D.18 Visual Resources

This section includes descriptions of the affected environment for Visual Resources in Section D.18.1 and presents the relevant regulations, plans, and standards in Section D.18.2. Sections D.18.3 through D.18.5 describe the impacts of the Proposed Project and the alternatives. Section D.18.5 presents the mitigation measures and mitigation monitoring requirements, and Section D.18.7 lists references cited. Additional supporting tables and documentation are provided in Visual Resources Appendix 10.

Visual resources refer to visual considerations in the physical environment. Visual resources analysis is a systematic process to logically assess visible change in the physical environment and the anticipated viewer response to that change. Landforms, water, and vegetation patterns are among the natural landscape features that define an area's visual character, whereas buildings, roads, and other structures reflect human modifications to the landscape. These natural and built landscape features are considered visual resources that contribute to the public's experience and appreciation of the environment.

This Visual Resources section describes the existing landscape character and visual quality of the Proposed Project study area, existing views of the Proposed Project from various on-the-ground vantage points, the visual characteristics of the Proposed Project, and the landscape changes that would be associated with the construction and operation of the Proposed Project as seen from various vantage points. For the purposes of this analysis, the Proposed Project study area is defined as the areas and locations from which a Proposed Project (and any alternatives) could be seen, also referred to as the project viewshed, which is discussed in greater detail in Section D.18.1.1 below.

D.18.1 Environmental Setting / Affected Environment

This section describes the existing visual resources in the Proposed Project study area. The Proposed Project would be located within portions of 11 incorporated cities (or spheres of influence), Riverside and San Bernardino Counties, reservation trust land of the Morongo Band of Mission Indians (Morongo Tribal Lands), and land managed by the United States Department of the Interior Bureau of Land Management (BLM).

D.18.1.1 Approach to Data Collection and Regional Setting

D.18.1.1.1 Approach to Data Collection

The Visual Resources technical approach incorporated both a regional perspective and site-specific, detailed landscape assessments. The regional perspective included a general description of the type of landscapes through which the Proposed Project would pass, an assessment of the Proposed Project viewshed based on digital terrain modeling, and linear viewpoint analyses (general visibility assessments) for key roadways in the Proposed Project study area. More detailed visual assessments of the Proposed Project were conducted from specific locations that were selected to represent key viewing populations and viewing circumstances. The assessment approach for these more detailed Key Observation Point (KOP) analyses was differentiated according to: (1) non-federal public and private lands and (2) federal lands managed by the BLM (see Table D.18-1). The technical approach used for views from non-federal public and private lands utilized the **Visual Sensitivity–Visual Change (VS-VC) System.** The technical approach for the portion of the Proposed Project where lands are managed by the BLM was based on the **BLM's Visual Resource Management (VRM) System.** This is a system that BLM requires for use on BLM-managed lands and is generally not applied to non-BLM-managed lands where the BLM has no visual resource management authority or established landscape management objectives.

Table D.18-1. Visual Resources Approach

Land Category	Visual Sensitivity–Visual Change (VS-VC) Methodology	BLM Visual Resource Management (VRM) Methodology
Federal Lands Managed by BLM		×
Non-federal Public Lands	×	
Private Lands	×	
Reservation Trust Land of the Morongo Band of Mission Indians	×	

It is important to note that only approximately 1 mile of the Proposed Project is located on BLM-managed land in the wind energy development area between Haugen-Lehmann Way to the west and Whitewater Canyon to the east. None of the KOPs selected for detailed analysis are located on the one-mile segment of BLM-managed land crossed by the Proposed Project, and this area of BLM-managed land is not visible from any of the selected KOPs. Therefore, the KOP analyses rely on the VS-VC System of analysis, but the one-mile segment of BLM-managed land will be discussed separately per the BLM's VRM System as directed by BLM staff. Although the two methodologies share similarities (each compares anticipated changes, which would occur as a result of a project, to existing sensitivity), there are differences in both approach and terminology. The two methods are described in greater detail in the following sections.

Key Observation Points (KOPs)

A number of representative KOPs were established to assess the various factors that are considered in the evaluation of a landscape's existing visual resources. KOPs were generally selected to be representative of the most critical locations from which the Proposed Project would be seen. KOPs were located based on their usefulness in evaluating existing landscapes and potential impacts on visual resources with various levels of sensitivity, in different landscape types and terrain, and from various vantage points. Typical KOP locations for the Proposed Project included those:

1. Along major or significant travel corridors or points of visual access,
2. At vista points,
3. At significant recreation areas,
4. In residential areas, and
5. At locations that provide good examples of the existing landscape context and viewing conditions.

