

E.1.3 Visual Resources

The discussions presented in the following sections refer to key viewpoints (KVPs), which are representative viewing locations where detailed visual analyses were conducted. The location of each referenced KVP is shown on Figure E.1.3-1. The methodology for assessment of visual resources is presented in Section D.3.

E.1.3.1 Environmental Setting

The 92.7-mile I-8 Alternative would cross through a diversity of landscapes ranging from arid, expansive deserts in the east to the suburban inland valleys further to the west. The alternative would parallel the SWPL for the first 35.7 miles from Imperial Valley Substation to a point about six miles west of the San Diego/Imperial County Line. At that point, the 500 kV line would turn northwest, passing less than one mile southeast of the southwest corner of ABDSP and crossing just west of the BLM Carrizo Gorge Wilderness Area and one mile east of the community of Boulevard. It would continue northwest, spanning I-8 and then turning west to parallel I-8, crossing the freeway several times to avoid residential areas, a wind farm, a casino, and other developed areas. Eventually, the 500 kV line would terminate at a new 500 kV/230 kV substation on the north side of the freeway and a 230 kV line would continue on, spanning to the south side of the freeway and transitioning underground beneath Alpine Road. At approximately MP I8-79, the route would span I-8 to the north and diverge from the I-8 corridor for the last time, heading in a north to northwest direction, passing El Capitan Reservoir, Wildcat Canyon, El Monte County Park, and the equestrian residential community of Moreno, before eventually spanning SR67 and connecting to Sycamore Canyon Substation.

Views of the I-8 Alternative would be available from numerous vantage points including I-8, Evan Hewes Highway, SR67, SR79, Sunrise National Scenic Byway, local roads, recreation facilities and dispersed recreation areas, and residential areas.

Given the length of this alternative (92.7 miles), the diversity of landscapes crossed, and the numerous viewing opportunities, 12 key viewpoints (KVPs 44 through 55) were selected for detailed analysis and are considered representative of the visual impacts that would be experienced along this alternative. The locations of the I-8 Alternative KVPs are shown on Figure E.1.3-1. The results of the visual analysis are summarized in Appendix VR-1. Discussions of the existing visual settings for the 12 KVPs are presented in the following paragraphs.

Key Viewpoint 44 – Dunaway OHV Staging Area (VRM)

Key Viewpoint 44 was established at the Dunaway OHV Staging Area, just south of the Dunaway Road/I-8 overpass (see Figure E.1.3-2A). Viewing to the south across the Yuha Desert, this location was selected to generally characterize the existing landscape visible to recreationists in the vicinity of the Dunaway OHV Staging Area and the OHV recreation trails within the Yuha Basin ACEC in the vicinity of the route. This land area, encompasses a portion of the existing SWPL transmission line. The flat desert landscape supports a sparse distribution of short grasses and shrubs of subdued color. Although there are distant mountain ranges and some areas of localized erosion that create land variation of visual interest, the overall scenic quality of the desert basin landscape is somewhat non-descript and compromised by the noticeable presence of the steel-lattice transmission line with its industrial character. Landform colors are predominantly tan with lavender and bluish hues for the distant mountains. Landform textures appear smooth to granular while vegetation is patchy with clumps, transitioning to continuous

blocks at greater distance. Vegetation exhibits a matte texture. Vegetation colors include tans to pale yellow for grasses with muted to light and dark greens for the shrubs. In the distance, the complex structural forms and lines of the existing SWPL structures are crossing the basin floor. The BLM scenic quality classification is Class C while viewer sensitivity is high. The Interim VRM Class Rating is III.

Key Viewpoint 45 – Yuha Desert I-8 Span (VRM)

Key Viewpoint 45 was established on westbound I-8, approximately 0.2 miles west of the Dunaway Road overpass (see Figure E.1.3-3A). Viewing to the west along the I-8, crossing of the Yuha Desert, this location was selected to generally characterize the existing landscape visible to travelers on I-8 in the vicinity of the span. This landscape encompasses a portion of the existing SWPL transmission line and the linear feature of I-8. Views from I-8 in the vicinity of the span are unobstructed and panoramic. Adjacent landform colors are predominantly tan with lavender and bluish hues for the distant mountains. Landform textures appear smooth to granular while vegetation is patchy with clumps, transitioning to continuous blocks at greater distance. Vegetation exhibits a matte texture. Vegetation colors include tans to pale yellow for grasses with muted to light and dark greens for the shrubs. Although there are distant mountain ranges that create land variation of visual interest, the overall scenic quality of the desert basin landscape is somewhat non-descript and compromised by the noticeable presence of the steel-lattice transmission line with its industrial character and the linear form the freeway that creates an unnatural demarcation in the desert vegetation. The BLM scenic quality classification is Class C while viewer sensitivity is high. The Interim VRM Class Rating is III.

Key Viewpoint 46 – Plaster City West OHV Staging Area (VRM)

Key Viewpoint 46 was established at the Plaster City West OHV Staging Area off of Evan Hewes Highway and north of I-8 (see Figure E.1.3-4A). This staging area is one of the more popular staging destinations for 4WD enthusiasts. Viewing to the west along the existing SWPL transmission line crossing of the Plaster City Open Area, this location was selected to generally characterize the existing landscape visible to recreationists in the vicinity of the Plaster City OHV Staging Area and the Open Area in the vicinity of the route. As shown in the photograph, this landscape encompasses a portion of the existing SWPL transmission line as it passes directly through the staging area and the portion of the Open Area west of the staging area. Views from the staging area and surrounding lands are unobstructed and panoramic. Adjacent landform colors are predominantly light tan with lavender and bluish hues for the distant mountains. Landform textures appear smooth to granular while the sparse vegetation is patchy with clumps. Vegetation exhibits a matte texture. Vegetation colors include tans to pale yellow for grasses with muted to light and dark greens for the shrubs. Although there are distant mountain ranges that create land variation of visual interest, the overall scenic quality of the desert basin landscape is somewhat non-descript and compromised by the noticeable presence of the steel-lattice transmission line with its industrial character and the linear form the freeway that creates an unnatural demarcation in the desert vegetation. The BLM scenic quality classification is Class C while viewer sensitivity is high. The Interim VRM Class Rating is III.

Key Viewpoint 47 – Sugarloaf Mountain to Interstate 8 (VRM)

Key Viewpoint 47 was established on eastbound I-8, south of Sugarloaf Mountain (see Figure E.1.3-5A). Viewing to the north toward Sugarloaf Mountain, this location was selected to generally characterize the existing landscape visible to travelers on I-8 descending from In-Ko-Pah Gorge to the Yuha Desert. This landscape encompasses a portion of the existing SWPL transmission line as it crosses Sugarloaf Mountain and converges on I-8, passing between the separated eastbound and westbound lanes. Vista

Figure E.1.3-1. Visual Resources SWPL Alternatives
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views from I-8 are panoramic in scope and encompass the western portion of the Yuha Desert with the Coyote Mountains beyond. Adjacent landform colors are predominantly light tan for soils with reddish-brown hues for rocks and lavender and bluish hues for the distant mountains. Landform textures appear smooth to granular while vegetation is patchy with clumps. Vegetation exhibits a matte texture and vegetation colors include tans to pale yellow for grasses with muted to light and dark greens and tans for the shrubs. Although the boulder slopes of In-Ko-Pah Gorge, Sugarloaf Mountain, and the Coyote Mountains beyond create land variation of visual interest, the overall scenic quality of the desert basin landscape is substantially compromised by the prominent presence of the steel-lattice transmission line with its complex structural form and lines and industrial character. The BLM scenic quality classification is Class C while viewer sensitivity is high. The Interim VRM Class Rating is III.

Key Viewpoint 48 – South of Table Mountain ACEC on Old Highway 80 (Airport Mesa) (VRM)

Key Viewpoint 48 was established on eastbound Old Highway 80, just south of Table Mountain ACEC and northeast of the rural community of Jacumba in an area referred to as Airport Mesa (see Figure E.1.3-6A). Viewing to the north-northeast toward the rocky ridges south of Table Mountain ACEC, this location was selected to generally characterize the existing landscape visible to travelers on Old Highway 80 in the vicinity of the ACEC. This landscape encompasses the southern end of the rugged Jacumba Mountains. However, also present in the landscape is the existing SWPL transmission line with its complex structural form and industrial character, which detracts from the otherwise natural appearing landscape. Landform colors are predominantly light tan for soils with tan to reddish-brown hues for rocks. Landform textures appear smooth to granular while the very sparse vegetation is patchy with clumps. Vegetation exhibits a matte texture and vegetation colors include tans to pale yellow for grasses with muted to light and dark greens and tans for the shrubs. Although the boulder slopes and jagged ridges of the Jacumba Mountains enhance visual variety and interest, the overall scenic quality of the desert mesa landscape is substantially compromised by the prominent presence of the steel-lattice transmission line with its complex structural form and lines and industrial character. The BLM scenic quality classification and viewer sensitivity are not available but the VRM Class Rating is II as identified in the current Eastern San Diego County Management Plan. The VRM Class II Management Objective is as follows:

VRM Class II. *To retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.*

However, the existing Management Plan is currently being revised and the VRM Class for this area is proposed to change to VRM Class III. The VRM Class III management objective is as follows:

VRM Class III. To partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate or lower. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.

Key Viewpoint 49 – Jacumba Street at Calexico Avenue in Jacumba (VS-VC)

Key Viewpoint 49 was established on Jacumba Street, just north of Calexico Avenue in Jacumba (see Figure E.1.3-7A). The view from KVP 49 encompasses the existing SWPL transmission line and the alternative route as it crosses a ridge north of the community of Jacumba. This location was selected to

generally characterize the existing landscape visible to residents of Jacumba that would be in close proximity to the alternative and would have open, unobstructed views of the transmission line.

Visual Quality. Low-to-Moderate. Viewing to the north-northeast, the foreground landscape is comprised of a rural residential neighborhood backdropped by a rugged, rocky ridge supporting the existing SWPL transmission line. Vegetation includes a variety of trees in the residential area, with short grasses and shrubs the predominant native vegetation. Overall, the landscape is lacking in visual variety, vividness, and uniqueness.

Viewer Concern. High. While local residents anticipate the presence of the existing SWPL line along the ridge to the north, the introduction of an additional line with a pronounced industrial character and additional view blockage of sky due to structure skylining, would be seen as an adverse visual change in the landscape.

