route crosses SR-33 (at SR-198) and I-5 just north of Jayne Avenue, both county-designated scenic highways. However, in both cases, the corridor is sited such that the crossings would be perpendicular spans of the roads which would “minimize detrimental effects on scenic amenities” visible from those highways, as directed by County policy. Therefore, this segment (and Project) would be consistent with county policy. Overall, within the visual context established by the existing transmission lines and other existing development including mineral extraction operations, agricultural facilities, and transportation infrastructure, impacts to scenic quality and landscape character would not be significant as discussed in Section C.11.3. Therefore, the Proposed Project would be consistent with existing regional and local visual resource policies.

C.11.3 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES FOR THE PROPOSED PROJECT

C.11.3.1 Introduction

Section C.11.3.2 of the impact analysis describes the methodology employed to identify visual impacts as well as the significance criteria that are used to determine the degree of significance of each impact. Section C.11.3.3 presents the mitigation measures from the 1988 FEIS/EIR that are still applicable to the Proposed Project. The remaining sections of the impact analysis address the operation and maintenance of the Proposed Project and Alternatives by segment. But before proceeding further, it is important to review the concepts and terminology that underpin a visual resources impact analysis. As explained at the beginning of Section C.11, this SEIR uses a different methodology from that used in the 1988 FEIS/EIR.

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

Visual Contrast evaluates a potential project's or activity's consistency with the visual elements of form, line, color, and texture already established in the landscape. Other elements that are considered in evaluating visual contrast include the degree of natural screening by vegetation and landforms, placement of structures relative to existing vegetation and landforms, distance from the point of observation, and relative size or scale. Visual contrast is categorized from low to high.

Project Dominance refers to the project's relationship to other visible landscape components in terms of vertical and horizontal extent. A project's scale and spatial relationship to the existing landscape can be categorized as subordinate, co-dominant, or dominant.

View Impairment refers to the extent to which a project's scale and position result in the blockage of higher quality visual elements by lower quality elements and is categorized from low to high.

Overall Visual Change summarizes the extent of landscape or viewshed change caused by a project, typically as experienced from key viewpoints. The assessment of overall visual change is based on an analysis of visual contrast, project dominance, and the impairment (or blockage) of views from key viewpoints and is categorized from low to high.

C.11.3.2 Visual Impact Analysis Methodology and Definition and Use of Significance Criteria

Assessment of the likely visual impacts that would occur as a result of operation of the Proposed Project and Alternatives was accomplished by establishing representative viewpoints from which to conduct a detailed analysis of the project. At each of these Key Viewpoints (KVPs), field analysis included assessment of visual contrast, project dominance, and view impairment. Subsequently, a conclusion was made regarding the overall visual change, which taken together with the existing landscape's overall visual sensitivity (discussed previously in the Environmental Baseline and Regulatory Setting above), determined the probable visual impact significance.

In some instances a visual simulation was also prepared to aid in the assessment of project impacts by illustrating the anticipated long-term appearance of the project in the existing landscape. If a determination was made that the resulting impact would be significant, the impact situation was evaluated against the application of feasible mitigation measures in an effort to reduce the visual impact to a level of non-significance if possible. The results of the visual analysis conducted for the Proposed Project and each of the Alternatives is presented in the Visual Resources Analysis Summary foldout tables provided as Appendix VR-1. Appendix VR-2 provides Existing Setting Photographs and Visual Simulations.

The criteria used to assess the significance of visual impacts resulting from a project take into consideration the factors described above, as well as Federal, State, and local policies and guidelines pertaining to visual resources. Appendix G of the CEQA Guidelines identifies the following four circumstances that can lead to a determination of significant visual impact:

- (1) The project has a substantial adverse effect on a scenic vista;
- (2) The project substantially damages scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- (3) The project substantially degrades the existing visual character or quality of the site and its surroundings; and
- (4) The project creates a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

A fifth circumstance potentially leading to a significant visual impact would be:

- (5) The project results in an inconsistency with regulations, plans, and standards applicable to the protection of visual resources.

In the present methodology, the degree of impact significance is generally arrived at as a function of landscape visual sensitivity and project-induced visual change. Table C.11-1 illustrates the general interrelationship between visual sensitivity and visual change leading to the determination of impact significance. The interrelationships presented in Table C.11-1 are intended as guidance only, recognizing that site-specific circumstances may warrant a different outcome. However, it is reasonable to conclude that lower visual sensitivity ratings paired with lower visual change ratings will generally correlate well with lower degrees of impact significance when viewed on site. Conversely, higher visual sensitivity ratings paired with higher visual change ratings will tend to result in higher degrees of visual impact occurring at the site.