At each KOP, the existing landscape was characterized per the applicable method and photographed. Photographs were presented as 11" x 17" color images at "life-size scale" when viewed at a standard reading/viewing distance of 18 inches (i.e., when the image is held at a distance of 18 inches from the eye, all landscape features in the images would appear to be the same scale [size] as they would appear in the field at the viewpoint location).

Visual Sensitivity–Visual Change (VS-VC) Methodology

Under this methodology, the Proposed Project was viewed from various public roads and vantage points to develop an overall assessment of the existing landscape character, visual quality, and viewing conditions. Then, at representative KOPs, the existing landscape was characterized (for visual quality, viewer concern, and viewer exposure) and photographed. Each of the factors considered in the evaluation of the existing landscape under the VS-VC methodology is discussed below.

Visual Quality is a measure of the overall impression or appeal of an area as determined by particular landscape characteristics such as landforms, rockforms, water features, and vegetation patterns, as well as associated public values. The attributes of variety, vividness, coherence, uniqueness, harmony, and pattern contribute to visual quality classifications of indistinctive (Low), common (Moderate), and distinctive (High). Visual quality is studied as a point of reference to assess whether a given project would appear compatible with the established features of the setting or would contrast noticeably and unfavorably with them.

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

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

Overall Visual Sensitivity is a concluding assessment as to an existing landscape's susceptibility to an adverse visual outcome (rated from Low to High). A landscape with a high degree of visual sensitivity is able to accommodate only a low degree of adverse visual change without resulting in a significant visual impact. A landscape with a low degree of visual sensitivity is able to accommodate a higher degree of adverse visual change before exhibiting a significant visual impact. Overall visual sensitivity is derived from a comparison of existing visual quality, viewer concern, and viewer exposure.

BLM Visual Resource Management (VRM) Approach

Public lands to be occupied by the Proposed Project and managed by the BLM are subject to visual resource management objectives as developed using the BLM VRM System (BLM, 1984; BLM, 1986a and 1986b) and presented in the Resource Management Plan for a given unit. The VRM system identifies four classes (I through IV) with specific management prescriptions for each class. The system is based on an assessment of scenic quality, viewer sensitivity, and viewing distance zones.

Scenic Quality is a measure of the overall impression or appeal of an area created by the physical features of the landscape, such as natural features (landforms, vegetation, water, color, adjacent scenery, and scarcity) and built features (roads, buildings, railroads, agricultural patterns, and utility lines). These features create the distinguishable form, line, color, and texture of the landscape composition that can be judged for scenic quality using criteria such as distinctiveness, contrast, variety, harmony, and balance.

Table D.18-2 presents the VRM scenic quality rating components that are evaluated to arrive at one of three scenic quality ratings (A, B, or C) for a given landscape. Each landscape component is scored, and a score of 19 or higher results in a Class A scenic quality rating. A score of 12 to 18 results in a Class B scenic quality rating, while a score of 11 or less results in a Class C scenic quality rating. The three scenic quality classes are described as follows:

- **Scenic Quality Class A** – Landscapes that combine the most outstanding characteristics of the region.
- **Scenic Quality Class B** – Landscapes that exhibit a combination of outstanding and common features.
- **Scenic Quality Class C** – Landscapes that have features that are common to the region.

