

E.4.3 Visual Resources

The Modified Route D Alternative route is described in Section E.4.1. It includes three main segments: a southwesterly segment that crosses BLM, CNF and private lands before reaching the Cameron Substation, a westerly segment that follows the southern boundary of the CNF, and a northerly segment that is primarily on CNF land and includes the Modified Route D Substation.

E.4.3.1 Environmental Setting

The first 15-mile segment of this 500 kV alternative would diverge from the I-8 Alternative just before MP I8-49. From here it would span I-8 and then turn southwest and west, following an existing 69 kV transmission line that connects Boulevard and Cameron Substations, primarily through public lands administered by the BLM and Cleveland National Forest. The route would then turn southwest along the eastern edge of Cameron Valley, crossing the ridges to the south of the valley before eventually turning west to converge on South Buckman Springs Road and Cameron Substation. From MP MD-15 to MD-24, the route would continue west, primarily on BLM land. The route would pass between BLM's Hauser Mountain Wilderness Study Area and CNF's Hauser Wilderness. At MP MD-24, the route would pass the Barrett Substation, heading north to re-enter the CNF. From MP MD-24 to MD-39, the route would follow the existing Barrett-Descanso 69 kV corridor for approximately five miles through Lyons Valley. The route would converge on and then cross Lyons Valley Road before diverging from the existing 69 kV line to ascend a series of ridges and cross Japatul Valley. The 500 kV route would terminate at an alternative 500 kV/230 kV substation on private land west of Japatul Valley Road and south of I-8. The 230 kV route would exit the substation to the north, descending a ridge and converging on I-8 (approximately two miles to the north) before turning west to transition underground at the same point as the I-8 Alternative (at the east end of Alpine Boulevard).

The landscape along this alternative is predominantly natural in appearance though there are rural residences in proximity to the route in the east (Cameron Valley) and west (Deerhorn, Lyons, and Japatul Valleys) (the southern east-west segment is more remote). There are existing utility lines along this alternative route though they tend to be of simple wood-pole construction, which is not uncharacteristic of the typical rural landscape. However, there are minimal built features exhibiting industrial character. The valleys are shallow and narrow and the bordering angular ridges are steep and rocky. Views of the Modified Route D Alternative would be very limited east of Cameron Valley but available from I-8, I-8 Ellis Wayside Vista Point, Old Highway 80, local paved roads (Buckman Springs Road, Lyons Valley Road, Japatul Valley Road, Japatul Road), local graded roads (Cameron Truck Trail, Big Potrero Truck Trail, Cottonwood Road, Barrett Lake Road, Cinnamon Drive, Skye Valley Road), and nearby residences.

Three key viewpoints (KVPs 67 through 69) were selected for detailed analysis and are considered representative of the visual impacts that would be experienced along this alternative. The locations of the Modified 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 67 – South Buckman Springs Road (VS-VC)

Key Viewpoint 67 was established on South Buckman Springs Road (see Figure E.4.3-1A). Viewing to the north-northeast, this location was selected to generally characterize the existing landscape views along the eastern portion of the Route D Alternative in general and south of Cameron Valley in particular where the route converges on South Buckman Springs Road.

Visual Quality. Moderate. The view from KVP 67 encompasses a foreground to middleground pastoral landscape bordered by low rolling, rocky ridges and hills. The grass- and shrub-covered fields and hill slopes are punctuated by individual and informal groupings of trees. Although a simple wood-pole passes through the landscape, and there are rural residences located along South Buckman Springs Road and Cameron Truck Trail, the landscape is substantially natural in appearance. Views are open and unobstructed with some panoramic sightlines available. Overall, the general lack of visual variety creates a landscape with moderate visual appeal.

Viewer Concern. High. Travelers on South Buckman Springs Road and Cameron Truck Trail, and nearby residents presently experience a rural landscape that is substantially natural in appearance though somewhat lacking in visual variety. Although there is an existing wood-pole utility line, there are no prominent structural features exhibiting industrial character. Any intrusion of built structures with industrial character or blockage of views of the valley or surrounding ridges would be perceived as an adverse visual change in the landscape.

