

E.3.3 Visual Resources

E.3.3.1 Environmental Setting

The 500 kV Route D Alternative would diverge from the I-8 Alternative at MP I8-70.3, heading north through Cleveland National Forest and portions of the Sweetwater and Upper San Diego River Places, staying east of the Captain Grande Indian Reservation and west of the Cuyamaca Mountains, in the vicinity of Boulder Creek and Cedar Creek Roads. The route would eventually cross the San Diego River Canyon approximately six miles south of the Inaja Monument Park Overlook and connect to the alternative Central South Substation.

The landscape along this alternative is remote and predominantly natural in appearance. There are few built features with the exception of a few scattered rural residences, the graded access roads, and an occasional simple wood-pole utility line. The valleys are shallow and the angular ridges are rocky. The Cuyamaca Mountains that form the eastern boundary of these landscapes rise abruptly from the valleys below. Views of the Route D Alternative would be available from the graded access roads including Boulder Creek, Cedar Creek, Tule Springs, and Eagle Peak Roads; several of the rural residences in the area; the peaks of the Cuyamaca Mountains; the upper San Diego River Canyon; and the Inaja Monument Park Overlook.

Three key viewpoints (KVPs 64 through 66) were selected for detailed analysis and are considered representative of the visual impacts that would be experienced along this alternative. The locations of the Route D Alternative KVPs are shown on Figure E.1.3-1. The results of the visual analysis are summarized in Appendix VR-1. A discussion of the existing visual setting for the three KVPs is presented in the following paragraphs.

Key Viewpoint 64 – Boulder Creek Road (SMS)

Key Viewpoint 64 was established on Boulder Creek Road, approximately 8.8 miles north of the intersection with Oak Grove Drive (see Figure E.3.3-1A). This view is to the west and captures a portion of the Upper San Diego River Place, which is a relatively remote, rugged landscape defined by rocky, angular landforms. The mix of vegetative communities ranges from chaparral on lower elevation hillsides to Coulter pine and black oak mixed with manzanita at higher elevations. The landscape is predominantly undeveloped though Boulder Creek Road (unpaved) is a prominent linear feature and there are several developed area interfaces around the scattered rural residences. A simple wood-pole utility line is also located in relatively close proximity to Boulder Creek Road. Views from Boulder Creek Road are panoramic and unobstructed.

The Upper San Diego River Place is maintained as a remote, natural appearing landscape that functions as a respite for the surrounding urban population. Valued landscape attributes to be preserved (or restored) over time include broad, undisturbed expanses of landscape that frame panoramic vistas; opportunities for viewing unique landscape features, such as deeply dissected canyons, waterfalls, and distant landmarks from vista points and road and trail corridors; and built elements that are rustic and unobtrusive. Part of the management emphasis is to maintain the natural-appearing setting. As a result, the Scenic Integrity Objective (SIO) for this area is HIGH.

Key Viewpoint 65 – Cuyamaca Peak (VS-VC)

Key Viewpoint 65 was established on Cuyamaca Peak (see Figure E.3.3-2A). Viewing to the west toward the intersection of Boulder Creek Road, Tule Springs Road, and Cedar Creek Road, this location was selected to generally characterize the existing landscape views in the direction of the Route D Alternative available from the vista viewpoints on the peaks of the Cuyamaca Mountains.

Visual Quality. High. The view from KVP 65 encompasses dramatic, panoramic vista views of the Upper San Diego River Valley and the surrounding mountains. With the exceptions of the graded, unpaved access roads (Boulder Creek, Tule Springs, and Cedar Creek Roads), and the few scattered rural residences, the landscape exhibits a predominantly intact, natural appearance. On clear days, views from the peaks can extend to the Pacific Ocean. Overall, the combination of variable landforms, vegetative patterns, and panoramic scope create a distinctive landscape with high visual appeal.

Viewer Concern. High. Visitors to the peak have a building sense of anticipation as the peak is approached by foot from the east side, through the undeveloped State Park forest. It is only when the summit is reached that the extent of the view is revealed. Because of the relatively unique nature of the view and the difficulty with which it is achieved, visitors would clearly perceive any degradation of the visible landscape as an adverse and unwanted result, particularly when viewed from a designated viewpoint in a State Park.