Table D.18-2. Visual Resource Management (VRM) Scenic Quality Rating

Component	Scenic Quality Rating		
Landform	High vertical relief (prominent cliffs, spires, or massive rock outcrops); severe surface variation; highly eroded formations (major badlands or dune systems); detail features dominant and exceptionally striking/ intriguing.	Steep canyons, mesas, buttes, cinder cones, and drumlins; interesting erosional patterns or variety in size and shape of landforms; or detail features, which are interesting though not dominant or exceptional.	Low rolling hills, foothills, or flat valley bottoms or few or no interesting landscape features.
	5	3	1
Vegetation	A variety of vegetative types as expressed in interesting forms, textures, and patterns.	Some variety of vegetation but only one or two major types.	Little or no variety or contrast in vegetation.
	5	3	1
Water	Clear and clean appearing, still, or cascading white water, any of which are a dominant factor in the landscape.	Flowing, or still, but not dominant in the landscape.	Absent or present but not noticeable.
	5	3	0
Color	Rich color combinations; variety or vivid color; or pleasing contrasts in the soil, rock, vegetation, water, or snowfields.	Some intensity or variety in colors and contrast of the soil, rock, and vegetation but not a dominant scenic element.	Subtle color variations, contrast, or interest; generally muted tones.
	5	3	1
Influence of Adjacent Scenery	Adjacent scenery greatly enhances visual quality.	Adjacent scenery moderately enhances overall visual quality.	Adjacent scenery has little or no influence on overall visual quality.
	5	3	0
Scarcity	One of a kind, unusually memorable, or very rare within region. Consistent chance for exceptional wildlife or wildflower viewing, etc.	Distinctive, though somewhat similar to others within the region.	Interesting within its setting but fairly common within the region.
	5+*	3	1
Cultural Modifications	Modifications add favorably to visual variety while promoting visual harmony.	Modifications add little or no visual variety to the area and introduce no discordant elements.	Modifications add variety but are very discordant and promote strong disharmony.
	2	0	–4
Scenic Quality Rating:	A = 19 or more	B = 12 to 18	C = 11 or less

*A rating of greater than 5 can be given but must be supported by written justification

Viewer Sensitivity is a factor used to represent the value of the visual landscape to the viewing public, including the extent to which the landscape is viewed. For example, a landscape may have high scenic qualities but be remotely located and, therefore, seldom viewed. Sensitivity considers such factors as visual access (including duration and frequency of view), type and amount of use (See Table D.18-3), public interest, adjacent land uses, and whether the landscape is part of a special area (e.g., California Desert Conservation Area [CDCA]).

Table D.18-3. Amount of Use Classifications

Type Area	High	Moderate	Low
Roads & highways	More than 45,000 visits/year	5,000 to 45,000 visits/year	Less than 5,000 visits/year
Rivers & trails	More than 20,000 visits/year	2,000-20,000 visits/year	Less than 2,000 visits/year
Recreation sites	More than 10,000 visitor-days/year	2,000-10,000 visitor-days/year	Less than 2,000 visitor-days/year

The three levels of viewer sensitivity can generally be defined as follows:

- **High Sensitivity.** Areas that are either designated for scenic resources protection or receive a high degree of use (includes areas visible from roads and highways receiving more than 45,000 visits [vehicles] per year). Typically within the foreground/middleground (f/m) viewing distance (see Table D.18-4).
- **Medium Sensitivity.** Areas lacking specific, or designated, scenic resources protection but are located in sufficiently close proximity to be within the viewshed of the protected area. Includes areas that are visible from roads and highways receiving 5,000 to 45,000 visits (vehicles) per year. Typically within the background (b) viewing distance (see Table D.18-4).
- **Low Sensitivity.** Areas that are remote from populated areas, major roadways, and protected areas or are severely degraded visually. Includes areas that are visible from roads and highways receiving less than 5,000 visits (vehicles) per year.

***Viewing Distance Zones*.** Landscapes are generally subdivided into three distance zones based on relative visibility from travel routes or observation points (see Table D.18-4). The f/m zone includes areas that are less than 3 to 5 miles from the viewing location. The **f/m** zone defines the area in which landscape details transition from readily perceived to outlines and patterns. The **b** zone is generally greater than five but less than 15 miles from the viewing location. The **b** zone includes areas where landforms are the most dominant element in the landscape, and color and texture become subordinate. In order to be included within this distance zone, vegetation should be visible at least as patterns of light and dark. The seldom-seen **(s/s)** zone includes areas that are usually hidden from view as a result of topographic or vegetative screening or atmospheric conditions. In some cases, atmospheric and lighting conditions can reduce visibility and shorten the distances normally covered by each zone (BLM, 1986b).

Table D.18-4. Distance Zones

f/m – foreground/middleground	0 to 3–5 miles
b – background	5–15 miles
s/s – seldom seen	seldom seen areas

The Visual Resource Management class for a given area is typically arrived at through the use of a classification matrix similar to that presented in Table D.18-5. By comparing the scenic quality, visual sensitivity, and distance zone, the specific VRM class can be determined. The exception to this process is the Class I designation, which is placed on special areas where management activities are restricted (e.g., wilderness areas).