Viewer Exposure. Moderate-to-high. The Modified Route D Alternative would be highly visible in the foreground of views from South Buckman Springs Road, Cameron Truck Trail and nearby residences. The number of viewers would be low-to-moderate and the duration of view would be brief (Buckman Springs Road) to extended (Cameron Truck Trail and nearby residences). Combining these four equally weighted factors gives an overall moderate-to-high viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For travelers on South Buckman Springs Road and Cameron Truck Trail and nearby residents, combining the equally weighted moderate visual quality, high viewer concern, and moderate-to-high viewer exposure results in an overall moderate-to-high visual sensitivity of the visual setting and viewing characteristics.

Key Viewpoint 68 – Lyons Valley Road (SMS)

Key Viewpoint 68 was established on Lyons Valley Road, approximately 2.75 miles east of the intersection with Honey Springs Road (see Figure E.4.3-2A). This view is to the north along the alternative route and captures a portion of the Pine Creek Place, which is generally an undeveloped canyon landscape. The canyons within this Place are typically rough, steep and narrow. Most of the area is covered with coastal sage and broadleaf chaparral. Granite boulders and rocky outcroppings dot the landscape. Although the streams are dry most of the year, riparian and oak woodlands (comprised of oaks, cottonwood, and willows) thrive in the grassy canyons. Lyons Valley Road is one of the main roads in the Pine Creek Place. The landscape is predominantly undeveloped and evidence of human activities is not common though 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 Lyons Valley Road. Views from Lyons Valley Road are open and unobstructed.

Pine Creek Place is maintained as a predominantly naturally evolving area that functions as a remote, undeveloped, wilderness landscape where only ecological changes are evident. The valued landscape attributes to be preserved or developed over time include pristine canyon woodland communities; vegetative diversity as expressed by healthy, coastal sage scrub communities; and the natural appearance of the landscape. Part of the management emphasis is to maintain the current character and level of development within the Pine Creek Place and promote wilderness values. As a result, the Scenic Integrity Objective (SIO) for this area is HIGH.

Figure E.4.3-1A/B. Key Viewpoint 67 – Modified Route D Alternative – South Buckman Springs Road – Existing View and Simulation

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Figure E.4.3-2A. Key Viewpoint 68 – Modified Route D Alternative – Lyons Valley Road –
Existing View

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Figure E.4.3-2B. Key Viewpoint 68 – Modified Route D Alternative – Lyons Valley Road – Visual Simulation

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Key Viewpoint 69 – Japatul Road (SMS)

Key Viewpoint 69 was established on Japatul Road, approximately two miles west of the intersection with Japatul Valley Road and Lyons Valley Road (see Figure E.4.3-3A). This view is to the north-northeast toward the mountain ridges north of Japatul Road and south of I-8 and captures a portion of the Sweetwater Place, which is a transition zone between the relatively undeveloped mountain, desert and wilderness open-spaces of eastern San Diego County and the urbanized communities of metropolitan San Diego. It contains the I-8 and Japatul road corridors, which offer expansive, scenic views to the adjacent mountains. The landscape supports a variety of vegetation types including oak woodlands, chaparral, and riparian vegetation. The landscape visible to the north from Japatul Road is predominantly undeveloped and natural appearing. Views can be open and unobstructed.

Sweetwater Place is maintained as a natural appearing landscape. The valued landscape attributes to be preserved or developed over time are the undeveloped character of Forest Service land that remain in this otherwise highly developed rural area; opportunities for unobstructed, panoramic views from the I-8 corridor—especially on the eastern side; the scenic integrity of important local landmarks; and built elements that are unobtrusive and exhibit a consistent architectural theme. Part of the management emphasis is to ensure that activities originating from neighboring private land are consistent with national forest land management objectives. Also, development within the I-8 road corridor (beyond the ridges visible in Figure E.4.3-3A) is to be managed to conserve panoramic views from the highway. As a result, the Scenic Integrity Objective (SIO) for Sweetwater Place is HIGH.

E.4.3.2 Environmental Impacts and Mitigations Measures

This section presents a discussion of impacts and mitigation measures for the Modified Route D Alternative as a result of construction, operation, and maintenance of the project. Table E.4.3-1 summarizes the impacts of the Modified Route D Alternative for visual resources.