Viewer Exposure. Moderate-to-high. The proposed route would be highly visible, though partially screened in the foreground, of views from Jacumba in general and KVP 49 specifically as the route passes to the north of Jacumba. While 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 of Jacumba, combining the equally weighted low-to-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 50 – Westbound I-8 Near La Posta Reservation (VS-VC)

Key Viewpoint 50 was established on westbound I-8, just east of the La Posta Reservation (see Figure E.1.3-8A). The view from KVP 50 captures the location of the I-8 Alternative as it passes adjacent and north of I-8 in an open, rugged landscape offering extended, unobstructed sightlines to the Laguna Mountains in the background. This location was selected to generally characterize the existing landscape visible to travelers on I-8.

Visual Quality. Moderate-to-high. The view to the northwest encompasses foreground to middleground rugged, rolling foothills backdropped by the horizontal form of the Laguna Mountains. Although the curvilinear form of I-8 (an Eligible State Scenic Highway) is a prominent built feature, the landscape to the north of the freeway appears relatively intact with few modifications. Views from the freeway are unobstructed and panoramic in scope. Overall, the landscape exhibits moderate visual variety and vividness with a moderate-to-high visual appeal.

Viewer Concern. High. Travelers on this section of I-8 are afforded panoramic views of a rugged, mountainous landscape that is primarily natural in appearance. Any addition of developed industrial features to the landscape or blockage of views to higher quality landscape features (rugged hills and ridges) would be perceived as an adverse visual change in the landscape.

Viewer Exposure. High. The proposed route would be highly visible in the foreground, of views from I-8 and KVP 50 as the route passes adjacent and to the north of the freeway. The number of viewers would be high and the duration of view would be extended given the inline views of the route and its location within the primary cone of vision of travelers on I-8. Combining these four equally weighted factors gives an overall high viewer exposure.

Overall Visual Sensitivity. High. For travelers on I-8, combining the equally weighted moderate-to-high visual quality, high viewer concern, and high viewer exposure results in an overall high visual sensitivity of the visual setting and viewing characteristics.

Key Viewpoint 51 – Eastbound I-8 in Cottonwood Valley (SMS)

Key Viewpoint 51 was established on eastbound I-8, approximately 1.5 miles north of the Buckman Springs Road off-ramp (see Figure E.1.3-9A). This viewpoint to the southeast captures a portion of the Morena Place, which is considered a gateway to the desert province and is generally comprised of rolling terrain that also includes large valleys surrounded by steep mountains. Scenery is further characterized by steep, uniform, chaparral covered hills, interrupted by scattered oak covered drainages. The landscape retains an open-space character with large expanses of undeveloped land. Views are also expansive.

The Morena Place is maintained as a natural appearing landscape along the I-8 corridor. Valued landscape attributes to be preserved over time include the rare and inviting streamside woodlands that provide scenic diversity in this chaparral-dominated landscape, and the natural appearance of areas that can be viewed from the I-8 corridor. Part of the management emphasis is to protect scenic values visible from the I-8 corridor. As a result, the Scenic Integrity Objective (SIO) for this area is HIGH.

Key Viewpoint 52 – Westbound I-8 at the Span, North of Cottonwood Valley (SMS)

Key Viewpoint 52 was established on westbound I-8, approximately 1.4 miles north of the Buckman Springs Road on-ramp (see Figure E.1.3-10A). This viewpoint to the northwest toward the proposed location of the I-8 Alternative's span of I-8, north of Cottonwood Valley, captures a portion of the Morena Place, which is considered a gateway to the desert province and is generally comprised of rolling terrain that also includes large valleys surrounded by steep mountains. Scenery is further characterized by steep, uniform, chaparral covered hills, interrupted by scattered oak covered drainages. The landscape retains an open-space character with large expanses of undeveloped land. Views are also expansive.

The Morena Place is maintained as a natural appearing landscape along the I-8 corridor. Valued landscape attributes to be preserved over time include the rare and inviting streamside woodlands that provide scenic diversity in this chaparral-dominated landscape, and the natural appearance of areas that can be viewed from the I-8 corridor. Part of the management emphasis is to protect scenic values visible from the I-8 corridor. As a result, the Scenic Integrity Objective (SIO) for this area is HIGH.

E.1.3.2 Environmental Impacts and Mitigation Measures

Impacts are analyzed in this section using the same methodology and significance criteria as defined for the Proposed Project in Section D.3. Table E.1.3-1 summarizes the visual impacts of the Interstate 8 Alternative.

Table E.1.3-1. Impacts Identified – Alternatives – Visual Resources

Impact No.	Description	Impact Significance
Construction Impacts for all Alternatives and Options		
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
Interstate 8 Alternative and Substation		
V-56	Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 44 at Dunaway OHV Staging Area	Class III
V-57	Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 45 on Westbound I-8, Crossing the Yuha Desert	Class III
V-58	Inconsistency with BLM VRM Class III Management objective due to introduction of structure contrast, industrial character, view blockage and skylining when viewed from Key Viewpoint 46 at the Plaster City West OHV Staging Area	Class I
V-59	Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 47 on Eastbound I-8, South of Sugarloaf Mountain	Class III
V-60	Inconsistency with BLM VRM Class II Management objective due to introduction of structure contrast, industrial character, view blockage and skylining when viewed from Key Viewpoint 48 south of Table Mountain ACEC on Old Highway 80 (Airport Mesa)	Class I
V-61	Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 49 in Jacumba	Class III
V-62	Increased structure contrast, industrial character, and view blockage when viewed from Key Viewpoint 50 on westbound I-8	Class I
V-63	Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 51 on eastbound I-8 in Cottonwood Valley	Class I
V-64	Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 52 on westbound I-8 north of Cottonwood Valley	Class I
V-65	Introduced structure contrast, industrial character, view blockage, skylining, and glare from night lighting when viewing the I-8 Alternative Substation	Class III
V-66	Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 53 on westbound Alpine Road	Class I
V-67	Increased structure contrast, industrial character, and view blockage when viewed from Key Viewpoint 54 in El Monte County Park	Class III
V-68	Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 55 on Moreno Boulevard	Class I
Campo North Option		
V-71	Increased structure contrast, industrial character, structure prominence and view blockage when viewed from Key Viewpoint 58 on eastbound I-8	Class I
South Buckman Springs Option		
V-72	Increased structure contrast, industrial character, structure prominence and view blockage when viewed from Key Viewpoint 59 on Cameron Truck Trail	Class I
V-87	Increased structure contrast, industrial character, structure prominence and view blockage when viewed from South Buckman Springs Road	Class I
V-88	Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining along the South Buckman Springs Option	Class I
Buckman Springs Underground Option		
V-70	Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, and view blockage when viewed from Key Viewpoint 57 on the northbound I-8 on-ramp from Buckman Springs Road in Cottonwood Valley	Class I

Table E.1.3-1. Impacts Identified – Alternatives – Visual Resources

Impact No.	Description	Impact Significance
West Buckman Springs Option		
V-69	Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 56 on northbound Buckman Springs Road in Cottonwood Valley	Class I
SDG&E Chocolate Canyon Option		
V-73	Increased structure contrast, industrial character, structure prominence and view blockage associated with the Chocolate Canyon Option	Class I

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)

Viewing areas of concern along this alternative occur in residential areas, along roads and recreational trails, and park and recreational facilities.

Substation, 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 substations, 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, suburban residents, commercial users, 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). Although 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, Mitigation Measures V-1a and V-1b are required to reduce the impacts to levels that would be less than significant. Please note the full text of the mitigation measures appears in Appendix 12.

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 in Lower Borrego Valley as well as travelers and recreationists on highways and local roads (I-8, SR78, SR86, SR98, Dunaway Road, Evan Hewes Highway, Westmorland Road, Huff Road, Wheeler Road, Old Kane Springs Road, Split Mountain Road), and numerous BLM 4WD access roads and smaller local 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 occur along the route where it passes through undeveloped arid and semi-arid lands. The installation of new structures and construction of new access along these portions of 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) previously presented in Table D.3-10 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 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

The I-8 Alternative would result in significant (Class I) and adverse but less than significant (Class III) visual impacts. Long-term, operational visual impacts would be experienced by viewers throughout this Alternative's study area. Twelve representative Key Viewpoints (KVPs 44 through 55) were selected to characterize the visual impacts that would occur along this alternative route, as illustrated in Figure E.1.3-1.

Impact V-56: Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 44 at Dunaway OHV Staging Area (VRM) (Class III)

Figure E.1.3-2A presents the existing view to the south from Key Viewpoint 44 at the Dunaway OHV Staging Area, just south of the I-8/Dunaway Road overpass. Figure E.1.3-2B presents a visual simulation that depicts the addition of the I-8 Alternative transmission line adjacent and to the north of the existing SWPL 500 kV, steel-lattice transmission line. This alternative would be prominently visible to 4WD recreationists at the Dunaway OHV Staging Area and on the BLM access roads leading out from the staging area into the Yuha Desert and Yuha Basin ACEC. Compared to the existing SWPL structures, the I-8 Alternative structures would be of similar design (complex, geometric forms with vertical to diagonal lines) and height and the conductors would appear as simple curvilinear lines. Although the number of visible structures would be effectively doubled, existing and new structures would be paired

Figure E.1.3-2A/B. Key Viewpoint 44 – I-8 Alternative – Dunaway Staging Area – Existing
Condition and Simulation

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and conductor spans would generally be matched. The new structures would also cause some additional skylining as they cross the flat expanse of the Yuha Desert, resulting in some additional view blockage of sky and mountains when viewed from the Dunaway OHV Staging Area. The new line would also slightly increase the structural complexity and industrial character visible from the staging area. The resulting visual contrast would be weak for structural form and weak to moderate for line, and the existing landscape character would not substantially change. The overall level of change would be low.

The BLM's Visual Resource Management (VRM) Class III objective allows for a moderate or lower degree of visual change that, while it may attract attention, should not dominate the view of the casual observer. Although the new line would not repeat the basic elements of the existing natural features in the landscape, it would repeat the characteristics of the existing line and it would not dominate the view of the casual observer. Therefore, the low level of visual change that would be caused by this portion of the I-8 Alternative would be consistent with the applicable VRM Class III management objective and the resulting visual impact would be adverse but less than significant (Class III). However, Mitigation Measure V-3a is still recommended to reduce the visual impact along this portion of the alternative in compliance with NEPA requirements. This viewpoint analysis is considered representative of views of this alternative from the Dunaway OHV Staging Area, public roads, and BLM access roads in the vicinity of the alternative in the Yuha Desert north and south of I-8.