Table D.18-5. Visual Resource Management (VRM) Classification Matrix								
Visual Sensitivity Levels		High			Medium			Low
Special Areas		I	I	I	I	I	I	I
Scenic Quality	A	II	II	II	II	II	II	II
	B	II	III	III*	III	IV	IV	IV
				IV*				
	C	III	IV	IV	IV	IV	IV	IV
Distance Zones		f/m	b	s/s	f/m	b	s/s	s/s

*If adjacent areas are Class III or lower, assign Class III; if higher, assign Class IV.

The objectives of each VRM classification as stated in the BLM VRM *Visual Resource Inventory Manual* are as follows:

- **VRM Class I.** The objective is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention.
- **VRM Class II.** The objective is 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.
- **VRM Class III.** The objective is 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.
- **VRM Class IV.** The objective is to provide for management activities, which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements in the predominant natural features of the characteristic landscape.

The easternmost segment of the Proposed Project (Segment 6) is located within the CDCA, and the easternmost portion of Segment 6 is located within the CDCA Coachella Valley Planning Area south of Desert Hot Springs and north of Palm Springs. VRM classes have previously been established for BLM-managed land crossed by the Proposed Project. A small portion (approximately 1 mile) of Segment 6 between Haugen-Lehmann Way and Whitewater Canyon Road is designated VRM Class II. An adjacent, but smaller, area not crossed by the Proposed Project is designated as Class IV. For the purpose of this analysis, the more restrictive class (Class II) has been applied to Segment 6 BLM-managed land.

D.18.1.1.2 Regional Setting

The Proposed Project would be located largely within portions of the San Bernardino Valley in the west and the San Gorgonio Pass in the east. The San Bernardino Valley region is bounded by the San Gabriel Mountains and the San Bernardino Mountains to the north, by the San Jacinto Mountains to the east, and by the Santa Ana Mountains and Pomona Valley on the south and west. The San Gorgonio Pass is a gap between the San Bernardino Mountains to the north and the San Jacinto Mountains to the south. The terrain of the Proposed Project study area varies from flat to gently sloping plains to steep ridges

and drainages in the foothills. Elevations along the Proposed Project range from approximately 1,050 to 3,000 feet above mean sea level with both relatively flat urban areas and mountainous topography.

The Proposed Project study area transitions from the more urbanized and rapidly developing sections of Riverside and San Bernardino Counties dominated by mixed use developments of residential, commercial, and industrial uses, to semi-arid, rolling terrain at the base of the east-west trending San Jacinto and San Bernardino Mountains into a desert basin environment bordered by rough, rocky mountain ranges with jagged ridgelines. Vegetation throughout the Proposed Project study area consists of grassland, chaparral, desert scrub, coastal sage scrub, coast live oak woodland, riparian woodland, alluvial scrub, agricultural land, and disturbed areas (SCE-PEA Oct. 2013, p. 4.4-2).

The Proposed Project would pass through portions of: the cities of Banning, Beaumont, Calimesa, Colton, Grand Terrace, Loma Linda, Palm Springs (i.e., the Potential Future Sphere of Influence Expansion Area), Rancho Cucamonga, Redlands, San Bernardino, and Yucaipa; unincorporated areas of Riverside and San Bernardino Counties; reservation trust land; and BLM-managed land. The Proposed Project would be located largely within an existing utility corridor containing multiple transmission lines.

D.18.1.1.3 Project Viewshed

A project viewshed is defined as the areas and locations from which a proposed project (and any alternatives) could be seen (also called project study area). The San Bernardino and San Gorgonio Mountains to the north and the San Jacinto Mountains to the south of the Proposed Project limit the Proposed Project viewshed to the north and south as does more localized topography such as the hills and ridges that define San Timoteo Canyon. Figures D.18-1 through D.18-6 present maps of the Proposed Project viewshed by segment.

The primary viewing populations of the Proposed Project are travelers on major roadways in the Proposed Project study area (e.g. Interstate [I-] 10, State Route [SR] 62, and San Timoteo Canyon Road) and residents that live in the immediate vicinity of the Proposed Project right-of-way (ROW).