Table C.11-1 General Guidance for Determination of Impact Significance

Visual Sensitivity	Visual Change				
	Low	Low to Moderate	Moderate	Moderate To High	High
Low	Not Significant ¹	Not Significant	Adverse but Not Significant ²	Adverse but Not Significant	Adverse but Not Significant ²
Low to Moderate	Not Significant	Adverse but Not Significant	Adverse but Not Significant	Adverse but Not Significant	Adverse but Not Significant
Moderate	Adverse but Not Significant ²	Adverse but Not Significant	Adverse but Not Significant	Adverse but Not Significant	Adverse and Potentially Significant ³
Moderate To High	Adverse but Not Significant	Adverse but Not Significant	Adverse but Not Significant	Adverse and Potentially Significant	Significant ⁴
High	Adverse but Not Significant	Adverse but Not Significant	Adverse and Potentially Significant ³	Significant ⁴	Significant

- 1 Not Significant impacts may or may not be perceptible but are considered minor in the context of existing landscape characteristics and view opportunity.
- 2 Adverse but Not Significant Impacts are perceived as negative but do not exceed environmental thresholds.
- 3 Adverse and Potentially Significant impacts are perceived as negative and may exceed environmental thresholds depending on site-specific circumstances.
- 4 Significant impacts with feasible mitigation may be reduced to levels that are not significant or avoided all together. Without mitigation, significant impacts would exceed environmental thresholds.

Implicit in this rating methodology is the acknowledgment that, for a visual impact to be considered significant, two conditions generally exist:

- (1) The existing landscape is of reasonably high quality and is highly valued by the public; and
- (2) The perceived incompatibility of one or more Proposed Project elements or characteristics tends toward the high extreme, leading to a substantial reduction in visual quality.

It should be noted that there are occasions when a reduction in structure heights or the installation of vegetative screening (in close proximity to a viewpoint) may accomplish some level of impact reduction. However, for a transmission project of this scale there may be little opportunity, aside from route relocation or selection of an alternative to mitigate significant visual impacts to a less than significant level. In most cases, either significant and unavoidable (Class I) or adverse but not significant (Class III) visual impacts will occur unless a re-route or alternative route is feasible.

C.11.3.3 Impacts and Mitigation Measures from 1988 FEIS/EIR

Table C.11-2 presents the visual resources impacts identified in the FEIS/EIR and compares them to those identified in this SEIR.

Table C.11-2 Summary of Impacts: 1988 FEIS/EIR and SEIR

Final EIS/EIR Impact	Significance	SEIR Impact	Significance
Impacts on scenic quality	Significant	Visibility of transmission towers and conductors (long-term)	Less than significant
[Construction impacts not addressed]	n/a	Visual impact of construction equipment and activities (short-term)	Less than significant

The 1988 Final EIR/EIS contained a number of mitigation measures pertinent to visual resources that are still applicable to the Proposed Project. Those mitigation measures have been incorporated into

three updated measures in this SEIR; disposition of each measure is explained in Table C.11-3. New measures were created in order to add more specific requirements that will allow the CPUC to ensure that compliance will occur.

Table C.11-3 Mitigation Measures From 1988 FEIS/EIR

1988 FEIS/EIR Mitigation Measure Description	Disposition in this SEIR
Avoid siting towers on ridgelines and hill tops wherever possible. This measure will serve to reduce the incidence of “skylining,” that is, positioning a tower so that it is seen silhouetted against the skyline. The measure will also help prevent highly visible alterations of landforms resulting from grading operations.	Included in V-2 (tower siting and appearance)
Minimize the number of towers visible from sensitive viewpoints within recreation areas.	
In areas identified as visually sensitive, the finish on the transmission towers should be dull and non-reflective.	
Tower placement should avoid areas where riparian vegetation or other vegetation communities of value occur.	Addressed in B-2
Temporary facilities, such as construction yards, and conductor tensioning and splicing sites should be sited to minimize disruption of the landscape by landform alteration and vegetation removal.	Incorporated into V-1
Existing roads will be used for access wherever possible. Minimize number and length of new construction access roads particularly in intensively farmed areas. Use temporary spur roads to towers and remove those roads not required for maintenance. Access roads should be designed to the minimum standards necessary for the construction and maintenance vehicle access.	
Existing roads damaged by activities related to the transmission line should be repaired to a condition equal to or better than their condition prior to the construction of the transmission line.	Addressed in T-4 (Section C.10)
Locate new access roads parallel to contours of landform wherever feasible.	Incorporated into V-1
The limits of construction activities should normally be predetermined, with activity confined within those limits. All construction vehicle movement outside the right-of-way should normally be restricted pre-designated access or public roads.	
No paint or permanent discoloring agents should be applied to rocks or vegetation to indicate survey or construction activity limits. Surveyors, flagging, or other suitable materials should be used to delineate limits.	
Where blasting is required for access roads or tower footings, debris should be recovered and removed where practical.	
Excavated material or other construction materials should be removed following construction.	
In construction areas where excavation is not required, vegetation should be left in place wherever possible and the original contours should be maintained in an undisturbed condition.	
Where vegetation is of high density or low diversity is encountered in the right-of-way, clearing to a harsh right-of-way edge should be avoided. Instead, it should be done to emulate natural clearings with irregular edges.	
Replant temporarily disturbed areas with a mixture of perennial grasses, forbs, brush, shrubs, and tree species that will provide effective erosion control. Prepare a firm, rough seedbed on fill or cut slopes and apply appropriate types and amounts of fertilizers and seed mixtures. Consider reseeding with native plants only in sensitive areas not subject to grazing.	Included in H-1 (Section C.7)