Table E.4.3-1. Impacts Identified – Alternatives – Visual Resources

Impact No.	Description	Impact Significance
Modified 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-82	Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 67 on northbound South Buckman Springs Road	Class I
V-83	Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 68 on Lyons Valley Road	Class I
V-84	Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 69 on Japatul Road (SMS)	Class I
Modified Route D Alternative Substation and Star Valley Option		
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-85	Substation: Increased structure contrast, industrial character, view blockage, and glare from night lighting when viewed from Japatul Road and Bell Bluff Road	Class II
V-86	Star Valley Option: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 70 on Star Valley Road	Class I

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

Transmission Line. 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, suburban residents, commercial users, outdoor recreation enthusiasts, and travelers on public roads. 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). As previously stated, APM VR-4 (presented in Table D.3-10 above) would be somewhat helpful in lessening the impact that would be caused by the project at these sites. However, to ensure that viewers are not unnecessarily impacted during construction, Mitigation Measures V-1a through V-1c (full text presented above) 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.1.5.1.

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

- V-1a Reduce visibility of construction activities and equipment.**
- V-1b Reduce construction night lighting impacts.**
- V-1c Prohibit construction marking of natural features.**

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

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

Applicant Proposed Measures (APMs) presented in Table D.3-10 above that pertain to ground disturbance in general include BIO-APM-23 and GEO-APM-2. These measures would help to lessen the occurrence and/or severity of these effects. However, long-term land scarring and vegetation clearance impacts would still constitute potentially significant visual impacts that could likely be mitigated to levels that are less than significant (Class II) with effective implementation of Mitigation Measures V-2a (Reduce in-line views of land scars), V-2b (Reduce visual contrast from unnatural vegetation lines), V-2c (Reduce color contrast), V-2e (Minimize vegetation removal), and V-2f (Restrict vehicle travel and restore land). Furthermore, Mitigation Measure V-2g (Reduce land scarring and vegetation clearance impacts on USFS-administered lands) shall be implemented for construction on USFS-administered lands to ensure consistency with the required Scenery Conservation Plan described in Mitigation Measure V-45a.

Figure E.4.3-3A. Key Viewpoint 69 – Modified Route D Alternative – Japatul Road– Existing View

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Figure E.4.3-3B. Key Viewpoint 69 – Modified Route D Alternative – Japatul Road– Visual Simulation

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However, if site-specific conditions indicate that the mitigation measures would not be effective in eliminating unnatural demarcations in the vegetation landscape and reducing the resulting visual impact to a level that would be less than significant, then Mitigation Measure V-2d (Construction by helicopter) would be required following consultations with the CPUC, USBLM, and USFS as appropriate.

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

- 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.**
- V-2d** **Construction by helicopter.**
- V-2e** **Minimize vegetation removal.**
- V-2f** **Restrict vehicle travel and restore land.**
- V-2g** **Reduce land scarring and vegetation clearance impacts on USFS-administered lands.**

Operational Impacts

Under the BLM's current South Coast Resource Management Plan, the Modified Route D would not be consistent with the following VRM Class III management objectives:

- Retain the existing character of the landscape.
- Limit the level of change to the characteristic landscape to no greater than moderate.
- Activities may attract attention but should not dominate the view of the casual observer.
- Changes should repeat the basic element found in the predominant natural features of the characteristic landscape.

As a result, the Modified Route D Alternative would result in Class I (Significant) visual impacts on BLM-administered public lands.

Under the current Cleveland National Forest Plan, the Modified Route D Alternative would also result in significant (Class I) visual impacts on Forest lands. The alternative would also result in significant (Class I) visual impacts when viewed from non-BLM and non-Forest lands (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 including travelers on roads and nearby residents. Backcountry recreationists in the northern portion of the Hauser Mountain WSA, Hauser Canyon, and on the Pacific Crest Trail would also experience significant visual impacts as the route passes east-west through these areas. Three representative Key Viewpoint (KVPs 67 through 69) were selected to characterize the visual impacts that would occur along this alternative route.

Impact V-82: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 67 on northbound South Buckman Springs Road (Class I)