Viewer Exposure. Moderate. The Route D Alternative would be highly visible in the middleground of views from the peak. Although the number of viewers would be low, the duration of view would be extended as visitors to the peak would pause for extended periods to appreciate the vista view. Combining these four equally weighted factors gives an overall moderate viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For visitors to the peaks of the Cuyamaca Mountains, combining the equally weighted high visual quality and high viewer concern, with the moderate viewer exposure results in an overall moderate-to-high visual sensitivity of the visual setting and viewing characteristics.

Key Viewpoint 66 – Inaja Monument Park Overlook (SMS)

Key Viewpoint 66 was established at the Inaja Monument Park Overlook (see Figure E.3.3-3A). This view is to the south and captures the upper portion of the San Diego River Canyon within the Upper San Diego River Place. The mix of vegetative communities ranges from chaparral on lower elevation hillsides to Coulter pine and black oak mixed with manzanita at higher elevations. The landscape is predominantly undeveloped though graded access roads are prominent linear features and there are several developed area interfaces around the scattered rural residences. A simple wood-pole utility line spans the upper canyon directly in front of the Overlook. Views from the Monument Overlook are panoramic and unobstructed.

The Upper San Diego River Place is maintained as a remote, natural appearing landscape that functions as a respite for the surrounding urban population. Valued landscape attributes to be preserved (or restored) over time include broad, undisturbed expanses of landscape that frame panoramic vistas; opportunities for viewing unique landscape features, such as deeply dissected canyons, waterfalls, and distant landmarks from vista points and road and trail corridors; and built elements that are rustic and unobtrusive. Part of the management emphasis is to maintain the natural-appearing setting. As a result, the Scenic Integrity Objective (SIO) for this area is HIGH.

E.3.3.2 Environmental Impacts and Mitigation Measures

Table E.3.3-1 summarizes the visual impacts of the Route D Alternative.

Table E.3.3-1. Impacts Identified – Route D Alternative – Visual Resources

Impact No.	Description	Impact Significance
Route D Alternative		
V-1	Short-term visibility of construction activities, equipment and night lighting	Class II, III
V-2	Visibility of land scarring in arid and semi-arid landscapes	Class II
V-78	Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 64 on Boulder Creek Road	Class I
V-79	Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 65 at Cuyamaca Peak	Class III
V-80	Slight increase in structure contrast, view blockage, and skylining when viewed from Key Viewpoint 66 at the Inaja Monument Park Overlook	Class III
Central South Substation Alternative		
V-1	Short-term visibility of construction activities, equipment and night lighting	Class III
V-81	Introduced structure contrast, industrial character, view blockage, skylining, and glare from night lighting when viewing the Central South Substation	Class III

Construction Impacts

Impact V-1: Short-term visibility of construction activities, equipment, and night lighting (Class II for substations, construction and storage yards, and fly yards; Class III for transmission line)

Construction impacts along the Route D Alternative would be as described for the Proposed Project Imperial Valley Link in Section D.3.5.1 and would include the visual intrusion of construction activities and equipment (Impact V-1) and visibility of land scarring (Impact V-2). No new ancillary facilities would be required for this alternative.

Construction impacts on visual resources would result from the presence and visual intrusion of construction vehicles, equipment, materials, and work force along the transmission line route. Construction impacts on visual resources would also result from the temporary alteration of landforms and vegetation along the ROW. Vehicles, heavy equipment, project components, and workers would be visible during access and spur road clearing and grading, 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 ROW including rural residents as well as travelers and recreationists on highways and local and Forest roads. View durations from these vantage points would vary from moderate to extended where the facilities and activities remain in the field of view of travelers for several minutes or miles. However, construction activities along the transmission line route would be transient and of short duration as construction progresses along the route. As a result, affected viewers would be aware of the temporary nature of project construction impacts, which would decrease their sensitivity to the impact. The resulting visual impacts would be adverse but less than significant (Class III). To ensure that viewers are not unnecessarily impacted during construction, Mitigation Measures V-1a and V-1b are recommended in compliance with NEPA, even though the impact is less than significant without mitigation. Please see the explanation of mitigation for less than significant impacts in Section D.1.4.1.