C.11.3.4 Proposed 500 kV Transmission Line Corridor

Short-term construction visual impacts and long-term operation visual impacts will occur as a result of implementation of the Proposed Project. The long-term operational visual impacts of the Proposed Project (and Alternatives) are discussed in the following sections of this analysis. Below is a brief summary of the visual impacts that would result from project construction.

Construction impacts on visual resources would result from the presence of equipment, materials, and work force at the substation sites, staging areas, and along the route, and from the temporary alteration

of landforms and vegetation along the right-of-way (ROW). Vehicles, heavy equipment, facility components, and workers would be visible during site clearing, grading, substation construction, structure erection, conductor stringing, and site/ROW clean-up and restoration. Construction equipment and activities would be seen by various viewers in close proximity to the sites and ROW including: nearby residents; recreationists on trails, roads, and waterways; motorists; and workers in agricultural fields. View durations would vary from brief to extended. Construction activities would be most visible for those elements of the Proposed Project (or Alternatives) adjacent to I-5.

Due to the relatively short duration of project construction, construction impacts would generally constitute adverse, but not significant (**Class III**) visual impacts of the Proposed Project. While impacts are anticipated to be less than significant and mitigation is not required, Mitigation Measure **V-1** is recommended to ensure that impacts remain less than significant; however implementation of this measure is not required for impact reduction.

V-1 Visual disturbance that can result from construction of the transmission line shall be minimized by implementation of the conditions listed below. Prior to the start of construction, PG&E shall submit a plan to CPUC for review and approval that details its procedures for ensuring that these conditions are met.

- Temporary facilities, such as construction yards, and conductor tensioning and splicing sites should be sited to minimize disruption of the landscape by landform alteration and vegetation removal
- Existing roads will be used for access wherever possible. Minimize number and length of new construction access roads particularly in intensively farmed areas. Use temporary spur roads to towers and remove those roads not required for maintenance. Access roads should be designed to the minimum standards necessary for the construction and maintenance vehicle access.
- Locate new access roads parallel to contours of landform wherever feasible.
- The limits of construction activities should normally be predetermined, with activity confined within those limits. All construction vehicle movement outside the right-of-way should normally be restricted pre-designated access or public roads.
- No paint or permanent discoloring agents should be applied to rocks or vegetation to indicate survey or construction activity limits. Surveyors, flagging, or other suitable materials should be used to delineate limits.
- Where blasting is required for access roads or tower footings, debris should be recovered and removed where practical.
- Excavated material or other construction materials should be removed following construction.
- In construction areas where excavation is not required, vegetation should be left in place wherever possible and the original contours should be maintained in an undisturbed condition.
- Where vegetation is of high density or low diversity is encountered in the right-of-way, clearing to a harsh right-of-way edge should be avoided. Instead, it should be done to emulate natural clearings with irregular edges.

The following impact discussions address operation and maintenance impacts by segment.

C.11.3.4.1 *Segment 1*

Viewed from SR-152, the additional transmission line structures of Segment 1 would be visible but only minimally noticeable as the transmission line exits Los Banos Substation to the southwest, paralleling an existing 500 kV transmission line and backdropped by two additional 500 kV transmission lines and two 230 kV transmission lines. The visual contrast of the vertical forms and lines would be low given the similarity of the Proposed Project's visual characteristics with other existing facilities. The project would appear co-dominant with the other energy transmission infrastructure and view impairment would be low given the background presence of four existing transmission lines. The remainder of Segment 1 as it parallels two existing 500 kV transmission lines to the southeast would have minimal public visual exposure and would result in minimal visual change. The overall visual change associated with Segment 1 would be low, resulting in a less than significant (**Class III**) visual impact.

While the long-term visual impact of new transmission towers is considered to be less than significant, Mitigation Measure **V-2** is recommended (but not required) to further ensure reduction of visual impacts. This measure will serve to reduce the incidence of "skylining;" that is, positioning a tower so that it is seen silhouetted against the skyline and will help prevent highly visible alterations of landforms resulting from grading operations. This measure presents specific recommendations regarding tower siting and finishing.