Figure E.4.3-1A presents the existing view to the north-northeast from Key Viewpoint 67 on northbound South Buckman Springs Road, across from Cameron Substation and just south of the route's span of South Buckman Springs Road. Figure E.4.3-1B presents a visual simulation that depicts the addition of

the Modified Route D transmission line to the landscape east of South Buckman Springs Road and east and south of Cameron Truck Trail. As shown in the simulation, the steel lattice structures would be very prominent, industrial additions to a landscape that presently is absent such features. Although the lattice design would help the structures to blend with the background when viewed from a distance, the close proximity of the structures to South Buckman Springs Road, Cameron Truck Trail and nearby residences would negate that blending characteristic and the structures would stand out from the predominantly natural land and vegetative forms, substantially compromising landscape integrity. The resulting visual contrast would be high. The co-dominant-to-dominant project features would cause a moderate-to-high degree of view blockage of the valley floor and surrounding hills and ridges. As a result, the overall visual change would be moderate-to-high and in the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be significant (Class I). Although APMs VR-1 through VR-6 commit SDG&E to several tower design and placement measures to minimize visual impacts, there is no mitigation available to reduce the significant visual impact to a level that would be less than significant in this corridor, aside from selection of an entirely different route (alternative) and landscape setting. The relatively open terrain, close viewing opportunities, and consistent backdrop along this route segment do not offer opportunities to either better screen the structures from view or blend them more effectively with a different background. Therefore, a localized rerouting of the line would not be effective. However, Mitigation Measure V-3a is still recommended to reduce the visual impact along this portion of the alternative. This viewpoint analysis is considered representative of project views from and in the vicinity of South Buckman Springs Road, Cameron Truck Trail, and nearby residences. It should also be noted that implementation of the Proposed Project or any of the other SWPL Alternatives (except for the BCD South Alternative) described elsewhere in this report, would eliminate the visual impacts along this portion of the alternative though under the other options, significant (Class I) visual impacts would occur elsewhere.

Measure for Impact V-82: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 67 on northbound South Buckman Springs Road

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

Construction Impacts

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

Construction and Storage Yards, and Fly Yards. Construction impacts on visual resources would result from the presence and visual intrusion of construction vehicles, equipment, materials, and work force at the construction and storage yards, and fly yards. Construction impacts on visual resources would also result from the temporary use of night lighting if night lighting is not appropriately controlled at these construction sites. Construction equipment and activities would be seen by various viewers in close proximity to the construction sites including rural residents, outdoor recreation enthusiasts, and travelers on public roads. Construction impacts at these sites could last two years and the resulting visual impacts would be significant but mitigable (Class II). Mitigation Measures V-1a and V-1b (full text presented above) and V-1c (described below) are required to reduce the impacts to levels that would be less than significant.

Impact V-83: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 68 on Lyons Valley Road (SMS) (Class I)

Figure E.4.3-2A presents the existing view to the north from Key Viewpoint 68 on Lyons Valley Road, approximately 2.75 miles east of the intersection with Honey Springs Road. Figure E.4.3-2B presents a visual simulation that shows the Modified Route D Alternative transmission line passing in close proximity to Lyons Valley Road. 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 Lyons Valley Road and adjacent Forest lands. 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 high.

The 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). Although APMs VR-1 through VR-6 commit SDG&E to several tower design and placement measures to minimize visual impacts, there is no mitigation available to reduce the significant visual impact to a level that would be less than significant in this corridor, aside from selection of an entirely different route (alternative) and landscape setting. The relatively open terrain, close viewing opportunities, and consistent backdrop along this route segment do not offer opportunities to either better screen the structures from view or blend them more effectively with a different background. Therefore, a localized rerouting of the line would not be effective. However, Mitigation Measures V-3a and V-45a are recommended 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 Lyons Valley Road, Japatul Road, local un-paved access roads, and rural residences in the vicinity of the route. It should also be noted that implementation of the Proposed Project or any of the other SWPL Alternatives described elsewhere in this report, would eliminate the visual impacts along this portion of the alternative though under the other options, significant (Class I) visual impacts would occur elsewhere.

Mitigation Measures for Impact V-83: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 67 on Lyons Valley Road

- V-3a Reduce visual contrast of towers and conductors.**
- V-45a Prepare and Implement Scenery Conservation Plan.**

Impact V-84: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 69 on Japatul Road (SMS) (Class I)

Figure E.4.3-3A presents the existing view to the north-northeast from Key Viewpoint 69 on Japatul Road, approximately two miles west of the intersection with Japatul Valley Road and Lyons Valley Road. Figure E.4.3-3B presents a visual simulation of the Modified Route D Alternative ascending the rugged ridges north of Japatul Road (and south of I-8) to the alternative substation site near the top of the ridges. 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 middleground views of the transmission line and substation from Japatul Road and foreground to middleground views of the transmission line exiting north of the substation from the Ellis Wayside Vista Point (on I-8) and westbound I-8. The 230 kV transmission line would also skyline as it crests the ridge immediately north of the substation before descending the slope to converge on I-8. View blockage of the background slopes would also be caused by the transmission line. Overall, the facilities would substantially reduce the integrity of the existing landscape and the resulting level of change would be high. Although the substation would be located on private property, the transmission line would cross public lands administered by the BLM and Forest Service. Also, the transmission line would be visible to residents in Japatul Valley and from the east in the vicinity of Bell Bluff Road (a distance of approximately 2.5 miles).