Mitigation Measures for Impact V-1: Visibility of construction activities and equipment

- V-1a Reduce visibility of construction activities and equipment.**
- V-1b Reduce construction night lighting impacts.**

Impact V-2: Visibility of land scarring in arid and semi-arid landscapes (Class II)

This impact would be as described for the Proposed Project Imperial Valley Link in Section D.3.5, and would occur along many areas of this route where it passes through undeveloped arid and semi-arid landscapes. The installation of new structures and construction of new access along the route would cause disturbance of soils and vegetation as vehicles and equipment access the route and equipment and materials are moved. The longer duration of land scarring impacts would generally constitute potentially significant visual impacts that could be mitigated to levels that would be less than significant (Class II). Applicant Proposed Measures (APMs) presented in Table D.3-10 that pertain to ground disturbance in general include BIO-23 and GEO-2. These measures would help to lessen the occurrence and/or severity of these impacts. However, Mitigation Measures V-2a through V-2c shall also be implemented in order to reduce impacts to less than significant levels.

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

- V-2a Reduce in-line views of land scars.**
- V-2b Reduce visual contrast from unnatural vegetation lines.**
- V-2c Reduce color contrast of land scars.**

Operational Impacts

Under the current Cleveland National Forest Plan, the Route D Alternative would result in significant (Class I) and beneficial (Class IV) visual impacts. The alternative would also result in adverse but less than significant visual impacts when viewed from the peaks of the Cuyamaca Mountains (under the visual sensitivity-visual change method of analysis).

Long-term, operational visual impacts would be experienced by viewers throughout the length of this alternative. Three representative Key Viewpoint (KVPs 64 through 66) were selected to characterize the visual impacts that would occur along this alternative route.

Impact V-78: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 64 on Boulder Creek Road (SMS) (Class I)

Figure E.3.3-1A presents the existing view to the west from Key Viewpoint 44 on Boulder Creek Road, approximately 8.8 miles north of the intersection with Oak Grove Road. Figure E.3.3-1B presents a visual simulation that shows the Route D Alternative transmission line crossing passing in close proximity to Boulder Creek Road and nearby rural residences. As shown in the simulation, this alternative would introduce prominent built structures with substantial industrial character into a predominantly natural landscape absent similar features. The resulting visual contrast would be substantial. The openness of the terrain and large scale of the structures would allow foreground to distant views of the transmission line (structures and conductors) from Boulder Creek Road, rural residences, and other graded access roads. View blockage of the surrounding slopes and ridges would also occur, as would skylining (extending above the horizon), where the line crosses ridges and crests hills. Skylining would exacerbate structure prominence and the transmission line would substantially reduce the integrity of the existing landscape. The resulting level of change would be moderate-to-high.

Figure E.3.3-1A. Key Viewpoint 64 – Route D Alternative – Boulder Creek Road – Existing View
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Figure E.3.3-1B. Key Viewpoint 64 – Route D Alternative – Boulder Creek Road – Visual
Simulation
[CLICK HERE TO VIEW](#)

The moderate-to-high level of change that would result from this alternative would not be consistent with Aesthetic Management Standard S9 of the Cleveland National Forest Land Management Plan requiring activities to meet the applicable SIO. Specifically, the transmission line would not repeat the form, line, color, texture, and pattern common to the landscape character so completely and at such scale that it is not evident, as required by the applicable “HIGH” SIO. Indeed, the structures would be quite prominent features in the landscape. Furthermore, the transmission line would not qualify for the exceptions of (1) a minor adjustment (one level reduction with approval) to the SIO, or (2) a temporary drop of more than one SIO not to exceed three years in duration, as required in Aesthetic Management Standard S10. The resulting visual impact would be significant (Class I). There is no mitigation available to reduce the significant visual impact to a level that would be less than significant. However, Mitigation Measures V-3a and V-45a would be implemented to reduce the visual impact along this alternative. While implementation of these measures will not achieve the HIGH SIO, they will enable achievement of the highest scenic integrity possible. This viewpoint analysis is considered representative of views of this alternative from Boulder Creek, Cedar Creek, and Tule Springs Roads, and scattered rural residences.

Mitigation Measures for Impact V-78: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 64 on Boulder Creek Road

V-3a Reduce visual contrast of towers and conductors.

V-45a Prepare and implement Scenery Conservation Plan.