V-2 In final siting of transmission tower, PG&E shall avoid siting towers on ridgelines and hilltops wherever possible, and shall minimize the number of towers visible from sensitive viewpoints within recreation areas. In areas identified as visually sensitive, the finish on the transmission towers should be dull and non-reflective.

Prior to the start of construction, PG&E shall submit to the CPUC for review and approval a siting plan that identifies (a) the tower and conductor finish and its visual properties, (b) all towers that are proposed for ridgelines, and all those visible from State Routes and I-5, and from Los Banos Creek Recreation Area and Little Panoche Reservoir. A visual resources specialist (approved by the CPUC) shall review these locations and determine whether modified locations could reduce the visual impact of the identified towers.

C.11.3.4.2 *Segment 2*

Figure C.11-3A presents the existing view to the west from **Key Viewpoint 1** near the Los Banos Creek Recreation Area Day Use Area. Figure C.11-3B presents a visual simulation of the Proposed Project, as it would appear once constructed to the west of the two existing 500 kV transmission lines. As shown in the simulation, the transmission line structures would be barely noticeable at this background viewing distance, resulting in a low degree of visual contrast. The subordinate forms of the vertical towers would cause low view impairment of the higher quality hills and ridges of the Diablo Range in the background. In the context of the existing transmission lines, overall visual change would be low, and in the context of a landscape with moderate visual sensitivity, the resulting visual impact would be adverse but less than significant (**Class III**), but implementation of Mitigation Measure **V-2** is recommended.

C.11.3.4.3 *Segment 3*

Between MP 14.5 and MP 20.5, Segment 3 would have minimal public visual access as it continues to parallel the two existing 500 kV transmission lines. The resulting visual contrast from the Proposed Project along this segment would be low and the proposed transmission line would appear subordinate to co-dominant compared to the existing lines. View impairment along this segment would also be low and the overall visual change would be low. In the context of the moderate visual sensitivity of the Segment 3 landscape, the low degree of visual change would result in an adverse but less than significant (**Class III**) visual impact, but implementation of Mitigation Measure **V-2** is recommended.

C.11.3.4.4 *Segment 4*

From MP 20.5 to MP 29, Proposed Segment 4 would continue to parallel the two existing 500 kV transmission lines across primarily open grassland and occasional drainage courses. Given the distance of segment 4 from I-5, public visual access along this segment is generally limited to Little Panoche Road, which is the primary east-west road in this area, and a few local un-paved roads. Figure C.11-4A presents the existing view to the east from **Key Viewpoint 2** on Little Panoche Road, adjacent to Little Panoche Reservoir. Figure C.11-4B presents a visual simulation of the Proposed Project as it crosses near the Little Panoche Reservoir dam. As shown in the simulation, the transmission line structures would be prominent foreground features in the open landscape. The existing two 500 kV transmission lines are visible to the east. Visual contrast resulting from the introduction of the prominent vertical structures and the horizontal to curvilinear conductors would only be moderate because the vertical forms and lines of the proposed transmission structures would replicate the forms and lines of the existing 500 kV transmission lines in the background. The Proposed Project would be co-dominant with the existing landforms and would cause moderate view impairment due to the prominent skylining that would occur as the structures extend above the horizon of the foothills and valley floor. The overall visual change would be moderate and in the context of moderate overall visual sensitivity, the resulting visual impact would be adverse but less than significant (**Class III**). Implementation of Mitigation Measure **V-2** is recommended.

C.11.3.4.5 *Segment 5*

From MP 29 to MP 69, Proposed Segment 5 continues to parallel the two existing 500 kV transmission lines across agricultural fields and grazing lands to the west of I-5. Figure C.11-5 presents the view to the west from **Key Viewpoint 3** on northbound I-5, approximately 1-½ miles north of Russell Avenue. The introduction of an additional transmission line to the west of the existing transmission lines visible in the photograph would result in a low degree of visual contrast at this middleground viewing distance. The structures would be subordinate features in the open landscape and would cause a low degree of view impairment. The overall visual change would be low and in the context of moderate overall visual sensitivity, the resulting visual impact would be adverse but less than significant (**Class III**). Implementation of Mitigation Measure **V-2** is recommended.