Mitigation Measure for Impact V-56: Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 44 at Dunaway OHV Staging Area

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

Impact V-57: Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 45 on Westbound I-8, Crossing the Yuha Desert (VRM) (Class III)

Figure E.1.3-3A presents the existing view to the west from Key Viewpoint 45 on westbound I-8, approximately 0.2 miles west of Dunaway Road. Figure E.1.3-3B presents a visual simulation that depicts the addition of the I-8 Alternative transmission line adjacent and to the north of the existing SWPL 500 kV, steel-lattice transmission line. This alternative would be prominently visible within the primary cone of vision (45 degrees either side of the primary direction of travel) of both westbound and eastbound travelers on I-8. Compared to the existing SWPL structures, the I-8 Alternative structures would be of similar design (complex, geometric forms with vertical to diagonal lines) and height and the conductors would appear as simple curvilinear lines. Although the number of visible structures would be effectively doubled, existing and new structures would be paired and conductor spans would generally be matched. The new structures would also cause some additional skylining as they cross the flat expanse of the Yuha Desert and span I-8, resulting in some additional view blockage of sky and mountains when viewed from I-8. The new line would also slightly increase the structural complexity and industrial character visible from I-8. The resulting visual contrast would be weak for structural form and weak to moderate for line, and the existing landscape character would not substantially change. The overall level of change would be low.

The BLM's Interim Visual Resource Management (VRM) Class III objective allows for a moderate or lower degree of visual change that, while it may attract attention, should not dominate the view of the casual observer. Although the new line would not repeat the basic elements of the existing natural features in the landscape, it would repeat the characteristics of the existing line and it would not dominate the view of the casual observer. Therefore, the low level of visual change that would be caused by this portion of the I-8 Alternative would be consistent with the applicable VRM Class III management objective and the resulting visual impact would be adverse but less than significant (Class III). How-

ever, Mitigation Measure V-3a is still recommended to reduce the visual impact along this portion of the alternative in compliance with NEPA requirements. This viewpoint analysis is considered representative of views of this alternative from I-8 in the vicinity of the I-8 span.

Mitigation Measure for Impact V-57: Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 45 on Westbound I-8, Crossing the Yuha Desert

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

Impact V-58: Inconsistency with BLM VRM Class III Management objective due to introduction of structure contrast, industrial character, view blockage and skylining when viewed from Key Viewpoint 46 at the Plaster City West OHV Staging Area (VRM) (Class I)

Figure E.1.3-4A presents the existing view to the west from Key Viewpoint 46 at the Plaster City West OHV Staging Area. Figure E.1.3-4B presents a visual simulation that depicts the addition of the I-8 Alternative transmission line adjacent and to the north of the existing SWPL 500 kV, steel-lattice transmission line. This alternative would be a dominant feature (along with the existing SWPL line) in views within the staging area and from the surrounding Open Area. Compared to the existing SWPL structures, the I-8 Alternative structures would be of similar design (complex, geometric forms with vertical to diagonal lines) and height and the conductors would appear as simple curvilinear lines. The number of visible structures would be effectively doubled, existing and new structures would be paired and conductor spans would generally be matched. However, the alternative line would add substantially to structure prominence, complexity, skylining, and industrial character when viewed from the staging area and surrounding Open Area. The resulting structural visual contrast (for form and line) would be strong. Also, because the new line would also pass directly through the staging area, parallel to the existing line, the two lines would effectively “bracket” views within the staging area. The overall level of change would be moderate-to-high.

The BLM’s Interim Visual Resource Management (VRM) Class III objective allows for a moderate or lower degree of visual change that, while it may attract attention, should not dominate the view of the casual observer. The new line with its complex structural forms and vertical to diagonal lines would not repeat the basic elements of the existing natural features in the landscape (simple, flat horizontal landform). Also, the proposed structures would be prominent to dominant features in the landscape as it passes through the staging area. The resulting moderate-to-high level of change caused by the new line would not meet the VRM Class III objective of a moderate (or lower) degree of visual change. Therefore, the I-8 Alternative would not be consistent with the applicable VRM Class III management objective and 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 Measure V-3a is recommended to reduce the visual impact along this alternative. This viewpoint analysis is considered representative of views of this alternative from the Plaster City West OHV Staging Area and the surrounding Plaster City Open Area, particularly west of the staging area.

Mitigation Measure for Impact V-58: Inconsistency with BLM VRM Class III Management objective due to introduction of structure contrast, industrial character, view blockage and skylining when viewed from Key Viewpoint 46 at the Plaster City West OHV Staging Area

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

Figure E.1.3-3A/B. Key Viewpoint 45 – I-8 Alternative – Yuha Desert I-8 Span – Existing View
and Simulation

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Figure E.1.3-4A. Key Viewpoint 46 – I-8 Alternative – Plaster City West Staging Area – Existing View

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Figure E.1.3-4B. Key Viewpoint 46 – I-8 Alternative – Plaster City West Staging Area – Visual Simulation

[CLICK HERE TO VIEW](#)

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Impact V-59: Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 47 on Eastbound I-8, South of Sugarloaf Mountain (VRM) (Class III)

Figure E.1.3-5A presents the existing view to the north from Key Viewpoint 47 on eastbound I-8, south of Sugarloaf Mountain and just north of In-Ko-Pah Gorge. Figure E.1.3-5B presents a visual simulation that depicts the addition of the I-8 Alternative transmission line adjacent and to the west of the existing SWPL 500 kV, steel-lattice transmission line. This alternative would be prominently visible within the primary cone of vision (45 degrees either side of the primary direction of travel) of both westbound and eastbound travelers on I-8. Compared to the existing SWPL structures, the I-8 Alternative structures would be of similar design (complex, geometric forms with vertical to diagonal lines) and height and the conductors would appear as simple curvilinear lines. Although the number of visible structures would be effectively doubled, existing and new structures would be paired and conductor spans would generally be matched. The new structures would also cause some additional skylining as they cross Sugarloaf Mountain and begin the ascent of In-Ko-Pah Gorge, resulting in some additional view blockage of sky and mountains when viewed from I-8. The new line would also increase the structural complexity and industrial character visible from I-8. The resulting visual contrast would be weak-to-moderate for structural form and line, and the existing landscape character would not substantially change. The overall level of change would be low-to-moderate.

The BLM's Interim Visual Resource Management (VRM) Class III objective allows for a moderate or lower degree of visual change that, while it may attract attention, should not dominate the view of the casual observer. Although the new line would not repeat the basic elements of the existing natural features in the landscape, it would repeat the characteristics of the existing line and it would not dominate the view of the casual observer. Therefore, the low-to-moderate level of visual change that would be caused by this portion of the I-8 Alternative would be consistent with the applicable VRM Class III management objective and the resulting visual impact would be adverse but less than significant (Class III). However, Mitigation Measure V-3a is still recommended to reduce the visual impact along this portion of the alternative in compliance with NEPA requirements. This viewpoint analysis is considered representative of views of this alternative from I-8 in the vicinity of Sugarloaf Mountain and In-Ko-Pah Gorge.

Mitigation Measure for Impact V-59: Increased structure contrast, view blockage, and skylining when viewed from Key Viewpoint 47 on Eastbound I-8, South of Sugarloaf Mountain

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

Impact V-60: Inconsistency with BLM VRM Class II Management objective due to introduction of structure contrast, industrial character, view blockage and skylining when viewed from Key Viewpoint 48 south of Table Mountain ACEC on Old Highway 80 (Airport Mesa) (VRM) (Class I)

Figure E.1.3-6A presents the existing view to the northeast from Key Viewpoint 48 south of Table Mountain ACEC on Old Highway 80 in an area referred to as Airport Mesa. Figure E.1.3-6B presents a visual simulation that depicts the addition of the I-8 Alternative transmission line adjacent and to the north of the existing SWPL 500 kV, steel-lattice transmission line. This alternative would be a prominent feature (along with the existing SWPL line) in views from Old Highway 80 and Airport Mesa. Compared to the existing SWPL structures, the I-8 Alternative structures would be of similar design (complex, geometric forms with vertical to diagonal lines) and height and the conductors would appear as simple curvilinear lines. However, the number of visible structures would be effectively doubled and the variations in terrain would result in mismatched tower heights and conductor spans.

Also, the alternative line would add substantially to structure prominence, complexity, skylining, and industrial character when viewed from Old Highway 80 and Airport Mesa. The resulting structural visual contrast would be weak to moderate for form and line. The overall level of change would be low-to-moderate.

The BLM's current Visual Resource Management (VRM) Class II objective requires the retention of existing landscape character and that the level of change be low. Management activities may be seen, but should not attract the attention of the casual observer. The new line with its complex structural forms and vertical to diagonal lines would not repeat the basic elements of the existing natural features in the landscape irregular to rolling hills that are rugged, rocky and natural appearing. Also, the proposed structures would be prominent features in the landscape as the line passes south of Table Mountain ACEC and adjacent to Old Highway 80. The resulting low-to-moderate level of change caused by the new line would not meet the VRM Class II objective of retention of existing character and a low degree of visual change. Therefore, the I-8 Alternative would not be consistent with the applicable VRM Class II management objective and 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 Measure V-3a is recommended to reduce the visual impact along this alternative. This viewpoint analysis is considered representative of views of this alternative from the Airport Mesa area and Old Highway 80 in particular. However, it should be noted that the existing management plan is in the process of being updated and the Airport Mesa area is proposed to be reclassified as a VRM Class III area. Should this occur, the low-to-moderate level of change caused by the I-8 Alternative would be consistent with the new VRM Class III management objective.

Mitigation Measure for Impact V-60: Inconsistency with BLM VRM Class II Management objective due to introduction of structure contrast, industrial character, view blockage and skylining when viewed from Key Viewpoint 48 south of Table Mountain ACEC on Old Highway 80 (Airport Mesa)

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

Impact V-61: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 49 in Jacumba (VS-VC) (Class III)

Figure E.1.3-7A presents the existing view to the north-northeast from Key Viewpoint 49 on Jacumba Street, just north of Calexico Avenue in Jacumba. Figure E.1.3-7B presents a visual simulation that depicts the alternative as it passes north of the community of Jacumba. The I-8 Alternative would be built adjacent and slightly to the north of the existing SWPL line. The new line would appear similar in design and height to the existing line. The Alternative would be partially screened by the ridgeline. However, additional view blockage of the background sky would occur (slight) and there would be a marginal increase in industrial character along the ridge. The resulting visual contrast would be low-to-moderate and the new transmission line would appear subordinate-to-co-dominant compared to the existing landscape features including the vertical forms of the existing transmission line structures, the horizontal form of the ridge, and the foreground residential structures. View blockage of the background sky would be low. The overall visual change would be low-to-moderate when the three equally weighted factors of visual contrast, project dominance, and view blockage are combined. In the context of the existing landscape's moderate visual sensitivity, the resulting visual impact would be adverse but less than significant (Class III). However, Mitigation Measure V-3a is recommended to reduce the visual impact along this portion of the alternative. While Impact V-61 is less than significant, mitigation is recommended 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 rural community of Jacumba.