The 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, particularly when viewed from Japatul Road and the I-8 Ellis Wayside Vista Point on I-8. 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 are recommended 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 portion of the alternative from Japatul Road, I-8, the I-8 Ellis Wayside View Point, and nearby residences. It should also be noted that implementation of the Proposed Project or any of the other SWPL Alternatives described elsewhere in this report (except for the BCD South Alternative), would eliminate the visual impacts along this portion of the alternative though under the other options, significant (Class I) visual impacts would occur elsewhere.

Mitigation Measures for Impact V-84: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 69 on Japatul Road

- V-3a Reduce visual contrast of towers and conductors.**
- V-45a Prepare and Implement Scenery Conservation Plan.**

E.4.3.3 Modified Route D Substation

Environmental Setting

The Modified Route D Substation would be located on private land north of Japatul Road and south of I-8. Due to the slope of the parcel, the substation would be constructed on a two-level pad. The Environmental Setting would be as described above for Key Viewpoint 69 and the reader is directed to that section for the discussion of the existing landscape and viewing characteristics. The reader is also referred to Figure E.4.3-3A for the existing view of the site from KVP 69 on Japatul Road. The substation site would also be visible from residences in the vicinity of Bell Bluff Road (a distance of approximately 2.25 miles).

Environmental Impacts and Mitigation Measures

This section presents a discussion of impacts and mitigation measures for the Modified Route D Alternative Substation as a result of construction, operation, and maintenance of the project.

Construction Impacts

Significant (Class II) construction Impacts would include the short-term visibility of construction activities, equipment and night lighting at the substation, construction and storage yards, and fly yards, and the long-term visibility of land scars in arid and semi-arid landscapes as described below

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

Construction impacts on visual resources would result from the presence and visual intrusion of construction vehicles, equipment, materials, and work force at the substation, construction and storage yards, and fly yards. Construction impacts on visual resources would also result from the temporary use of night lighting if night lighting is not appropriately controlled at these construction sites. Construction equipment and activities would be seen by various viewers including travelers on local roads and nearby residents. Construction impacts at these sites could last two years and the resulting visual impacts would be significant but mitigable (Class II). Mitigation Measures V-1a through V-1c (full text presented above) are required to reduce the impacts to levels that would be less than significant.

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

- V-1a Reduce visibility of construction activities and equipment.**
- V-1b Reduce construction night lighting impacts.**
- V-1c Prohibit construction marking of natural features.**

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

Land scarring from use of staging areas and construction yards, construction of new access and spur roads, and activities adjacent to construction sites and along the ROW can be long-lasting (several years) in arid and semi-arid environments where vegetation recruitment and growth are slow. In-line views of linear land scars or newly bladed roads are particularly problematic and introduce adverse visual change and contrast by causing unnatural vegetative lines and soil color contrast from newly exposed soils. Vegetation clearance could occur in conjunction with project construction or during the life of the

project if vegetation is cleared as part of ongoing ROW maintenance or if a changed vegetation structure is maintained within the right of way.

Applicant Proposed Measures (APMs) presented in Table D.3-10 above that pertain to ground disturbance in general include BIO-APM-23 and GEO-APM-2. These measures would help to lessen the occurrence and/or severity of these effects. However, long-term land scarring and vegetation clearance impacts would still constitute potentially significant visual impacts that could likely be mitigated to levels that are less than significant (Class II) with effective implementation of Mitigation Measures V-2a (Reduce in-line views of land scars), V-2b (Reduce visual contrast from unnatural vegetation lines), V-2c (Reduce color contrast), V-2e (Minimize vegetation removal), and V-2f (Restrict vehicle travel and restore land). However, if site-specific conditions indicate that the mitigation measures would not be effective in eliminating unnatural demarcations in the vegetation landscape and reducing the resulting visual impact to a level that would be less than significant, then Mitigation Measure V-2d (Construction by helicopter) would be required.