C.11.3.4.6 *Segment 6*

From MP 69 to MP 79, Proposed Segment 6 continues to parallel I-5 approximately 1.5 miles to the west. Figure C.11-6 presents the view from **Key Viewpoint 4** on I-5, approximately 8.25 miles north of Jayne Avenue. At this middleground distance, the proposed transmission line structures would be visible but not prominent, similar to the appearance of the existing transmission lines shown in Figure C.11-5. The resulting visual contrast would be low and the transmission line would appear subordinate to flat landform of the valley floor and the rolling to angular landforms of the hills in the background to the west. View impairment would be low, as would the overall degree of visual change. Combined with the moderate visual sensitivity of the existing landscape, the resulting visual impact would be adverse but less than significant. Figure C.11-7 presents the view to the southwest from **Key Viewpoint 5** on southbound El Dorado Avenue just south of the I-5 overpass. The introduction of linear structures with vertical to horizontal lines and industrial character at a middleground distance of approximately 1.5 miles would result in low-to-moderate visual contrast and appear subordinate to co-dominant in a landscape of open grazing land backdropped by the southern extension of the Diablo Range. View impairment would be low and the resulting overall visual change would be low-to-moderate. When such changes are viewed in the context of a landscape with moderate overall visual sensitivity, the resulting visual impact would be adverse but less than significant (**Class III**). Implementation of Mitigation Measure **V-2** is recommended.

C.11.3.4.7 *Segment 7*

From MP 79 to Gates Substation near MP 83, Proposed Segment 7 parallels Jayne Avenue on the north side, spanning I-5 between MP 80 and MP 81. Figure C.11-8A presents the existing view from **Key Viewpoint 6** on I-5, just north of Jayne Avenue. Figure C.11-8B presents a simulation of the Proposed Project as it spans I-5 from east to west. From this location, the Proposed Project would introduce prominent vertical structures into foreground views of both northbound and southbound motorists. The prominent linear structures with horizontal lines and industrial character would cause a high degree of visual contrast in comparison to the predominantly horizontal landforms and horizon lines, and prominent diagonal lines of the freeway pavement. The project would appear co-dominant with the prominent landforms and view impairment would be moderate, primarily associated with the skylining that would occur as a result of the structures extending above the background horizon line of the valley floor and Diablo Range. Overall visual change would be moderate-to-high and when evaluated against an existing landscape of moderate visual sensitivity, the resulting visual impact would be adverse but less than significant (**Class III**). Implementation of Mitigation Measure **V-2** is recommended.

C.11.3.5 Proposed Project Substation Modifications

C.11.3.5.1 *Los Banos Substation*

The Proposed Project would include modifications at Los Banos Substation consisting of extending the existing 500 kV bus, installing new circuit breakers, changing bus positions, possible installation of a new capacitor bank, and installation of miscellaneous electrical equipment. In the context of the existing substation facilities and numerous transmission line structures in the immediate vicinity of the

substation, the substation modifications would not be noticeable from Gonzaga Road, SR-152, or I-5, and no visual impacts would occur.

C.11.3.5.2 Gates Substation

The Proposed Project would also include modifications to Gates Substation and two existing transmission lines entering the substation, referred to as the “Gates Loop.” Substation modifications would include extending the existing 500 kV bus, installing new line positions, installing new circuit breakers, changing bus positions, installation of a new capacitor bank, and installation of miscellaneous electrical equipment. The Gates Loop would include re-alignment of the existing Los Banos-Midway 500 kV No. 2 line to loop into Gates Substation and moving the No. 1 line within the substation. In the context of the existing substation facilities and numerous transmission line structures in the immediate vicinity of the substation, the substation modifications would not be noticeable from Jayne Avenue. Also, the Gates Loop would result in the removal of seven existing transmission towers and the installation of six new towers adjacent to the existing Los Banos-Midway kV No. 1 line, the net change of which would also not be noticeable from Jayne Avenue. As a result, the total changes at Gates Substation, including the Gates Loop would not result in adverse visual impacts.

C.11.3.6 Proposed Changes South of Gates Substation

Proposed changes south of Gates Substation would include either reconfiguring or reconductoring the Gates-Arco-Midway 230 kV Line so as to establish two 230 kV circuits between the Gates, Arco, and Midway Substations (one circuit currently exists); installing a 230 kV line position at Midway Substation; installing miscellaneous electrical equipment at Midway Substation; and installing 500 kV shunt capacitors at Midway Substation. The reconfiguration option would only require the removal of 6 or 8 jumpers and the reconnection of a 115 kV line back to its original position on the No. 2 line. The reconductoring option would require the reconductoring of the Gates-Arco-Midway transmission lines. In either case, existing towers and access roads would be utilized though the reconductoring option may require some tower structural enhancements or the installation of some additional structures. However, in the context of the existing transmission line facilities and structural character, none of the potential changes, including the possible installation of some additional towers, would be substantially noticeable and would not cause substantial landscape changes. The resulting visual impacts would at most be adverse but less than significant (**Class III**).

C.11.3.7 Visual Impacts of Recommended Mitigation

Biological Resources Mitigation Measure B6b recommends consideration of Tubular Steel Poles (TSPs) to reduce impacts on sensitive plant species. While this tower design does reduce land disturbance, the structures are more massive than lattice structures, and therefore are more visible from a distance. Lattice structures tend to fade into background when viewed from a distance. There are some locations along the Proposed and Alternative corridors where there is limited visibility of the route due to its remote location. In these areas, use of TSPs would not create a visual impact. But in other locations where the corridor is visible from a recreation area or scenic highway, this mitigation measure could result in the creation of a significant and unavoidable visual impact (**Class I**).