Figure E.1.3-5A. Key Viewpoint 47 – I-8 Alternative – Sugarloaf Mountain / I-8 – Existing View
[CLICK HERE TO VIEW](#)

Figure E.1.3-5B. Key Viewpoint 47 – I-8 Alternative – Sugarloaf Mountain / I-8 – Visual Simulation

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Figure E.1.3-6A/B. Key Viewpoint 48 – I-8 Alternative – South of Table Mountain – Existing View and Simulation

[CLICK HERE TO VIEW](#)

Figure E.1.3-7A. Key Viewpoint 49 – I-8 Alternative – Jacumba – Existing View
[CLICK HERE TO VIEW](#)

Figure E.1.3-7B. Key Viewpoint 49 – I-8 Alternative – Jacumba – Visual Simulation

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Mitigation Measure for Impact V-61: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 49 in Jacumba

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

Impact V-62: Increased structure contrast, industrial character, and view blockage when viewed from Key Viewpoint 50 on westbound I-8 (VS-VC) (Class I)

Figure E.1.3-8A presents the existing view to the northwest from Key Viewpoint 50 on westbound I-8, just east of the La Posta Reservation. Figure E.1.3-8B presents a visual simulation that depicts the alternative as it passes adjacent and to the north of I-8 (an Eligible State Scenic Highway). The openness of the terrain would allow extended in-line views of the transmission line from I-8 and would cause several structures to be visible in the same field of view. As shown in the simulation, the transmission line would introduce structurally prominent features with considerable industrial character into a predominantly natural-appearing landscape lacking similar characteristics. The resulting visual contrast would be moderate-to-high. The co-dominant structures would also cause a moderate-to-high degree of view blockage of the background slopes and ridgelines. These three equally weighted factors would result in an overall moderate-to-high visual change that in the context of the existing landscape's high visual sensitivity, would result in significant (Class I) visual impacts. Although APMs VR-1 through VR-6 commit SDG&E to several tower design and placement measures to lessen the occurrence of 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 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, localized reroutes would not be effective. Also, with the availability of both close and distant views of the route, different structure designs would not be effective in reducing the visual impact to a level that would be less than significant. However, Mitigation Measure V-3a is still recommended to reduce the visual impact along this portion of the alternative in compliance with NEPA. This viewpoint analysis is considered representative of project views from and in the vicinity of I-8. It should also be noted that implementation of the Proposed Project or any of the Northern Route Alternatives described in Section D-3 would eliminate the visual impacts along this portion of I-8. Under the three Buckman Springs options, the significant impact would merely be shifted to different locations.

Mitigation Measure for Impact V-62: Increased structure contrast, industrial character, and view blockage when viewed from Key Viewpoint 50 on westbound I-8

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

Impact V-63: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 51 on eastbound I-8 in Cottonwood Valley (SMS) (Class I)

Figure E.1.3-9A presents the existing view to the southeast across Cottonwood Valley from Key Viewpoint 51 on eastbound I-8, approximately 1.5 miles north of the Buckman Springs Road off-ramp. Figure E.1.3-9B presents a visual simulation that shows the I-8 Alternative transmission line crossing the east side of Cottonwood Valley, east of the Buckman Springs Rest Area. As shown in the simulation, this alternative would introduce noticeable built structures with substantial industrial character into a predominantly natural landscape absent similar features. The image presented is under dark, overcast skies, typical of many winter days in the project area. However, on sunny, summer days, the transmission line would stand out more and the contrast would be more noticeable. Overall, the resulting visual

contrast would be substantial. The openness of the terrain, large scale of the structures, and confined sightlines within Cottonwood Valley would allow foreground views of the transmission line (structures and conductors) from both I-8 and the Buckman Springs Rest Area. View blockage of the slopes to the east would also occur, as would skylining at the southern end of the valley where the line ascends a gap in the ridge. The transmission line would substantially reduce the integrity of the existing landscape. The resulting level of change would be moderate-to-high.

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 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 viewpoints in Cottonwood Valley in general and I-8 and the Buckman Springs Rest Area specifically.

Mitigation Measures for Impact V-63: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 51 on eastbound I-8 in Cottonwood Valley

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

V-45a Prepare and Implement Scenery Conservation Plan.

Impact V-64: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 52 on westbound I-8 north of Cottonwood Valley (SMS) (Class I)

Figure E.1.3-10A presents the existing view to the north-northwest toward the proposed I-8 Alternative's span location over I-8, from KVP 52 on westbound I-8, approximately 1.4 miles north of the Buckman Springs Road/I-8 northbound on-ramp. Figure E.1.3-10B presents a visual simulation that shows the I-8 Alternative transmission line spanning I-8. As shown in the simulation, this alternative would introduce noticeable built structures with substantial industrial character into a predominantly natural landscape absent similar features. The image presented is under dark, overcast skies, typical of many winter days in the project area. However, on sunny, summer days, the transmission line would stand out more and the contrast would be more noticeable. Overall, the resulting visual contrast would be substantial. The large scale of the structures and confined sightlines within the gap at the crossing would allow foreground views of the transmission line (structures and conductors) from both travel directions on I-8. The span would be visible within the primary cone of vision (45 degrees either side of the primary direction of travel) of both east- and westbound travelers for a considerable distance. View

Figure E.1.3-8A. Key Viewpoint 50 – I-8 Alternative – La Posta – Existing View

[CLICK HERE TO VIEW](#)

Figure E.1.3-8B. Key Viewpoint 50 – I-8 Alternative – La Posta – Visual Simulation

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Figure E.1.3-9A. Key Viewpoint 51 – I-8 Alternative – Cottonwood Valley – Existing View
[CLICK HERE TO VIEW](#)

Figure E.1.3-9B. Key Viewpoint 51 – I-8 Alternative – Cottonwood Valley – Visual Simulation
[CLICK HERE TO VIEW](#)

Figure E.1.3-10A. Key Viewpoint 52 – I-8 Alternative – Interstate 8 Span – Existing View
[CLICK HERE TO VIEW](#)

Figure E.1.3-10B. Key Viewpoint 52 – I-8 Alternative – Interstate 8 Span – Visual Simulation
[CLICK HERE TO VIEW](#)

blockage of the adjacent slopes and sky (conductor span) would also occur. The transmission line would substantially reduce the integrity of the existing landscape. The resulting level of change would be moderate-to-high.

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 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 the span and structures situated in close proximity to I-8 from viewpoints on I-8 in the vicinity of the project.

Mitigation Measures for Impact V-64: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 52 on westbound I-8 north of Cottonwood Valley

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

V-45a Prepare and Implement Scenery Conservation Plan.

Impact V-65: Introduced structure contrast, industrial character, view blockage, skylining, and glare from night lighting when viewing the I-8 Alternative Substation (VS-VC) (Class III)

Views of the substation, approximately 0.75 miles north of I-8, would be very limited. The proposed substation would not be noticeable to travelers on I-8 because sightlines to the substation would be obstructed by intervening terrain and oak woodlands. Also, the substation would be beyond the primary cone of vision (45 degrees either side of the primary direction of travel) of travelers on I-8. To the extent that a small portion of the upper structural elements are 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 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. However, Mitigation Measures V-7a, 7b, and 21a are recommended to ensure that visual impacts do not result from the operation of this highly complex facility. [redundant] It should also be noted that implementation of the Proposed Project, any of the other Alternatives described elsewhere in this report, would eliminate Impact V-65. However, under any of the other options, Class I visual impacts would occur elsewhere.

Mitigation Measure for Impact V-65: Introduced structure contrast, industrial character, view blockage, skylining, and glare from night lighting when viewing the I-8 Alternative Substation

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

V-7b Screen ancillary facilities.

V-21a Reduce night lighting impacts.

Impact V-66: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 53 on westbound Alpine Road (VS-VC) (Class I)

Figure E.1.3-11A presents the existing view to the northwest from Key Viewpoint 53 on westbound Alpine Road, just north of Peutz Valley Road. Figure E.1.3-11B presents a visual simulation that depicts the paired transition structures adjacent to the south side of Alpine Road, before the span of Alpine Road and I-8 (an Eligible State Scenic Highway) to the north. The structurally prominent and complex transition structures and span of I-8 would be highly visible and would introduce substantial industrial character into a suburban rural landscape absent similar features. The resulting visual contrast would be moderate-to-high. The co-dominant structures would also cause a moderate degree of view blockage of the background sky and hills (from I-8). These three equally weighted factors would result in an overall moderate visual change that in the context of the existing landscape's moderate-to-high visual sensitivity, would result in significant (Class I) visual impacts. Although APMs VR-1 through VR-6 commit SDG&E to several tower design and placement measures to minimize visual impacts, they would not be sufficient to prevent the occurrence of a significant visual impact. SDG&E has also presented the Chocolate Canyon Option as a potential alternative to the I-8 route starting at Alpine Road (see Section E.1.3.5 Chocolate Canyon Option). Under the Chocolate Canyon Option, the underground portion of the route would continue on from the point of the proposed transition structures on Alpine Road, passing beneath I-8 to the north side of I-8 where the line would surface via two transition structures (see Figure E.1.3-11C). However, this location would be even more prominently visible to both east and westbound traffic and therefore, is not recommended from a visual resources perspective. However, by moving the proposed I-8 transition structures further to the northwest along the south side of Alpine Road and spanning I-8 to a new location slightly to the west of the currently proposed span location, the towers would be better backdropped and visual contrast would be reduced. The resulting visual impact would still be significant (Class I) but it would be less than the impact resulting from the Alpine Road transition location and substantially less than the Chocolate Canyon Option transition location. Therefore, Mitigation measures V-3a and V-66a are recommended to reduce the visual impact of the transition structure. This viewpoint analysis is considered representative of project views from and in the vicinity of Alpine Road and I-8. It should also be noted that implementation of the Proposed Project or the Route D Alternatives described elsewhere in this report, would eliminate the visual impacts along this portion of Alpine Road/I-8 though under the other options, the significant impacts of tangent structures would occur elsewhere.