Given the Proposed Project's frequent location along foothills and ridges or on flat plains throughout much of its route, most views of it are either at grade or from inferior (lower elevation) positions, which result in the skylining (extending above the horizon) of some structures from some viewing locations.

The duration of views depends on the viewing population. Stationary viewing populations (such as those in residences or recreation facilities) have more time to view the Proposed Project. Fast-moving viewing populations (such as motorists on nearby roadways) have less time to view the Proposed Project, but the openness of much of the landscape can still afford extended view durations even for freeway (I-10) travelers.

As discussed below in Section D.18.2.2, SR 62 and SR 243 are Officially Designated State Scenic Highways. SR 111 is an Eligible State Scenic Highway. Also, San Timoteo Canyon Road, Beaumont Avenue (north to the San Bernardino County Line), and Whitewater Canyon Road are County Eligible Scenic Highways. All of these roadways have views of portions of the Proposed Project. As discussed elsewhere in this document, traffic volumes are heavy on I-10, SR 62, and SR 111; moderate on San Timoteo Canyon Road and Beaumont Avenue; and light on Whitewater Canyon Road in the Proposed Project study area.

D.18.1.1.4 Linear Viewpoint Analysis

In contrast to stationary views at specific KOPs, which are discussed later in this section, transient views from roadways are variable and can range from unobstructed to completely screened (typically by roadside vegetation or structures). Figures D.18-7A through D.18-7C present linear viewpoint analyses of the Proposed Project from three roadways in the Proposed Project study area including I-10, SR 62,

and San Timoteo Canyon Road. As shown in the three figures, roadway segments are color-coded to indicate the available views of the Proposed Project and include views up to 90 degrees off the direction of travel. Project visibility is not considered when the angle of view exceeds 90 degrees off the direction of travel. The limits of the color-coding indicate the point in that particular direction of travel where the Proposed Project would first become reasonably visible in the greater field of view, though it may still not be noticeable. These results are based on actual field verification of travel views and distances and not on the more theoretical digital terrain analysis that does not take into account screening by structures and vegetation. As illustrated in the figures, there are four view categories that pertain to the Proposed Project and include road segments where:

1. The project would not be visible;
2. The project would be visible but not noticeable;
3. The project would be noticeable but not prominent; and
4. The project would be prominent but not dominant.

A fifth category, *the project would be visibly dominant*, does not occur with respect to the Proposed Project. It should be remembered that what is being considered here is the incremental difference between what is presently within the ROW and what will be within the ROW upon Proposed Project implementation. Tables D.18-6 through D.18-8 quantify the four viewing categories for each roadway and each direction of travel, as well as for both directions of travel combined. What is clear from the figures and tables is that the Proposed Project would have a relatively limited impact on views from these key roadways, with I-10 being the least impacted and San Timoteo Canyon Road being the most impacted. The following paragraphs briefly describe the key findings of the linear viewpoint analyses.

Interstate 10. The linear viewpoint analysis covered I-10 from its intersection with I-15 in the west (Segment 1) to just east of SR 62 in the east (see Figures D.18-7A and 7B). As shown on Figure D.18-7A, this includes a substantial stretch of freeway between Redlands and Calimesa where the Proposed Project would be screened from view by intervening terrain. It is clear from Table D.18-6 that the Proposed Project would have a very limited effect on views from I-10 with the Proposed Project being either not visible, or visible but not noticeable, for approximately 80 percent of the combined (eastbound-westbound) travel distance of slightly over 90 miles. The Proposed Project would be prominently visible from I-10 for only five percent of the combined travel distance, and at no point would the Proposed Project appear to be a dominant visual feature when viewed from I-10.

Table D.18-6. Interstate 10 Linear Viewpoint Analysis[1]

Travel Direction and Category of Visibility	Affected Travel Distance (miles)	Percent of Total Affected Travel Distance	View Duration[2] (minutes)
Eastbound I-10			
1. Not visible	21.82	49%	19.4
2. Visible but not noticeable	13.62	31%	12.1
3. Noticeable but not prominent	6.69	15%	5.9
4. Prominent but not dominant	2.27	5%	2.0
Eastbound Subtotal	44.40	100%	39.4
Westbound I-10			
1. Not visible	25.41	55%	22.6
2. Visible but not noticeable	12.80	28%	11.4
3. Noticeable but not prominent	5.70	12%	5.1
4. Prominent but not dominant	2.09	5%	1.8
Westbound Subtotal	46.00	100%	40.9