C.11.4 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES FOR WESTERN CORRIDOR ALTERNATIVE SEGMENTS

C.11.4.1 Segment 2A

Figure C.11-3A presents the existing view to the west from the access road to the Los Banos Creek Recreation Area Day Use Area. Figure C.11-3B presents a visual simulation of the Proposed Project in Segment 2, as it would appear once constructed to the west of the two existing 500 kV transmission lines. Transmission structures in Alternative Segment 2A would be located slightly less than one mile beyond (to the west of) the Proposed Segment 2 corridor simulated in Figure C.11.3B. Although Segment 2A could be prominent in views from trails in the far west of the Recreation Area, they would not be noticeable to most users of the Recreation Area that congregate around the reservoir. From the viewpoint along the Day Use Area access road, which provides better visual access toward the west than many of the visitor use areas on and around the reservoir, the visual contrast exhibited by the Segment 2A structures would be low, appearing subordinate to existing landforms. View impairment would be low, as would the overall visual change. The resulting visual impact would be adverse but less than significant (**Class III**). As for Proposed Segment 2, implementation of Mitigation Measure **V-2** is recommended.

C.11.4.2 Segment 4A

From MP 20.5 to MP 29, Alternative Segment 4A would parallel Proposed Segment 4 to the west, crossing the western end of Little Panoche Reservoir approximately one mile west of Little Panoche Dam. Figure C.11-9A presents the existing view to the southwest from **Key Viewpoint 7** on Little Panoche Road, adjacent to Little Panoche Reservoir. Figure C.11-9B presents a visual simulation of the project within Alternative Segment 4A. As shown in the simulation, the transmission structures would cross Little Panoche Creek and ascend the hills to the south of the Creek and Reservoir. The linear structures would have prominent vertical lines and industrial character. The conductors would exhibit noticeable curvilinear lines. The structural appearance and industrial character of the transmission line would cause a moderate-to-high visual contrast and would appear co-dominant with the existing landforms. View impairment would be moderate as a result of structure skylining and the overall visual change would also be moderate. When considered within the context of the moderate visual sensitivity of the existing landscape, the resulting visual impact would be adverse but less than significant (**Class III**). As for Proposed Segment 4, implementation of Mitigation Measure **V-2** is recommended.

C.11.4.3 Segment 6A

From MP 69 to MP 79, Alternative Segment 6A would be located midway between I-5 and Proposed Segment 6. Figure C.11-6 presents the view from I-5, approximately 8.25 miles north of Jayne Avenue. At a middleground viewing distance from I-5 ranging from approximately 0.75 mile to 1.25 miles, the transmission line with its industrial character and prominent vertical lines would result in a moderate degree of visual contrast within a landscape context dominated by natural forms and rural character. The structures would appear co-dominant with the flat landform of the valley floor and the

rolling to angular landform of the Diablo Range in the background. View impairment would be moderate as the transmission structures and conductors would partially obscure views of the hills in the background. Combined with the moderate visual sensitivity of the existing landscape, the resulting visual impact would be adverse but less than significant (**Class III**). Implementation of Mitigation Measure **V-2** is recommended.

C.11.4.4 Segment 6B

From MP 69 to MP 79, Alternative Segment 6B would be located approximately one mile further west (away from I-5) than Proposed Segment 6. As previously discussed, Alternative Segment 6B would pass intermittently through irrigated agricultural lands in the north (Figure C.11-6) and open grazing lands in the south (Figures C.11-7 and C.11-10). The addition of foreground to middleground, vertical structures with vertical to curvilinear lines and industrial character would be inconsistent with the predominantly natural forms and lines of the existing rural, agricultural landscape as viewed from Jayne Avenue (Figure C.11-10). The resulting visual contrast would be moderate-to-high and the project would appear co-dominant to dominant in the generally flat to rolling landscape. View impairment would be moderate with most of the visible structures skylining above the low horizon line of valley floor and foothills. The overall visual change that would occur with Alternative Segment 6B would be moderate-to-high. However, when considered within the context of a landscape that is characterized as having an overall moderate degree of visual sensitivity, the resulting visual impact would be adverse but less than significant (**Class III**). As for Proposed Segment 6, implementation of Mitigation Measure **V-2** is recommended.