Figure E.1.3-11A. Key Viewpoint 53 – I-8 Alternative – Alpine Road Transition Structure –
Existing View

[CLICK HERE TO VIEW](#)

Figure E.1.3-11B. Key Viewpoint 53 – I-8 Alternative – Alpine Road Transition Structure –
Visual Simulation

[CLICK HERE TO VIEW](#)

Figure E.1.3-11C. Reroute per Mitigation Measure V-66a
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Mitigation Measures for Impact V-66: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 53 on westbound Alpine Road

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

V-66a Reduce structural prominence and visual contrast associated with the Alpine Road transition structures. In order to reduce the structural prominence and visual contrast associated with the Alpine Road transition structures, the structures shall be moved further northwest on Alpine Road as shown in Figure E.1.3-11C. From here, the line will span I-8 to a new location further west than the Alpine Road transition location described for the I-8 Alternative (see Figure E.1.3-11C). This measure will result in the relocation of the transition structures to a slightly less prominent location and will allow for a better backdrop for both the transition structures and the first tangent structure on the north side of I-8. SDG&E shall submit final construction plans demonstrating compliance with this measure to the CPUC for review and approval at least 120 days prior to the start of construction.

Impact V-67: Increased structure contrast, industrial character, and view blockage when viewed from Key Viewpoint 54 in El Monte County Park (VS-VC) (Class III)

Figure E.1.3-12A presents the existing view to the northeast from Key Viewpoint 54 in El Monte County Park. Figure E.1.3-12B presents a visual simulation that depicts the 230 kV tubular steel-pole transmission line passing north of the park, at the base of El Cajon Mountain. The steel-pole structures would be noticeable through not prominent additions to the landscape. The new structures and conductors would result in a low-to-moderate degree of visual contrast. These subordinate-to-co-dominant structural features would also cause a low-to-moderate degree of view blockage of the rugged background slopes of El Cajon Mountain. These three equally weighted factors would result in an overall low-to-moderate visual change that in the context of the existing landscape's moderate-to-high visual sensitivity, would result in adverse but less than significant (Class III) visual impacts. However, Mitigation Measure V-3a is recommended to reduce the visual impact along this portion of the alternative. While Impact V-67 is less than significant, mitigation is recommended 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 El Monte County Park.

Mitigation Measure for Impact V-67: Increased structure contrast, industrial character, and view blockage when viewed from Key Viewpoint 54 in El Monte County Park

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

Impact V-68: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 55 on Moreno Boulevard (VS-VC) (Class I)

Figure E.1.3-13A presents the existing view to the east-southeast from Key Viewpoint 55 on Moreno Boulevard, just south of San Vicente Drive. Figure E.1.3-13B presents a visual simulation that depicts the I-8 Alternative as it passes along a ridge east of the community of Moreno. The tubular steel-pole structures would be prominently visible to nearby residences and equestrians, particularly along the foothills at the base of the ridge. Skylining would exacerbate structure prominence and the facilities would introduce structural complexity and industrial character into the landscape. The resulting visual contrast would be moderate. The subordinate-to-co-dominant structures would also cause a moderate degree of view blockage of the background ridge and sky. These three equally weighted factors would result in an overall moderate visual change that in the context of the existing landscape's moderate-to-

high visual sensitivity, would result in significant (Class I) visual impacts. 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 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. For example relocating the line to the back (east) side of the ridge visible in Figure E.1.3-13A/B would eliminate the visual impact on residences on the west side of the ridge but cause a similar impact to rural residences on the east side of the ridge. Therefore, a localized rerouting of the line would not be effective. However, Mitigation Measures V-3a and V-68a are still recommended to reduce the visual impact along this portion of the alternative. In particular, Mitigation Measure V-68a would be effective in reducing structure visibility, prominence, and contrast from more distant views (e.g., Moreno Boulevard) by relocating the ridgeline structures to elevations sufficiently low on the ridge to eliminate structure skylining when viewed from Moreno Boulevard, SR67, and residences on the slopes west of SR67. While this would substantially lessen the visual impact on more distant views, it would not significantly reduce the visual impact on closer views from residences at the base of the ridge. This viewpoint analysis is considered representative of project views from and in the vicinity of Moreno Boulevard. It should also be noted that implementation of the Proposed Project or the Route D 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-68: Increased structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 55 on Moreno Boulevard

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

V-68a **Eliminate skylining of ridgeline towers and conductors.** In order to eliminate the skylining of ridgeline towers and conductors, the ridgeline towers shall be relocated to elevations sufficiently low on the ridge to eliminate structure skylining when viewed from Moreno Boulevard, SR67, and residences on the slopes west of SR67. SDG&E shall submit final construction plans demonstrating compliance with this measure to the CPUC for review and approval at least 120 days prior to the start of construction.

E.1.3.3 Interstate 8 Alternative Substation

The Interstate 8 Alternative Substation would be a 500 kV to 230 kV substation, which would be located adjacent to the I-8 route on private land approximately 0.75 miles north of I-8, 1.5 miles east of SR79, and 2.5 miles west of Pine Valley. The site would be located in a shallow grassy valley surrounded by oak woodlands. Public views of this location are extremely limited and would only be glimpsed from I-8. Views from I-8 would be at right angles to the primary direction of travel and would be substantially screened by intervening terrain and vegetation. Given the lack of public visibility, a key viewpoint was not established for views of this substation.

Figure E.1.3-12A. Key Viewpoint 54 – I-8 Alternative – El Monte County Park – Existing View
[CLICK HERE TO VIEW](#)

Figure E.1.3-12B. Key Viewpoint 54 – I-8 Alternative – El Monte County Park – Visual Simulation

[CLICK HERE TO VIEW](#)

Figure E.1.3-13A. Key Viewpoint 55 – I-8 Alternative – Moreno Boulevard – Existing View
[CLICK HERE TO VIEW](#)

Figure E.1.3-13B. Key Viewpoint 55 – I-8 Alternative – Moreno Boulevard – Visual Simulation
[CLICK HERE TO VIEW](#)

E.1.3.4 Interstate 8 Route Options

West Buckman Springs Option

Environmental Setting

The West Buckman Springs Option would reroute the I-8 Alternative to the west side of I-8 rather than the east side where the route is currently proposed. At MP I8-54, the route would cross to the south side of I-8 heading west and crossing the Pacific Crest National Scenic Trail to follow the west side of Buckman Springs Road north for approximately four miles, passing just west of the Boulder Oaks Campground and within two miles northeast of the Morena Reservoir. The majority of this route would pass through undeveloped and predominantly natural appearing lands.

Views of the West Buckman Springs Option would be available from I-8, Buckman Springs Road, the Buckman Springs Rest Area, the Pacific Crest National Scenic Trail, and Boulder Oaks Campground.

One key viewpoint (KVP 56) was selected for detailed analysis and is considered representative of the visual impacts that would be experienced along this alternative. The location of the West Buckman Springs Option KVP is 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 KVP 56 is presented in the following paragraphs.

Key Viewpoint 56 – Buckman Springs Road in Cottonwood Valley (SMS)

Key Viewpoint 56 was established on northbound Buckman Springs Road, approximately 0.1 miles south of the split to the I-8 access ramps (see Figure E.1.3-14A). This view to the north captures a portion of the Morena Place, which is considered a gateway to the desert province and is generally comprised of rolling terrain that also includes large valleys surrounded by steep mountains. Scenery is further characterized by steep, uniform, chaparral covered hills, interrupted by scattered oak covered drainages. The landscape retains an open-space character with large expanses of undeveloped land. Views are also expansive though in Cottonwood Valley they are somewhat confined by the mountain ranges that define the valley on the west and east.

The Morena Place is maintained as a natural appearing landscape along the I-8 corridor. Valued landscape attributes to be preserved over time include the rare and inviting streamside woodlands that provide scenic diversity in this chaparral-dominated landscape, and the natural appearance of areas that can be viewed from the I-8 corridor. Part of the management emphasis is to protect scenic values visible from the I-8 corridor, which would include Buckman Springs Road. As a result, the Scenic Integrity Objective (SIO) for this area is HIGH.

Environmental Impacts and Mitigation Measures

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 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. No new ancillary facilities would be required for this alternative.

The viewing opportunities of concern along this segment include I-8, Buckman Springs Road, and the Buckman Springs Rest Area. 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 could occur along most of this route where it passes through undeveloped arid and semi-arid lands. 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-APM-23 and GEO-APM-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

The West Buckman Springs Option would result in significant (Class I) visual impacts. Long-term, operational visual impacts would be experienced by viewers along much of this route. One representative Key Viewpoint (KVP 56) was selected to characterize the visual impacts that would occur along this alternative.

Impact V-69: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 56 on northbound Buckman Springs Road in Cottonwood Valley (SMS) (Class I)

Figure E.1.3-14A presents the existing view to the north toward the West Buckman Springs Option as it crosses the west side of Cottonwood Valley, from Key Viewpoint 56 on northbound Buckman Springs

Figure E.1.3-14A. Buckman Springs Road - West Buckman Springs Alt. Existing View
[CLICK HERE TO VIEW](#)

Figure E.1.3-14B. Buckman Springs Road - West Buckman Springs Alt. Simulation
[CLICK HERE TO VIEW](#)

Figure E.1.3-14C. Buckman Springs Alternative Reroute per Mitigation Measure V-69a
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Road, approximately 0.1 miles south of the split to the I-8 on-ramps. Figure E.1.3-14B presents a visual simulation that depicts the West Buckman Springs Option as it passes west of Interstate 8 in Cottonwood Valley. As indicated in the figure, this alternative would cross the lower slopes of the hills west of I-8, introducing noticeable built structures with substantial industrial character into a predominantly natural landscape absent similar features. The, the resulting visual contrast would be substantial. The openness of the terrain, large scale of the structures, and confined sightlines within Cottonwood Valley would allow foreground views of the transmission line (structures and conductors) from Old Highway 80, Boulder Creek Campground, Mountain Empire High School, Buckman Springs

Road, I-8 and Buckman Springs Rest Area. View blockage of the slopes to the west would also occur, as would skylining at the northern end of the valley where the line ascends a slope to intersect the I-8 Alternative. The transmission line would substantially reduce the integrity of the existing landscape. The resulting level of change would be moderate-to-high.