Table D.18-6. Interstate 10 Linear Viewpoint Analysis[1]

Travel Direction and Category of Visibility	Affected Travel Distance (miles)	Percent of Total Affected Travel Distance	View Duration[2] (minutes)
Total Both Directions			
1. Not visible	47.23	52%	42.0
2. Visible but not noticeable	26.42	29%	23.5
3. Noticeable but not prominent	12.39	14%	11.0
4. Prominent but not dominant	4.36	5%	3.8
Total for Both Directions	90.40	100%	80.3

1 - See Figures D.18-7A and 7B for Linear Viewpoint Maps of I-10
2 - Based on posted travel speed.

State Route 62. The linear viewpoint analysis included SR 62, an Officially Designated State Scenic Highway, from its intersection with I-10, north for approximately 3 miles to the point where the Proposed Project first becomes visible, though not noticeable, to southbound travelers (see Figure D.18-7B). As shown in Table D.18-7, the Proposed Project would be prominently visible to northbound travelers as the transmission line spans the highway. However, the distance of visibility is very brief because the span is only approximately 1.25 miles north of the I-10 interchange. Overall, the Proposed Project would have a limited effect on views from SR 62 with the Proposed Project being either not visible, or visible but not noticeable, for 60 percent of the combined (northbound-southbound) travel distance of approximately 4 miles and prominently visible for 23 percent of the combined travel distance as travelers approach the span. At no point would the Proposed Project appear to be a dominant visual feature given the presence of existing energy infrastructure and dominance of Mount San Jacinto (when traveling southbound).

Table D.18-7. SR 62 Linear Viewpoint Analysis[1]

Travel Direction and Category of Visibility	Affected Travel Distance (miles)	Percent of Total Affected Travel Distance	View Duration[2] (minutes)
Northbound SR 62			
1. Not visible	0.22	20%	0.20
2. Visible but not noticeable	0	0%	0
3. Noticeable but not prominent	0.35	32%	0.32
4. Prominent but not dominant	0.52	48%	0.48
Northbound Subtotal	1.09	100%	1.00
Southbound SR 62			
1. Not visible	0.97	34%	0.90
2. Visible but not noticeable	1.19	42%	1.10
3. Noticeable but not prominent	0.33	11%	0.30
4. Prominent but not dominant	0.37	13%	0.34
Southbound Subtotal	2.86	100%	2.64
Total Both Directions			
1. Not visible	1.19	30%	1.10
2. Visible but not noticeable	1.19	30%	1.10
3. Noticeable but not prominent	0.68	17%	0.63
4. Prominent but not dominant	0.89	23%	0.82
Total for Both Directions	3.95	100%	3.65

1 - See Figure D.18-7B for a Linear Viewpoint Map of SR 62
2 - Based on posted travel speed

San Timoteo Canyon Road. The linear viewpoint analysis addressed the full extent of San Timoteo Canyon Road (see Figure D.18-7C) from its intersection with Barton Road in the north to its southern terminus with Oak Valley Parkway, a linear distance of almost 11.5 miles (northbound travel direction). As shown in Table D.18-8, the Proposed Project would be either not visible (due to screening by terrain and roadside vegetation) or visible but not noticeable for approximately 46 percent of the combined (northbound-southbound) travel distance of slightly more than 22.6 miles. However, given the Proposed Project's relatively close proximity to San Timoteo Canyon Road and frequent superior (elevated) location along the southern ridgeline, the Proposed Project would be prominently visible for 43 percent of the combined travel distance, consistent with the visibility of the current energy transmission infrastructure. However, at no point would the Proposed Project appear to be a dominant visual feature.