C.11.5 ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES FOR THE EASTERN CORRIDOR ALTERNATIVE

C.11.5.1 Segment 1

Viewed from SR-152, the additional transmission line structures of Segment 1 of the Eastern Corridor Alternative would be visible but only minimally noticeable as it exits Los Banos Substation to the south and then turns to the southeast, paralleling two existing 230 kV transmission lines (the existing 230 kV lines are visible in Figure C.11-2 as they ascend the eastern-most [left] low hill to the south of the substation). The visual contrast of the linear to complex forms and vertical lines would be low given the similarity of the Proposed Project's visual characteristics with other existing facilities in the immediate vicinity. The project would appear co-dominant with the other energy transmission infrastructure and view impairment would be low-to-moderate given the skylining that would be noticeable as the structures ascend the hill. The remainder of Segment 1 as it parallels two existing 230 kV transmission lines to the southeast would have minimal public visual exposure from I-5 and would result in an overall low degree of visual change. The resulting visual impact would be adverse but less than significant (**Class III**). Mitigation Measures **V-1** and **V-2** are recommended.

C.11.5.2 Segment 2

Figure C.11-11A presents the existing view to the east from **Key Viewpoint 8** near the Los Banos Creek Recreation Area Day Use Area. Figure C.12-11B presents a visual simulation of Segment 2 of the Eastern Corridor Alternative, as it would appear spanning to the east of the Los Banos Creek Reservoir dam. As shown in the simulation, this segment would cause the introduction of prominent linear structures with vertical lines and industrial character similar to that already established in the landscape by the two existing 230 kV transmission lines. The resulting visual contrast would be moderate and the structures would appear co-dominant with the existing landforms and reservoir. View impairment would be moderate owing to the prominent skylining effect that would occur as the structures stand above the horizon line of the hills. Overall visual change would be moderate and, taken in the context of the moderate-to-high visual sensitivity of the existing landscape; the resulting visual impact would be adverse but less than significant (**Class III**). Mitigation Measures **V-1** and **V-2** are recommended.

C.11.5.3 Segment 3

Figure C.11-12A presents the existing view to the northwest from **Key Viewpoint 9** on I-5, just north of the existing 230 kV transmission line crossing of I-5. Figure C.12-12B presents a visual simulation of Segment 3 of the Eastern Corridor Alternative, as it would appear paralleling the existing 230 kV lines. As shown in the simulation, this segment would substantially increase the prominence of electric transmission infrastructure with vertical to curvilinear lines and industrial character. However, the resulting visual contrast would only be moderate due to the prominence of the existing transmission lines in the foreground of views from I-5. Segment 3 of the Eastern Corridor Alternative would appear co-dominant with the existing structures and rolling to angular landforms of the foothills to the west of I-5. View impairment would be moderate owing to the prominent skylining effect that would occur as the structures extend above the horizon line of the hills. However, the prominence of the skylining is reduced by the existing skylining associated with the existing 230 kV structures. Overall visual change would be moderate and, taken in the context of the moderate visual sensitivity of the existing landscape, the resulting visual impact would be adverse but less than significant (**Class III**).

C.11.5.4 Segment 4

After crossing to the east side of I-5, Segment 4 of the Eastern Corridor Alternative diverges away from the freeway to a maximum separation distance of about 2.5 miles before converging to within approximately 0.5 mile of I-5 at the southern terminus of Segment 4 near MP 47. Throughout its length, Segment 4 would continue to parallel the existing two 230 kV transmission lines, passing through flat grazing land and irrigated agricultural fields that extend from the horizon in the north to the horizons in the east and south. As a result of Segment 4's substantial distance from I-5 and the presence of the two existing transmission lines, substantial visual impacts on views from I-5 would not occur.

C.11.5.5 Segment 5

Segment 5 of the Eastern Corridor Alternative parallels the east side of I-5 at a separation distance of approximately 0.5-mile for most of the length from MP 47 to MP 63, then gradually diverging away to a distance of approximately 1.5 miles by MP 69.5. Figure C.11-13 presents the existing view to the north from the Derrick Avenue / I-5 Overpass near MP 55. Segment 5 would result in a substantial increase in the prominence of electric transmission infrastructure with vertical lines and industrial character. The resulting visual contrast would be moderate-to-high. The transmission structures would appear co-dominant to dominant in the context of the existing broad, flat landforms of the valley floor and the adjacent 230 kV structures. View impairment would be moderate-to-high owing to the prominent skyline effect that would occur as the structures extend above the horizon line of the valley floor. However, the overall visual change would be moderate and, taken in the context of the moderate visual sensitivity of the existing landscape, the resulting visual impact would be adverse but less than significant (**Class III**).

C.11.5.6 Segment 6

At MP 69.5, Segment 6 of the Eastern Corridor Alternative diverges eastward from the 230 kV transmission lines for a distance of approximately 5.5 miles, turning south near MP 75 to connect to Gates Substation, near MP 85. Segment 6 would pass through irrigated croplands throughout most of its length. Views to Segment 6 would be generally limited to local roads including SR-198 (at the spanning point), SR-269 (Lassen Avenue), Gale Avenue, Butte Avenue, and Jayne Avenue.