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, V-45a, and V-69a are recommended to reduce the visual impact along this alternative. Mitigation Measure V-69a would require the rerouting of the alternative to follow Bear Valley Road in a northwest direction, which would remove the transmission line from Cottonwood Valley much further to the south, thereby eliminating a substantial and highly visible portion of the route from views from I-8. Because this route would still cross lands subject to a HIGH SIO, the reroute would also be inconsistent with Aesthetic Management Standard S9 and the HIGH SIO, and the visual impact would remain significant (Class I). However, Mitigation Measure V-69a would substantially reduce this alternative's visibility. While implementation of these measures will not achieve the HIGH SIO, they will enable achievement of the highest scenic integrity possible and they would reduce the visual impact that would be experienced by travelers on I-8. This viewpoint analysis is considered representative of views of this alternative from viewpoints in Cottonwood Valley in general and Buckman Springs Road and I-8 in particular.

Mitigation Measures for Impact V-69: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 56 on northbound Buckman Springs Road in Cottonwood Valley

- V-3a Reduce visual contrast of towers and conductors.**
- V-45a Prepare and Implement Scenery Conservation Plan.**
- V-69a Reduce visibility of the West Buckman Springs Option by rerouting the alternative to Bear Valley Road.** In order to substantially reduce the visibility of the West Buckman Springs Option, reroute the West Buckman Springs Option to follow Bear Valley Road to a new point of intersection with the I-8 Route, as shown in Figure E.1.3-14C. SDG&E shall

submit final construction plans demonstrating compliance with this measure to the CPUC and USFS for review and approval at least 120 days prior to the start of construction.

Buckman Springs Underground Option

Environmental Setting

The Buckman Springs Underground Option would include the construction of two transition stations for the 500 kV line and installation of an underground route segment along the east side of Cottonwood Valley. The route would transition to an underground 500 kV line at a transition station located at MP I8-55. The underground route would parallel I-8, east of the Buckman Springs Rest Area, then transition back to a 500 kV overhead line northeast of the northbound I-8 on-ramp from Buckman Springs Road. The transition stations would be constructed on undeveloped, naturally appearing lands.

Views of the transition stations would be available from I-8 and the Buckman Springs Rest Area. One key viewpoint (KVP 57) was selected for detailed analysis and is considered representative of the visual impacts that would be experienced along this alternative. The location of the Buckman Springs Underground Option KVP is 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 KVP 57 is presented in the following paragraphs.

Key Viewpoint 57 – Northbound I-8 On-ramp in Cottonwood Valley (SMS)

Key Viewpoint 57 was established on the northbound I-8 on-ramp from Buckman Springs Road (see Figure E.1.3-15A). This view is to the north-northeast toward the proposed location of the north transition structure for the Buckman Springs Underground Option. The transition structure would be located in close proximity to I-8 on open, shrub-covered level land. The view captures a portion of the Morena Place, which is considered a gateway to the desert province and is generally comprised of rolling terrain that also includes large valleys surrounded by steep mountains. Scenery is further characterized by steep, uniform, chaparral covered hills, interrupted by scattered oak covered drainages. The landscape retains an open-space character with large expanses of undeveloped land. Views are also expansive though in Cottonwood Valley, they are somewhat confined by the mountain ranges that define the valley on the west and east.

The Morena Place is maintained as a natural appearing landscape along the I-8 corridor. Valued landscape attributes to be preserved over time include the rare and inviting streamside woodlands that provide scenic diversity in this chaparral-dominated landscape, and the natural appearance of areas that can be viewed from the I-8 corridor. Part of the management emphasis is to protect scenic values visible from the I-8 corridor, which would include Buckman Springs Road and the Rest Area. As a result, the Scenic Integrity Objective (SIO) for this area is HIGH.

Environmental Impacts and Mitigation Measures

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 Buckman Springs Underground Option would be as described in Section D.3.5 for the Proposed Project Imperial Valley Link 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 roads. The viewing opportunities of concern along this segment include I-8 and Buckman Springs Road. 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 could occur along most of this route where it passes through undeveloped desert scrub lands. 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-APM-23 and GEO-APM-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

The Buckman Springs Underground Option would result in significant (Class I) visual impacts. Long-term, operational visual impacts would be experienced by viewers in Cottonwood Valley, particularly those in proximity to the transition structures. One representative Key Viewpoint (KVP 57) was selected to characterize the visual impacts that would occur along this alternative route.

Impact V-70: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, and view blockage when viewed from Key Viewpoint 57 on the northbound I-8 on-ramp from Buckman Springs Road in Cottonwood Valley (SMS) (Class I)

Figure E.1.3-15A presents the existing view to the north-northeast toward the north transition structure location for the Buckman Springs Underground Option as it crosses the east side of Cottonwood Valley, from Key Viewpoint 57 on northbound I-8 on-ramp from Buckman Springs Road. Figure E.1.3-15B presents a visual simulation that depicts the Buckman Springs Underground Option 500 kV/230 kV transition station to the east of the I-8 on-ramp. As shown in the simulation, the transition station would be prominently located on open, level land, adjacent to I-8, north of the Buckman Springs Rest Area. The transition station would introduce substantial structural complexity and 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 structure would allow foreground views of the structure from I-8 and the on-ramp from Buckman Springs Road. View blockage of the slopes to the east would also occur as would skylining for the aboveground portion of the route. The transmission line would substantially reduce the integrity of the existing landscape. The resulting level of change would be moderate-to-high.

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 are recommended to reduce the visual impact along this alternative. While implementation of these measures would not achieve the HIGH SIO, they would enable achievement of the highest scenic integrity possible and they would reduce the visual impact that would be experienced by travelers on I-8. This viewpoint analysis is considered representative of views of this alternative from viewpoints in Cottonwood Valley in general and I-8 and the northbound on-ramp in particular.

Figure E.1.3-15A. Key Viewpoint 57 – Buckman Springs Underground Option – Buckman Springs Road Northbound I-8 On-Ramp – Existing View and Simulation

[CLICK HERE TO VIEW](#)

Figure E.1.3-15B. Key Viewpoint 57 – Buckman Springs Underground Option – Buckman Springs Road Northbound I-8 On-Ramp – Existing View and Simulation

[CLICK HERE TO VIEW](#)

Mitigation Measures for Impact V-70: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining when viewed from Key Viewpoint 57 on the northbound I-8 on-ramp from Buckman Springs Road in Cottonwood Valley

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

V-45a Prepare and Implement Scenery Conservation Plan.

Campo North Option

Environmental Setting

The Campo North Option would include the construction of approximately 1.4 miles of overhead 500 kV line along the north side of I-8 at the Campo Reservation. The route would diverge from the I-8 Alternative at Manzanita Road on the Campo Reservation (approximately I-8 milepost 44.5). While the I-8 Alternative would span to the south side of I-8 at this location, the Campo North Option would continue on along the north side of I-8 for a distance of approximately 1.3 miles, reconnecting to the I-8 Alternative at approximately I-8 milepost 46, just east of the Acorn Casino. Along this route, the Campo North Option would pass in close proximity to the southern end of the wind farm along Tecate Ridge.

Views of the transmission line would be available from eastbound and westbound I-8. One key viewpoint (KVP 58) was selected for detailed analysis and is considered representative of the visual impacts that would be experienced along this alternative. The location of the Campo North Option KVP is 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 KVP 58 is presented in the following paragraphs.

Key Viewpoint 58 – Eastbound I-8 at Campo Reservation (VS-VC)

Key Viewpoint 58 was established on eastbound I-8, just east of Crestwood Road and the Acorn Casino (see Figure E.1.3-16A). The view from KVP 58 captures the location of the Campo North Option as it passes adjacent and north of I-8 in an open, rural landscape offering extended, unobstructed sightlines to Tecate Divide and the ridges beyond. This location was selected to generally characterize the existing landscape visible to travelers on I-8 in the vicinity of the Campo North Option.

Visual Quality. Moderate. The view to the east-northeast encompasses foreground to middleground, rolling grass- and shrub-covered hills punctuated by groupings of oaks and backdropped by the low, rolling to angular form of Tecate Divide, which is lined by the prominent wind turbines. The dominant vertical forms of the wind turbines establish industrial character and compromise the coherence of a landscape that is predominantly rural in character. Skylining of the wind turbines exacerbates the prominence and visibility of these structures. The linear form of I-8 (an Eligible State Scenic Highway) is a prominent built feature. Views from the freeway are unobstructed and panoramic in scope. Overall, the landscape exhibits moderate visual variety and visual appeal.

Viewer Concern. High. Travelers on this section of I-8 are afforded panoramic views of a predominantly rural landscape to the north and south of I-8. While the existing wind turbines to the north of I-8 and the Acorn Casino to the south of I-8 are prominent built features that would be anticipated by repeat travelers on I-8, the addition of industrial character or blockage of views to the hills and ridges north of I-8 would be perceived as an adverse visual change in the landscape.

Viewer Exposure. High. The Campo North route would be highly visible in the foreground, of views from I-8 and KVP 58 as the route passes adjacent and to the north of the freeway. The number of viewers would be high and the duration of view would be extended given the inline views of the route and its location within the primary cone of vision of travelers on I-8. Combining these four equally weighted factors gives an overall high viewer exposure.

Overall Visual Sensitivity. High. For travelers on I-8, combining the equally weighted moderate visual quality, high viewer concern, and high viewer exposure results in an overall moderate-to-high visual sensitivity of the visual setting and viewing characteristics.

Environmental Impacts and Mitigation Measures

Construction Impacts

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

Construction impacts along the Campo North Option would be as described in Section D.3.5 for the Proposed Project Imperial Valley Link 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 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 could occur along most of this option where it passes through undeveloped arid and semi-arid lands. 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 vis-

ual 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-APM-23 and GEO-APM-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

The Campo North Option would result in significant (Class I) visual impacts. Long-term, operational visual impacts would be experienced by viewers along all of this route. One representative Key Viewpoint (KVP 58) was selected to characterize the visual impacts that would occur along this option.

Impact V-71: Increased structure contrast, industrial character, structure prominence and view blockage when viewed from Key Viewpoint 58 on eastbound I-8 (VS-VC) (Class I)

Figure E.1.3-16A presents the existing view to the east-northeast from Key Viewpoint 58 on eastbound I-8, approximately 0.7 miles east of Crestwood Road. Figure E.1.3-16B presents a visual simulation that depicts the alternative as it passes adjacent and to the north of I-8 (an Eligible State Scenic Highway). The openness of the terrain would allow extended in-line views of the transmission line from I-8 and would cause several structures to be visible in the same field of view. As shown in the simulation, the transmission line would introduce structurally complex and prominent features with considerable industrial character into a predominantly rural landscape that is already host to prominent vertical features in the wind turbines along Tecate Divide. The resulting visual contrast would be moderate-to-high. The co-dominant structures would also cause a moderate-to-high degree of view blockage of the background hills, ridgelines, and sky. These three equally weighted factors would result in an overall moderate-to-high visual change that in the context of the existing landscape's moderate-to-high overall visual sensitivity, would result in significant (Class I) visual impacts.