Table D.18-8. San Timoteo Canyon Road Linear Viewpoint Analysis*

Travel Direction and Category of Visibility	Affected Travel Distance (miles)	Percent of Total Affected Travel Distance	View Duration[2] (minutes)
Northbound San Timoteo Canyon Road			
1. Not visible	3.35	29%	4.02
2. Visible but not noticeable	2.74	24%	3.29
3. Noticeable but not prominent	1.33	12%	1.60
4. Prominent but not dominant	4.03	35%	4.83
Northbound Subtotal	11.45	100%	13.74
Southbound San Timoteo Canyon Road			
1. Not visible	2.85	25%	3.42
2. Visible but not noticeable	1.64	15%	1.97
3. Noticeable but not prominent	1.10	10%	1.32
4. Prominent but not dominant	5.60	50%	6.72
Southbound Subtotal	11.19	100%	13.43
Total Both Directions			
1. Not visible	6.20	27%	7.44
2. Visible but not noticeable	4.38	19%	5.25
3. Noticeable but not prominent	2.43	11%	2.92
4. Prominent but not dominant	9.63	43%	11.56
Total for Both Directions	22.64	100%	27.17

1 - See Figure D.18-7C for a Linear Viewpoint Map of San Timoteo Canyon Road
2 - Based on posted travel speed

D.18.1.2 Environmental Setting by Segment

The visual resources setting for the Proposed Project study area is described below in seven sections: San Bernardino (Segment 1), Colton and Loma Linda (Segment 2), San Timoteo Canyon (Segment 3), Beaumont and Banning (Segment 4), Morongo Tribal Lands and surrounding areas (Segment 5), Whitewater and Devers (Segment 6), and Subtransmission (adjacent to Segment 1). Detailed visual analyses were conducted at representative KOPs within each segment and are discussed below and summarized in Table 10-1 in Appendix 10.

D.18.1.2.1 Segment 1: San Bernardino

This segment of the Proposed Project extends from the San Bernardino Substation south through the cities of Redlands and Loma Linda before terminating at San Bernardino Junction. The transmission line corridor along this segment contains three or four transmission lines depending on location. The landscape along this segment is suburban in character with numerous residential developments, parks, and commercial developments in close proximity to the corridor.

Views of the Proposed Project along this segment would be available from local roads paralleling and crossing under the corridor, residential neighborhoods adjacent to the transmission line corridor, parks within the corridor ROW, and I-10 where the transmission lines span the freeway.

KOP 1 – Right-of-Way Crossing of Mission Road in Loma Linda

Figure D.18-8A presents the view to the south from Mission Road, down the ROW park that has been developed under the transmission lines, in the City of Loma Linda. The view encompasses that portion of Segment 1 heading south from Mission Road, toward San Bernardino Junction, just beyond the first ridgeline at the far left of the image. The image captures the orchard/park setting within this portion of the ROW, the residential developments that back on to the ROW, and the hills that provide a backdrop to the south.

Visual Quality. Low to Moderate. The foreground to middleground landscape is of a suburban electric utility corridor with substantial industrial character but hosting some orchard trees and developed park landscaping within the ROW. Suburban residential areas border both sides of the ROW. Vegetation within, and adjacent to, the corridor provides visual interest and color contrast, but the corridor is dominated by the larger, complex, industrial forms of the transmission structures.

Viewer Concern. High. Although energy transmission infrastructure dominates the foreground views from the park within the corridor, from adjacent residential neighborhoods, and from roads that are spanned by the ROW and adjacent to the park, viewers would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky or ridgelines) an adverse visual change.

Viewer Exposure. High. The Proposed Project would be highly visible in the foreground views from the park within the corridor, from adjacent residential neighborhoods, and from roads that are spanned by the ROW and adjacent to the park. The number of viewers would be Moderate, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 1, combining the equally weighted Low to Moderate visual quality, High viewer concern, and High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

Segment 1 Night Lighting

General. North of I-10, the night lighting landscape along Segment 1 is fairly typical of an urban environment primarily due to commercial lighting, exterior security lighting on business and warehouse sites, traffic signal lights, and street lighting. There are also numerous vehicle lights, particularly along major roadways and on I-10 with its high traffic volume. South of I-10, as the Proposed Project passes through the residential areas between Redlands Boulevard to the north and Beaumont Avenue to the south, there is less lighting, as would be anticipated, that includes some street lighting, residential lighting, and very limited areas of lighting in the occasional ROW park areas. Past Beaumont Avenue, as the route ascends the ridge to San Bernardino Junction and the intersection with Segments 2 and 3, there is no lighting.

Federal Aviation Administration (FAA) Hazard Lighting. There are no FAA hazard lights within the Segment 1 ROW, including the span of I-10. There are also no existing FAA lights in the vicinity of the Segment 1 ROW with the exception of the lights on the stacks of the Mountainview Power Plant, located immediately northwest of San Bernardino Substation, at the northern terminus of Segment 1.