Impact V-79: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 65 at Cuyamaca Peak (VS-VC) (Class III)

Figure E.3.3-2A presents the existing view to the west from Key Viewpoint 65 at Cuyamaca Peak. Figure E.3.3-2B presents a visual simulation that depicts the addition of the Route D transmission line to the valley below in the vicinity of Boulder Creek Road. As shown in the simulation, at a viewing distance of approximately 2.5 to 3 miles, the steel lattice structures would be slightly noticeable as somewhat indistinct, vertical features. The lattice design would help the structures to blend with the background. Depending on lighting and visibility conditions, the structures may appear light to dark in color, exhibiting varying degrees of visibility. The images presented in Figures E.3.3-2A and 2B represent slightly obscured visibility from the low mists of a winter cloud cover, which is not uncommon for the peaks during the winter season. However, even under these reduced visibility conditions, the repetitive pattern of the structures would cause them to stand out slightly from the surrounding natural forms and colors, increasing their noticeability and subsequent visual contrast. The resulting visual contrast would be low-to-moderate. The subordinate project features would cause a low-to-moderate degree of view blockage of the background landforms. As a result, the overall visual change would be low-to-moderate (particularly under improved viewing conditions) when the three equally weighted factors of visual contrast, project dominance, and view blockage are combined. In the context of the existing landscape’s moderate-to-high visual sensitivity, the resulting visual impact would be adverse but less than significant (Class III). However, Mitigation Measure V-3a would be implemented to reduce the visual impact along this portion of the alternative. While Impact V-79 is less than significant, mitigation would be implemented in compliance with NEPA requirements (please see the explanation of mitigation for less than significant impacts in Section D.1.2). This viewpoint analysis is considered representative of views of this alternative from the peaks of the Cuyamaca Mountains.

Mitigation Measure for Impact V-79: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 65 at Cuyamaca Peak

V-3a Reduce visual contrast of towers and conductors.

Impact V-80: Slight increase in structure contrast, view blockage, and skylining when viewed from Key Viewpoint 66 at the Inaja Monument Park Overlook (SMS) (Class III)

Figure E.3.3-3 presents the existing view to the south down the San Diego River Canyon from Key Viewpoint 66 at the Inaja Monument Park Overlook. The Route D Alternative would cross the canyon approximately six miles south of the Overlook. At that viewing distance, the structures would not be noticeable though they may be slightly visible under clear viewing conditions. Because of the substantial viewing distance, the landscape would appear to be unaltered to the casual observer. To the extent that the structures within the canyon are visible, the resulting level of change would be very low.

This alternative would be consistent with Aesthetic Management Standard S9 requiring activities to meet the applicable Scenic Integrity Objective. Specifically, this alternative, as viewed from the Monument Overlook, would not appear to alter the existing landscape, which would meet the requirement of a HIGH SIO. Although the new transmission line would not repeat the form, line, color, texture, and pattern common to the landscape character, the structures would not be noticeable. Also, the alternative, as proposed, would not need to file for an exception as described in Aesthetic Management Standard S10. Therefore, because the visual impact would be adverse but less than significant (Class III), no mitigation measures are proposed.

E.3.3.3 Central South Substation Alternative

Environmental Setting

The Central South Substation Alternative would be a 500 kV to 230 kV substation, which would be located on private land at the north end of the Route D Alternative transmission line route, west of the crossing of the Upper San Diego River Canyon. The site spans a shallow depression on a grassy plain punctuated by scattered oaks. Public views of this location are extremely limited and would only be glimpsed from SR78 to the north and Little Page Road to the west. Views from these two public roads are substantially screened by roadside vegetation. In both cases, views approach 90 degrees off the direction of travel and on SR78, travel speeds limit any potential view to a brief moment. Given the lack of public visibility, a key viewpoint was not established for this alternative.

Construction Impacts

Impact V-1: Short-term visibility of construction activities, equipment, and night lighting (Class III)

Construction impacts at the substation location would be as described for the Proposed Project Imperial Valley Link in Section D.3.5 and would include the visual intrusion of construction activities and equipment (Impact V-1). No new ancillary facilities would be required for this alternative.

Figure E.3.3-2A. Key Viewpoint 65 – Route D Alternative – Cuyamaca Peak – Existing View

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Figure E.3.3-2B. Key Viewpoint 65 – Route D Alternative – Cuyamaca Peak – Visual Simulation

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Figure E.3.3-3. Key Viewpoint 66 – Route D Alternative – Inaja Monument Overlook – Existing
View and Simulation

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There are no public viewpoints of concern and while construction of the substation would require an extended period of time, it would not be visible. APM VR-4 (presented in Table D.3-10) would be somewhat helpful in minimizing the impact at the site because it would prohibit the application of paint or permanent discoloring agents to rocks or vegetation to indicate survey or construction activity limits. Although Impact V-1 at this location would be less than significant, mitigation would be implemented in compliance with NEPA requirements. However, to ensure that viewers are not unnecessarily impacted during construction, Mitigation Measures V-1a and V-1b would be implemented to reduce construction impacts, but are not required because the impact is less than significant without mitigation.