Although APMs VR-1 through VR-6 commit SDG&E to several tower design and placement measures to lessen the occurrence of visual impacts, there is no mitigation available to reduce the significant visual impact to a level that would be less than significant along this route, aside from selection of an entirely different route (alternative) and landscape setting. The relatively open terrain 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, localized reroutes would not be effective. Also, with the availability of both close and distant views of the route, different structure designs would not be effective in reducing the visual impact to a level that would be less than significant. However, Mitigation Measure V-3a is still recommended to reduce the visual impact along this portion of the alternative in compliance with NEPA. This viewpoint analysis is considered representative of project views from and in the vicinity of I-8. It should also be noted that implementation of the Proposed Project or any of the non-SWPL Alternatives described elsewhere in this report, would eliminate the visual impacts along this portion of I-8 though under the other options, the significant impact would merely be shifted to different locations.

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Figure E.1.3-16A/B. Key Viewpoint 58 – Campo North Option – Eastbound I-8 – Existing View
and Simulation

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Mitigation Measure for Impact V-71: Increased structure contrast, industrial character, structure prominence and view blockage when viewed from Key Viewpoint 58 on eastbound I-8

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

South Buckman Springs Option

Environmental Setting

The South Buckman Springs Option would extend west from the Modified Route D Alternative at the point where the Modified Route D Alternative turns southwest down the east side of Cameron Valley. The South Buckman Springs Option would continue due west, crossing to the west side of Cameron Valley and then turning south toward The Narrows. The route would then pass through The Narrows to the west and then turn to the northwest, converging on South Buckman Springs Road. The South Buckman Springs Option would then follow South Buckman Springs Road to its termination point at the intersection with the West Buckman Springs Alternative.

Views of the transmission line would be available from Cameron Truck Trail, nearby residences in Cameron Valley, and South Buckman Springs Road. One key viewpoint (KVP 59) was selected for detailed analysis and is considered representative of the visual impacts that would be experienced along this option. The location of the South Buckman Springs Option KVP is 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 KVP 59 is presented in the following paragraphs.

Key Viewpoint 59 – Cameron Truck Trail in Cameron Valley (VS-VC)

Key Viewpoint 59 was established on southbound Cameron Truck Trail, just north of the route's east-west span of Cameron Truck Trail (see Figure E.1.3-17A). The view from KVP 59 captures the location of the South Buckman Springs Option as it passes through Cameron Valley in an open, rural landscape that is predominantly natural in appearance. This location was selected to generally characterize the existing landscape visible to travelers and residents in Cameron Valley in the vicinity of the South Buckman Springs Option.

Visual Quality. Moderate-to-high. The view to the southwest encompasses a foreground to middleground pastoral landscape bordered by angular, rocky ridges and hills. The grass-covered valley floor is punctuated by groves of trees, particularly along drainage courses. Although a simple wood-pole utility line runs down the valley, and there are rural residences located along both side of the road in the southern portion of the valley, the landscape is substantially natural in appearance. Views are open and unobstructed. Overall, the landscape exhibits moderate-to-high visual variety and visual appeal.

Viewer Concern. High. Nearby residents and travelers on Cameron Truck Trail presently experience a rural landscape exhibiting a considerable variety of land and vegetative forms that maintain coherence and create a moderately high aesthetic appeal. There are no prominent structural forms or 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 South Buckman Springs route would be highly visible in the foreground, of views from Cameron Truck Trail and KVP 59 as the route passes through Cameron

Valley. The number of viewers would be low but the duration of view would be extended given the low rate of travel speed on Cameron Truck Trail and the static views available from 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 Cameron Truck Trail and nearby residences, combining the equally weighted moderate-to-high 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

Construction Impacts

Impact V-1: Short-term visibility of construction activities, equipment, and night lighting (Class II – Construction and storage yards, fly yards; and Class III – 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 necessary to support construction of the South Buckman Springs Option. 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 support areas. 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. 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 travelers and residents in Cameron Valley and travelers on South Buckman Springs 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: Visibility of construction activities and equipment

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 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

The South Buckman Springs Option would result in long-term significant (Class I) visual impacts throughout the route. One representative Key Viewpoint (KVP 59) was selected to characterize the visual impacts that would occur along this option.

Impact V-72: Increased structure contrast, industrial character, structure prominence and view blockage when viewed from Key Viewpoint 59 on Cameron Truck Trail (VS-VC) (Class I)

Figure E.1.3-17A presents the existing view to the southwest from Key Viewpoint 59 on Cameron Truck Trail, just north of the route's span of Cameron Truck Trail in Cameron Valley. Figure E.1.3-17B presents a visual simulation that depicts the option as crosses east-west through Cameron Valley before turning to the south and then west through The Narrows. The openness of the terrain

would allow extended in-line views of the transmission line from Cameron Truck Trail and nearby residences and would cause several structures to be visible in the same field of view. As shown in the simulation, the transmission line with its lattice-steel structures would introduce structurally complex and prominent features with considerable industrial character into a landscape that is predominantly natural in appearance and absent such industrial character. The new structures and conductors would also result in view blockage of the valley, surrounding hills and ridges, and sky. The resulting visual contrast would be high. The co-dominant structures would also cause a moderate-to-high degree of view blockage of the background hills, ridgelines, and sky. These three equally weighted factors would result in an overall moderate-to-high visual change that in the context of the existing landscape's moderate-to-high overall visual sensitivity would result in significant (Class I) visual impacts. Although APMs VR-1 through VR-6 commit SDG&E to several tower design and placement measures to lessen the occurrence of visual impacts, there is no mitigation available to reduce the significant visual impact to a level that would be less than significant along this route, aside from selection of an entirely different route (alternative) and landscape setting. The relatively open terrain 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, localized reroutes would not be effective. Also, with the availability of both close and distant views of the route, different structure designs would not be effective in reducing the visual impact to a level that would be less than significant. However, Mitigation Measure V-3a is still recommended to reduce the visual impact along this portion of the option in compliance with NEPA. This viewpoint analysis is considered representative of project views from and in the vicinity of Cameron Truck Trail. It should also be noted that implementation of the Proposed Project or any of the non-SWPL Alternatives described elsewhere in this report, would eliminate the visual impacts along the South Buckman Springs Option though under the other options, the significant impact would merely be shifted to different locations.

Mitigation Measure for Impact V-72: Increased structure contrast, industrial character, structure prominence and view blockage when viewed from Key Viewpoint 59 on Cameron Truck Trail

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

Impact V-87: Increased structure contrast, industrial character, structure prominence and view blockage when viewed from South Buckman Springs Road (VS-VC) (Class I)

The South Buckman Springs Option would introduce prominent, structurally complex lattice-steel transmission line structures with substantial industrial character into the immediate foreground of views from South Buckman Springs Road as the route converges on South Buckman Springs Road from The Narrows and then follows the road north to the point of intersection with the West Buckman Springs Alternative. The resulting visual contrast would be high. The co-dominant-to-dominant structures would also cause a moderate-to-high degree of view blockage of the background hills, ridgelines, and sky. These three equally weighted factors would result in an overall moderate-to-high visual change that in the context of the existing landscape's moderate-to-high overall visual sensitivity would result in significant (Class I) visual impacts. Although APMs VR-1 through VR-6 commit SDG&E to several tower design and placement measures to lessen the occurrence of visual impacts, there is no mitigation available to reduce the significant visual impact to a level that would be less than significant along this route, aside from selection of an entirely different route (alternative) and landscape setting. However, by rerouting the route north, away from South Buckman Springs Road once the route exits west through The Narrows, the impact on views from South Buckman Springs Road would be noticeably reduced. Therefore, in addition to Mitigation Measure V-3a, Mitigation Measure V-87a is also recommended to reduce the visual impact along this portion of the option in compliance with NEPA. This viewpoint analysis is considered representative of project views from and in the vicinity of South Buckman

Figure E. 1.3-17A. Key Viewpoint 59 – South Buckman Springs Option – Cameron Truck Trail –
Existing View

[CLICK HERE TO VIEW](#)

Figure E.1.3-17B. Key Viewpoint 59 – South Buckman Springs Option – Cameron Truck Trail –
Visual Simulation

[CLICK HERE TO VIEW](#)

Springs Road. It should also be noted that implementation of the Proposed Project or any of the non-SWPL Alternatives described elsewhere in this report, would eliminate the visual impacts along the South Buckman Springs Option though under the other options, the significant impact would merely be shifted to different locations.

Mitigation Measures for Impact V-87: Increased structure contrast, industrial character, structure prominence and view blockage when viewed from South Buckman Springs Road

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

V-87a Reduce visibility of the South Buckman Springs Option by rerouting the option to the north, away from South Buckman Springs Road. In order to substantially reduce the visibility of the South Buckman Springs Option from South Buckman Springs Road, reroute the South Buckman Springs Option to achieve greater separation from South Buckman Springs Road, as shown in Figure E.1.3-17C. SDG&E shall submit final construction plans demonstrating compliance with this measure to the CPUC and USFS for review and approval at least 120 days prior to the start of construction.

Impact V-88: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining along the South Buckman Springs Option (SMS) (Class I)

In addition to the specific impacts described above for Impacts V-72 and V-87 in Cameron Valley and along South Buckman Springs Road (respectively), the route would also pass through portions of Cleveland National Forest. Similar to the impacts discussed above, the transmission line would introduce substantial structure contrast, industrial character, and view blockage along the route on forest lands that are predominantly natural in appearance and absent similar features. As a result, the transmission line would reduce the integrity of the existing landscape and the level of change that would occur would be moderate-to-high.

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 are recommended to reduce the visual impact along this alternative. While implementation of these measures would not achieve the HIGH SIO, they would enable achievement of the highest scenic integrity possible and they would reduce the visual impact that would be experienced by viewers along this route option. This viewpoint analysis is considered representative of views of this option from Cleveland National Forest lands along this route option.

Mitigation Measures for Impact V-88: Inconsistency with USFS Scenic Integrity Objective due to introduction of structure contrast, industrial character, view blockage, and skylining along the South Buckman Springs Option

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

V-45a Prepare and Implement Scenery Conservation Plan.