Figure C.11-14A presents the view to the northwest from **Key Viewpoint 10** on Jayne Avenue, just southeast of Gates Substation. Figure C.11-14B presents a simulation of the 500 kV line in Segment 6 of the Eastern Corridor Alternative as it converges on Gates Substation from the north. In the profusion of energy transmission infrastructure proximate to Gates Substation, the additional 500 kV line would result in a minimally noticeable increase in vertical and horizontal forms and lines and industrial character. The resulting visual contrast would be low and the structures would appear subordinate to the more dominant structures in the foreground of the view. View impairment would be low in spite of the structure skylining that would occur as a result of the prominence of other skylined structures and the lack of a significant background landscape. The overall visual change would be low and in the context of the low-to-moderate visual sensitivity of the existing landscape, the resulting visual impact would be less than significant (**Class III**).

C.11.6 MITIGATION MONITORING, COMPLIANCE, AND REPORTING TABLE

Table C.11-4 presents the Mitigation Monitoring Program for visual resources.

Table C.11-4 Mitigation Monitoring Program

Impact	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
Proposed Project and All Alternatives						
<p>Adverse visual impacts on existing landscape character and visual quality as a result of improper project siting.</p>	<p>V-1 Visual disturbance that can result from construction of the transmission line shall be minimized by implementation of the conditions listed below. Prior to the start of construction, PG&E shall submit a plan to CPUC for review and approval that details its procedures for ensuring that these conditions are met.</p> <ul style="list-style-type: none"> • Temporary facilities, such as construction yards, and conductor tensioning and splicing sites should be sited to minimize disruption of the landscape by landform alteration and vegetation removal • Existing roads will be used for access wherever possible. Minimize number and length of new construction access roads particularly in intensively farmed areas. Use temporary spur roads to towers and remove those roads not required for maintenance. Access roads should be designed to the minimum standards necessary for the construction and maintenance vehicle access. • Locate new access roads parallel to contours of landform wherever feasible. • The limits of construction activities should normally be predetermined, with activity confined within those limits. All construction vehicle movement outside the right-of-way should normally be restricted predesignated access or public roads. • No paint or permanent discoloring agents should be applied to rocks or vegetation to indicate survey or construction activity limits. Surveyors, flagging, or other suitable materials should be used to delineate limits. • Where blasting is required for access roads or tower footings, debris should be recovered and removed where practical. • Excavated material or other construction materials should be removed following construction. • In construction areas where excavation is not required, vegetation should be left in place wherever possible and the original contours should be maintained in an undisturbed condition. • Where vegetation is of high density or low diversity is encountered in the right-of-way, clearing to a harsh right-of-way edge should be avoided. Instead, it should be done to emulate natural clearings with irregular edges. 	<p>Proposed Project and Alternatives – All Segments</p>	<p>CPUC to verify project siting and design prior to construction.</p>	<p>Following project construction, existing roads would appear to be in a condition equal to or better than, their condition prior to construction of the project.</p> <p>No discoloring of rocks or vegetation would be visible.</p> <p>Following construction, there would be no visible debris from blasting.</p> <p>Following construction, there would be no visible excavated material.</p> <p>Alteration of landforms and vegetation as a result of temporary facilities would be minimized.</p>	<p>CPUC</p>	<p>Before and during construction</p>

Impact	Mitigation Measure	Location	Monitoring/ Reporting Action	Effectiveness Criteria	Responsible Agency	Timing
<p>Adverse visual impacts on existing landscape character and visual quality as a result of improper project siting.</p>	<p>V-2 In final siting of transmission tower, PG&E shall avoid siting towers on ridgelines and hill tops wherever possible, and shall minimize the number of towers visible from sensitive viewpoints within recreation areas. In areas identified as visually sensitive, the finish on the transmission towers should be dull and non-reflective. Prior to the start of construction, PG&E shall submit to the CPUC for review and approval a siting plan that identifies (a) the tower and conductor finish and its visual properties, (b) all towers that are proposed for ridgelines, and all those visible from State Routes and I-5, and from Los Banos Creek Recreation Area and Little Panoche Reservoir. A visual resources specialist (approved by the CPUC) shall review these locations and determine whether modified locations could reduce the visual impact of the identified towers.</p>	<p>Proposed Project and Alternatives – All Segments</p>	<p>CPUC to verify project siting and design prior to construction.</p>	<p>The incidence of tower “skylining” and landform grading would be minimized when viewed from State Routes and I-5, and from Los Banos Creek Recreation Area and Little Panoche Reservoir. Visibility of, and glare from, transmission towers would be minimized.</p>	<p>CPUC</p>	<p>Confirm design prior to project construction. Confirm implementation following project construction.</p>

C.11.7 REFERENCES

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