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

- 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.**
- V-2d** **Construction by helicopter.**
- V-2e** **Minimize vegetation removal.**
- V-2f** **Restrict vehicle travel and restore land.**

Operational Impacts

The substation would result in operational impacts when viewed from Japatul Road and Bell Bluff Road as described in the following paragraph.

Impact V-85: Increased structure contrast, industrial character, view blockage, and glare from night lighting when viewed from Japatul Road and Bell Bluff Road (VS-VC) (Class II)

Views of the substation, approximately two miles north of Japatul Road (see Figures E.4.3-4A and 4B) and approximately 2.25 miles west of the Bell Bluff Road residential area, would be somewhat limited by distance though direct lines of sight would be available. The proposed substation would be visible to travelers on Japatul Road though not particularly noticeable (Figure E.4.3-4B). However, the substation would appear integrated with the connecting transmission line. The connecting transmission line would tend to draw the viewer's eye toward the substation location, which would increase the facility's visibility in the landscape. Visibility of the substation and connecting transmission line would vary with lighting and weather conditions. Under some conditions, the substation would be quite visible, particularly from the Bell Bluff Road residential area. To the extent that the substation is noticeable under any conditions of visibility, the substation would appear within a rugged, undeveloped ridgeline landscape. Therefore, to the extent that the substation is observed, the 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 of background slopes and ridges. The resulting visual impact would be significant but mitigable (Class II). Mitigation Measures V-7a, 7b, and 21a are required to ensure that visual impacts do not result from the operation of this highly complex facility. It

Figure E.4.3-4A. Key Viewpoint 70 – Star Valley Option– Star Valley Road – Existing View
[CLICK HERE TO VIEW](#)

Figure E.4.3-4B. Key Viewpoint 70 – Star Valley Option– Star Valley Road – Simulation
[CLICK HERE TO VIEW](#)

should also be noted that implementation of the Proposed Project or any of the other Alternatives (Except for the BCD South Alternative) described elsewhere in this report, would eliminate Impact V-85. However, under any of the other options, Class I visual impacts would occur elsewhere.

Mitigation Measures for Impact V-85: Increased structure contrast, industrial character, view blockage, and glare from night lighting when viewed from Japatul Road and Bell Bluff Road

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

V-7b Screen ancillary facilities.

V-21a Reduce night lighting impacts.

E.4.3.4 Star Valley Option

Environmental Setting

The Modified Route D Star Valley Option would exit the Modified Route D Alternative Substation to the west-northwest as an overhead double-circuit 230 kV transmission line. The route would head west and northwest for 2.2 miles, then north for approximately 0.3 miles to meet Star Valley Road, 0.7 miles east of I-8 Exit 33 for Willows Road. On the southwest side of the bend in Star Valley Road, the route would transition underground and continue north to Alpine Boulevard. This option would join the I-8 Alternative at Alpine Boulevard. From the substation, the route would pass through undeveloped land absent built features with industrial character. Views of the aboveground portion of the route would be available to residents along Star Valley Road and the side roads.

Key Viewpoint 70 was established on Star Valley Road, just north of the bend in the road (see Figure E.4.3-4A). Viewing to the south, this location was selected to generally characterize the existing landscape views in the vicinity of the transition structure location.

Visual Quality. Moderate. The view from KVP 70 encompasses a foreground rural, undeveloped landscape consisting of low, rolling, rocky hills supporting grass and low-growing shrubs. The landscape is predominantly natural in appearance though lacking in visual variety. Views are open and unobstructed and there is no visual evidence of built industrial features or character.

Viewer Concern. High. Residents along Star Valley Road presently experience a rural landscape that is substantially natural in appearance. Although the landscape is somewhat lacking in visual variety, there is no visible industrial character or prominent structural features. Any intrusion of built structures with industrial character or blockage of views of the sky, hills, and ridges would be perceived as an adverse visual change in the landscape.

Viewer Exposure. Moderate-to-high. The Star Valley Option would be highly visible in the foreground of views from residences along Star Valley Road. Although the number of viewers would be low, the duration of view would be extended. Combining these four equally weighted factors gives an overall moderate-to-high viewer exposure.

Overall Visual Sensitivity. Moderate-to-high. For residents along Star Valley Road, combining the equally weighted moderate visual quality, high viewer concern, and moderate-to-high viewer exposure results in an overall moderate-to-high visual sensitivity of the visual setting and viewing characteristics.