Chocolate Canyon Option

Environmental Setting

The Chocolate Canyon Option was originally suggested by SDG&E as mitigation for the visibility of the I-8 route segment that extends from the Alpine Road Transition Structures to El Monte County Park. The route was modified by the EIR/EIS Team to reduce the visibility of the transition structures adjacent to the I-8 Freeway. In order to do that, the transition structures were moved further west/northwest along Alpine Boulevard. From this transition point, the aboveground route would cross the freeway and head northeast up Chocolate Canyon, roughly parallel to El Monte Road. The route would follow the canyon to Capitan Lake where it would turn to the west, just south of the southern shore of the reservoir, eventually intersecting the I-8 Alternative just west of the dam. The landscape along this route is primarily natural in appearance. Views of the route would be available from I-8 at the southern end, a few residences west of Peutz Valley Road, and from Capitan Reservoir near the north end.

Environmental Impacts and Mitigation Measures

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 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 impacts along the Chocolate Canyon Option would be as described in Section D.3.5 for the Proposed Project Imperial Valley Link 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.

The viewing opportunity of concern along this segment includes I-8 and Capitan Reservoir. 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.

Figure E.1.3-17C. South Buckman Springs Option Mitigation Reroute Map
[CLICK HERE TO VIEW](#)

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V-1b Reduce construction night lighting impacts.

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

This impact could occur along most of this option where it passes through undeveloped arid and semi-arid lands. 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-APM-23 and GEO-APM-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

Impact V-73: Increased structure contrast, industrial character, structure prominence and view blockage associated with the Chocolate Canyon Option (VS-VC) (Class I)

The Chocolate Canyon Option would reduce the prominent views of the Interstate 8 Alternative, but would still result in significant (Class I) visual impacts. The introduction of prominent built structures with substantial industrial character into a predominantly natural appearing landscape would cause long-term, operational visual impacts, which would be experienced by viewers on I-8 and Capitan Reservoir and a few residences off of Peutz Valley Road to the east. However, the advantage of this route over the I-8 Alternative route is that by following Chocolate Canyon at a lower elevation and staying off the ridgeline to the west, visibility of the route would be substantially reduced for travelers on I-8, residences off of Peutz Valley Road, and the numerous residences to the west of the I-8 Alternative route. Also, structure prominence would be reduced with the Chocolate Canyon Option because the lower elevation route would minimize structure skylining in general and eliminate structure skylining along the ridgeline west of Chocolate Canyon.

Mitigation Measure for Impact V-73: Increased structure contrast, industrial character, structure prominence and view blockage associated with the Chocolate Canyon Option

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

E.1.3.5 Future Transmission System Expansion for Interstate 8 Alternative

As described in Section E.1.1, the Interstate 8 Alternative Substation that would be built as a part of the Interstate 8 Alternative would accommodate up to six 230 kV circuits and a 500 kV circuit. Only two 230 kV circuits are proposed by this alternative at this time, but construction of additional 230 kV circuits and a 500 kV circuit out of the Interstate 8 Alternative Substation may be required in the future. This section considers the impacts of construction and operation of these potential future transmission lines.

There are three routes that are most likely for these future lines; each is addressed below. Figure E.1.1-6 illustrates the potential routes of the transmission lines.

Environmental Setting – 230 and 500 kV Future Transmission System Expansion

The future 230 and 500 kV lines from the Interstate 8 Alternative Substation would most likely follow one or more of the following routes:

Interstate 8 route including underground within Alpine Boulevard

Please note the Interstate 8 route including underground within Alpine Boulevard would only be applicable for future 230 kV lines.

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. See Section E.1.3.1 and E.1.3.2 for a description of the Environmental Setting and Mitigation Measures for the Interstate 8 Alternative. The future transmission line route would follow the I8 Alternative's 230 kV route to the point where it meets the Proposed Project at MP 131. 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 a description of the Environmental Setting, Impacts, and Mitigation Measures for the Inland Valley Line and the Coastal Link of the Proposed Project. The Interstate 8 230 kV future transmission route could then follow the Proposed Project's 230 kV Future Transmission Expansion route from Chicarita to the Escondido Substation shown in Figure B-12a. See Section D.3.11 for a description of the Environmental Setting and Impacts for the Proposed Project's Future Transmission Expansion route.

Route D Alternative corridor

Additional 230 and 500 kV circuits could follow the Route D Alternative corridor to the north of Descanso, after following the Interstate 8 Alternative 230 kV route from the Interstate 8 Substation to MP I8 70.3. The environmental setting and mitigation measures for the Visual Resources of the Route D Alternative can be found in Section E.3.3.1 and in Section E.3.3.2. It should be noted however, that the Route D Alternative Visual impacts and mitigation measures are for a 500 kV transmission line, and the Interstate 8 future transmission line as detailed above could be either a 500 kV line or a 230 kV line. For a description of a typical 500 kV transmission support structure and a typical 230 kV support structure see Section B.3.1.

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 for more information on the visual setting of the Central, Inland Valley, and Coastal Links respectively of the Proposed Project. The visual environmental impacts and mitigation measures for the above links can be found in Section D.3.7, D.3.8, and D.3.9 respectively.

For the visual setting, impacts, and mitigation measures of the Proposed Project's 230 kV Future Transmission Expansion route and the Proposed Project's 500 kV Future Transmission Expansion route see Section D.3.11.

Interstate 8 Alternative with Modified Route D alignment and West of Forest alignment

The future 230 or 500 kV lines could follow the proposed Interstate 8 Alternative route from the Interstate 8 Alternative Substation until reaching the Modified Route D Alternative corridor (within the 368 Corridor identified by the Department of Energy's Draft West-wide Corridor Programmatic EIS) and then follow the Modified Route D Alternative corridor south for 11 miles to MP MD-26. For the environmental setting, impacts and mitigation measures for Visual of the Modified Route D see Section E.4.3. At this point, 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. This route would meet up with the Interstate 8 Alternative at approximately MP I8-79 and would follow the I8 Alternative's overhead 230 kV route to the point where it meets the Proposed Project at MP 131. 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 route (see description in Section B.2.7) from Chicarita to the Escondido Substation.

Views of the future 230 or 500 kV line would be available from several rural residences and numerous public roads including Lyons Valley Road, Skyline Truck Trail, Wisecarver Truck Trail, Hilary Drive, Mark Trail, Lawson Valley Road, Forest Route 16SD1, Sycuan Truck Trail, Dehesa Road, Harbison Canyon Road, Mountain View Road, Alpine Boulevard, and other local access roads. The new 230 kV line along the West of Forest alignment would also be visible from the unincorporated communities of Alpine, Harbison Canyon, and Flinn Springs as well as from the Loveland Reservoir. Although the area is relatively undeveloped, there are notable built features including the linear forms of the paved and unpaved roads and existing electric transmission infrastructure including several wood-pole utility lines.

Visual Quality. Moderate. The views along the future transmission route 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 little visual evidence of built industrial features or character.

Viewer Concern. High. residents along the transmission line route 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 future transmission route would be highly visible in the foreground of views from residences along the roads listed above. Also, the transmission line route would parallel Lyons Valley Road and Skyline Truck Trail for 0.5 miles and 1.7 miles respectively and be visible to any travelers along these routes. 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 the future transmission route, 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 – 230 or 500 kV Future Transmission System Expansion

Construction Impacts

Impact V-1: Short-term visibility of construction activities, equipment, and night lighting (Class II – Substations, construction and storage yards, fly yards; and Class III – 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, suburban residents, commercial users, outdoor recreation enthusiasts, and travelers on public roads. Construction impacts at these sites could be lengthy and the resulting visual impacts would be significant but mitigable (Class II). Mitigation Measures V-1a and V-1b (full text presented in Appendix 12) and V-1c (described below) are required to reduce the impacts to levels that would be less than significant.

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). To ensure that viewers are not unnecessarily impacted during construction, Mitigation Measures V-1a and V-1c 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: 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. [APM VR-4]

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.

Long-term land scarring and vegetation clearance impacts would 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 G-1b (Implement erosion control procedures). 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 USBLM 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 on non-Forest lands.**
- V-2d** **Construction by helicopter.**
- V-2e** **Minimize vegetation removal. [BIO-APM-23]**
- G-1b** **Implement erosion control procedures. [GEO-APM-2]**

Operational Impacts

Impact V-1FT: Increased structure contrast, industrial character, view blockage, and skylining (Class I)

Operational impacts of the future 230 kV lines would be very noticeable. Where an additional future 230 kV line is located along an existing 230 kV route and the 230 kV transmission lines are paired up, viewers would be able to see a doubling of the built features (structures and conductors) with increased visual contrast and view blockage. Assuming that the transmission lines are of identical design and are effectively paired up, tower for tower with synchronized conductor spans, the incremental impact would be adverse but less than significant. However, in the likely event that three or more transmission lines are co-located in a corridor, even with identical designs, it would be very unlikely that natural terrain variations would allow for a consistent pairing of all structures. As a result, structures would be offset in terms of location and elevation. This would cause asynchronous structure positioning and conductor spans. The corridor would appear more structurally complex with substantially greater industrial character. View blockage of higher valued landscape features (hills, ridgelines, mountains, and sky) would also increase. Landscape integrity would be substantially compromised and the resulting incremental visual impact would be significant and unmitigable (Class I).

Cumulative Impact V-2FT: Increased structure contrast, industrial character, view blockage, and skylining resulting in cumulative visual impacts (Class I)

Most cumulative impacts of the Proposed Project are addressed in Section G. The visual sensitivity of the existing landscape and viewing conditions, structure design, site-specific siting locations of future transmission structures, and the resulting cumulative visual impacts of the future 230 kV lines vary along

the length of the potential future routes. Where two transmission lines are lined up, viewers would be able to see a doubling of the built features (structures and conductors) with increased visual contrast and view blockage. Assuming that the new transmission line is of identical design and is effectively matched up with an existing 230 kV line, tower for tower with synchronized conductor spans, the cumulative impact would be less than significant. However, with three or more transmission lines in a corridor, even with identical designs, it would be very unlikely that natural terrain variations would allow for a consistent matching of structures. As a result, structures would likely be offset in terms of both location and elevation. This would cause asynchronous structure positioning and conductor spans. The corridor would appear more structurally complex with substantially greater industrial character. View blockage of higher valued landscape features (hills, ridgelines, mountains, and sky) would also be more substantial. The resulting cumulative visual impact would be significant and unmitigable (Class I).

Mitigation Measures for Impact V-2FT: Increased structure contrast, industrial character, view blockage, and skylining resulting in cumulative visual impacts (as appropriate)

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

V-25a Structure design and placement guidance.