Mitigation Measures for Impact V-1: Visibility of construction activities and equipment

V-1a Reduce visibility of construction activities and equipment.

V-1b Reduce construction night lighting impacts.

Operational Impacts

Operation of the Central South Substation Alternative would result in adverse but less than significant (Class III) visual impacts. Long-term operational visual impacts would be very limited in their visibility to travelers on SR78 and Little Page Road. As a result, no key viewpoint was selected to characterize the visual impacts that would occur from this alternative.

Impact V-81: Introduced structure contrast, industrial character, view blockage, skylining, and glare from night lighting when viewing the Central South Substation (VS-VC) (Class III)

The proposed substation would not be noticeable to travelers on SR78 and Little Page Road. However, to the extent that it is seen from these public vantage points, it would appear as an assemblage of complex, geometric forms with vertical to diagonal lines. The substation components would exhibit structural contrast and industrial character in a natural-appearing landscape lacking similar characteristics. It may also be possible to discern some degree of view blockage and skylining through the screened views. To the extent that the substation is noticed, it would be an adverse but less than significant (Class III) visual impact given the very limited public visibility of the facility. Mitigation Measures V-7a, 7b, and 21a are recommended, but not required to ensure that visual impacts do not result from the operation of this highly complex facility. While Impact V-81 is less than significant, mitigation would be implemented in compliance with NEPA requirements (please see the explanation of mitigation for less than significant impacts in Section D.1.2). It should also be noted that implementation of the Proposed Project, the Top of the World Substation Alternative, the SWPL I-8 Alternative, or the SWPL Modified Route D Alternative, described in Section D-3 in this report, would eliminate Impact V-81. However, under the other options, a Class I impact (as opposed to a Class III impact) would occur at those different locations.

Mitigation Measure for Impact V-81: Increased structure contrast, industrial character, view blockage, and skylining when viewing the Central South Substation

V-7a Reduce visual contrast associated with ancillary facilities.

V-7b Screen ancillary facilities.

V-21a Reduce night lighting impacts.

E.3.3.4 Future Transmission System Expansion

For the Proposed Project and route alternatives along the Proposed Project route, Section B.2.7 identifies Future Transmission System Expansion routes for both 230 kV and 500 kV future transmission lines. These routes are identified, and impacts are analyzed in Section D of this EIR/EIS, because SDG&E has indicated that transmission system expansion is foreseeable, possibly within the next 10 years. For the SWPL alternatives, 500 kV and 230 kV expansions would also be possible. The potential expansion routes for the Route D Alternative are described in the following paragraphs.

230 and 500 kV Future Transmission System Expansion

The Route D Alternative would begin at approximately MP I8-70 and would head northward until it reached the Central South Substation Alternative at approximately MP 114.5 of the Proposed Project. The Route D Alternative would convert to 230 kV at the Central South Substation and a double-circuit 230 kV line would be constructed southwest from that substation to the Sycamore Canyon Substation. The Central South Substation would accommodate up to six 230 kV circuits and an additional 500 kV circuit. Only two 230 kV circuits are proposed at this time, but construction of additional 230 kV circuits and a 500 kV circuit out of the Central South Substation may be required in the future. There are two routes that are most likely for these future lines; each is addressed below. Figure E.1.1-6 illustrates the potential routes of the future transmission lines.

Additional 230 and 500 kV circuits could follow the Proposed Project corridor starting at MP 114.5. The routes could either: (1) follow the Proposed Project corridor southwest to the Chicarita Substation and then follow the Proposed Project's 230 kV Future Transmission Expansion System (see description in Section B.2.7) from Chicarita to the Escondido Substation; or (2) the Proposed Project northeast to the Proposed Central East Substation and then follow the Proposed Project's 500 kV Future Transmission Expansion route shown in Figure B-12b (see description in Section B.2.7). See Section D.3.2, D.3.7, D.3.8, and D.3.9 for the Visual setting, impacts, and mitigation measures for the Central, Inland Valley, and Coastal Links of the Proposed Project. See Section D.3.11 for the Visual setting, impacts, and mitigation measures for the Future Transmission System Expansion of the Proposed Project.

Figure E.3.3-Ap.1. Visual Summary Table: Route D Alternative
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