Environmental Impacts and Mitigation Measures

This section presents a discussion of impacts and mitigation measures for the Star Valley Option as a result of construction, operation, and maintenance of the project.

The Star Valley Option would cause construction impacts when viewed from the residences along Star Valley Road in general and KVP 70 specifically.

Construction Impacts

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

Construction and Storage Yards, and Fly Yards. Construction impacts on visual resources would result from the presence and visual intrusion of construction vehicles, equipment, materials, and work force at the construction and storage yards, and fly yards. Construction impacts on visual resources would also result from the temporary use of night lighting if night lighting is not appropriately controlled at these construction sites. Construction equipment and activities would be seen by various viewers in close proximity to the construction sites including rural residents, outdoor recreation enthusiasts, and travelers on public roads. Construction impacts at these sites could last two years and the resulting visual impacts would be significant but mitigable (Class II). Mitigation Measures V-1a and V-1b (full text presented above) and V-1c (described below) are required to reduce the impacts to levels that would be less than significant.

Transmission Line and Transition Structures. 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 and at the transition structures. 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 residents along Star Valley Road. 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). As previously stated, APM VR-4 (presented in Table D.3-10 above) would be somewhat helpful in lessening the impact that would be caused by the project at these sites. However, to ensure that viewers are not unnecessarily impacted during construction, Mitigation Measures V-1a through V-1c (full text presented above) 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.1.5.1.

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

- V-1a Reduce visibility of construction activities and equipment.**
- V-1b Reduce construction night lighting impacts.**
- V-1c Prohibit construction marking of natural features.**

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

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

Applicant Proposed Measures (APMs) presented in Table D.3-10 above that pertain to ground disturbance in general include BIO-APM-23 and GEO-APM-2. These measures would help to lessen the occurrence and/or severity of these effects. However, long-term land scarring and vegetation clearance impacts would still constitute potentially significant visual impacts that could likely be mitigated to levels that are less than significant (Class II) with effective implementation of Mitigation Measures V-2a (Reduce in-line views of land scars), V-2b (Reduce visual contrast from unnatural vegetation lines), V-2c (Reduce color contrast), V-2e (Minimize vegetation removal), and V-2f (Restrict vehicle travel and restore land). Furthermore, Mitigation Measure V-2g (Reduce land scarring and vegetation clearance impacts on USFS-administered lands) shall be implemented for construction on USFS-administered lands to ensure consistency with the required Scenery Conservation Plan described in Mitigation Measure V-45a. However, if site-specific conditions indicate that the mitigation measures would not be effective in eliminating unnatural demarcations in the vegetation landscape and reducing the resulting visual impact to a level that would be less than significant, then Mitigation Measure V-2d (Construction by helicopter) would be required following consultations with the CPUC and USFS.

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

- 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.**
- V-2d Construction by helicopter.**
- V-2e Minimize vegetation removal.**
- V-2f Restrict vehicle travel and restore land.**
- V-2g Reduce land scarring and vegetation clearance impacts on USFS-administered lands.**

Operational Impacts

The Star Valley Option would cause long-term operational impacts when viewed from the residences along Star Valley Road in general and KVP 70 specifically. One representative Key Viewpoint (KVP 70) was selected to characterize the visual impacts that would occur in the vicinity of Star Valley Road.

Impact V-86: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 70 on Star Valley Road (Class I)

Figure E.4.3-4A presents the existing view to the south from Key Viewpoint 70 on southbound Star Valley Road, just north of the bend in Star Valley Road. Figure E.4.3-4B presents a visual simulation that depicts the addition of the transition structures just to the southwest of the bend in the road and the

connecting overhead transmission line. As shown in the simulation, the steel pole transition structures and tangent towers would be very prominent, industrial additions to a landscape that presently is absent such features, substantially compromising landscape integrity. The resulting visual contrast would be high. The co-dominant-to-dominant project features would cause a moderate-to-high degree of view blockage of the background hills, ridges, and sky. As a result, the overall visual change would be moderate-to-high and in the context of the existing landscape's moderate-to-high visual sensitivity, the resulting visual impact would be significant (Class I). Although APMs VR-1 through VR-6 commit SDG&E to several tower design and placement measures to minimize visual impacts, there is no mitigation available to reduce the significant visual impact to a level that would be less than significant in this corridor, aside from selection of an entirely different route (alternative) and landscape setting. The relatively open terrain, close viewing opportunities, and consistent backdrop along this route segment do not offer opportunities to either better screen the structures from view or blend them more effectively with a different background. Therefore, a localized rerouting of the line would not be effective. However, Mitigation Measure V-3a is still recommended to reduce the visual impact along this portion of the alternative. This viewpoint analysis is considered representative of project views from Star Valley Road and nearby residences. It should also be noted that implementation of the Proposed Project or any of the other SWPL Alternatives (except for the BCD South Alternative) described elsewhere in this report, would eliminate the visual impacts along this portion of the alternative though under the other options, significant (Class I) visual impacts would occur elsewhere.

Mitigation Measure for Impact V-86: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 70 on Star Valley Road

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

E.4.3.5 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 Modified Route D Alternative would begin at approximately Interstate 8 MP-47 and would head southwest then northward until it reached the Interstate 8 Alternative at approximately MP I8-71. A substation could be built to convert the 500 kV line to 230 kV at approximately MD-34, the Modified Route D Substation Alternative. The double-circuit 230 kV line would exit the substation overhead, then continue north into the CNF, joining the Interstate 8 Alternative at approximately MP I8-71 where it transitions to underground at the east end of Alpine Boulevard. The Modified Route D Substation would accommodate up to six 230 kV circuits and a 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 Modified Route D Substation may be required in the future. There are three routes that are most likely for these future lines; each is described below. Figure E.1.1-6 illustrates the potential routes of the future transmission lines.

- Two additional 230 kV circuits could be installed underground within Alpine Boulevard, with appropriate compact duct banks and engineering to avoid, or possibly relocate, existing utilities.

This route would follow the Interstate 8 Alternative route from the Interstate 8 Alternative Substation until MP I8-70.8 where it would transition underground until MP I8-79 where it would transition overhead again. The future transmission line route would continue to follow the Interstate 8 Alternative's overhead 230 kV route to the point where it meets the Proposed Project at MP 131. See Section E.1.3.1 and E.1.3.2 for the Visual setting, impacts, and mitigation measures along the I-8 route. The future transmission route would then join the proposed route corridor to the west, continuing past the Sycamore Canyon Substation to the Chicarita Substation. See Section D.3.2, D.3.8, and D.3.9 for the Visual setting, impacts, and mitigation measures for the Inland Valley and Coastal Links. It could then follow the Proposed Project's 230 kV Future Transmission Expansion route (see description in Section B.2.7) from Chicarita to the Escondido Substation shown in Figure B-12a. See Section D.3.11 for the Visual setting, impacts, and mitigation measures for the Future Transmission System Expansion of the Proposed Project.

- Additional 230 and 500 kV circuits could follow the Route D Alternative corridor (see description in Section E.3.1) to the north of Descanso, after following the Interstate 8 Alternative 230 kV route from the Interstate 8 Substation to MP I8 70.3. See Section E.3.3.1 and E.3.3.2 for the Visual setting, impacts, and mitigation measures along Route D. The Route D corridor would connect with the Proposed Project corridor at Milepost 114.5, and could then follow either: (1) the Proposed Project southwest to the Chicarita Substation and then follow the Proposed Project's 230 kV Future Transmission Expansion route (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.
- The future 230 and 500 kV lines could follow the Modified Route D Alternative corridor (within the 368 Corridor identified by the Department of Energy's Draft West-wide Corridor Programmatic EIS) south for 8 miles to MP MD-26. See Section E.4.3.1 and E.4.3.2 for the Visual setting, impacts, and mitigation measures along Modified Route D. At MP MD-26, new 230 or 500 kV circuits would turn west and connect with the northernmost segment of the West of Forest Alternative route as described in Section E.1.1. See Section E.1.3.5 for the Visual setting, impacts, and mitigation measures along MP MD-26 to MP I8-79 corridor. This route would meet up with the Interstate 8 Alternative at approximately MP I8-79 and would follow the Interstate 8 Alternative's overhead 230 kV route to the point where it meets the Proposed Project at MP 131 (for a description of the Interstate 8 transmission corridor see Section E.1.1). The future transmission route would then join the proposed route corridor to the west, continuing past the Sycamore Canyon Substation to the Chicarita Substation. It could 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. See Section D.3.11 for the Visual setting, impacts, and mitigation measures for the Future Transmission System Expansion of the Proposed Project.