D.18.1.2.2 Segment 2: Colton and Loma Linda

This segment of the Proposed Project extends east from the Vista Substation by spanning I-215, then passing through the cities of Grand Terrace, Colton, and Loma Linda to the San Bernardino Junction. Vista Substation is a visually complex facility serving numerous transmission lines and exhibiting substantial industrial character. The transmission line corridor along this segment contains several lattice structure transmission lines. The landscape along this segment transitions from a typical suburban landscape with a mix of newer and older residential neighborhoods in Grand Terrace and Colton to the undeveloped, rolling, grass-covered hills of southern Loma Linda. Views of the Proposed Project along this route segment would be available from local roads paralleling and crossing under the corridor, and residential neighborhoods adjacent to the transmission line corridor.

KOP 2 – Canyon Vista Drive in Colton

Figure D.18-9A presents a life-size scale view to the west toward the existing transmission lines along the ridgeline south of the residential development, from Canyon Vista Drive, just west of East Chase Canyon Lane, in the City of Colton. The view encompasses a residential neighborhood and a portion of Segment 2 between San Bernardino Junction and the Vista Substation. Three transmission lines are positioned along the ridgeline south of the subdivision. The northernmost line (second and fifth structures from the left in the image) is to be replaced with the Proposed Project.

Visual Quality. Moderate. The foreground residential landscape consists of newer, two-story, single-family residences with some established trees, which provide interesting color contrasts with the red-tiled roofs. The view is backdropped by grass-covered, rolling hills and ridgelines with monotone tan grasses, punctuated by prominent, structurally complex, lattice transmission structures that exhibit substantial skylining (extending above the horizon).

Viewer Concern. High. Although energy transmission infrastructure features prominently in the foreground views from the residential neighborhood, residents would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky or ridges) an adverse visual change.

Viewer Exposure. Moderate to High. The Proposed Project would be highly visible in the foreground views from the residential neighborhood. The number of viewers would be Low, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 2 and surrounding neighborhood, combining the equally weighted Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

Segment 2 Night Lighting

General. There is no night lighting within any portion of Segment 2 along the hills and ridges traversed by the ROW. Night lighting in the vicinity of Segment 2 is primarily limited to suburban residential lighting that borders the ROW and includes some street lights, very limited traffic signal lights, and some vehicle lights, which are most apparent where the route spans I-215.

FAA Hazard Lighting. There are no FAA hazard lights within or in the vicinity of the Segment 2 ROW.

D.18.1.2.3 Segment 3: San Timoteo Canyon

This segment begins at the San Bernardino Junction and passes through San Timoteo Canyon to the El Casco Substation.

The landscape along this segment is predominantly rural residential. Open views of canyon slopes and rolling foothills are available to residents and travelers on San Timoteo Canyon Road. ~~For the most part,~~ T~~t~~he Proposed Project would parallel existing transmission lines across the canyon's rolling, grass-covered, southern ridgeline.

Views of the Proposed Project along this route segment would be available from San Timoteo Canyon Road, local roads paralleling and crossing under the utility corridor, and from rural residences.

KOP 3 – Pilgrim Road

Figure D.18-10A presents a life-size scale view to the west toward the Proposed Project route from Pilgrim Road, off of San Timoteo Canyon Road in San Timoteo Canyon, in the City of Calimesa. The rural residential view captures portions of three transmission lines that traverse the hills and ridgelines that define the southwest border of the canyon.

Visual Quality. Moderate. The rural residential landscape consists of rolling, grass-covered hills with minimal visual variety and the prominent complex of vertical forms consisting of energy transmission infrastructure. Lattice structures blend effectively with background landforms but become noticeably more conspicuous where structure skylining occurs.

Viewer Concern. High. Although energy transmission infrastructure features prominently in the foreground landscape, residents would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky or ridges) an adverse visual change.

Viewer Exposure. Moderate to High. The Proposed Project would be highly visible in the foreground views from the rural residences. The number of viewers would be Low, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 3, combining the equally weighted Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

KOP 4 – Westbound San Timoteo Canyon Road

Figure D.18-11A presents a life-size scale view to the southwest toward the Proposed Project route, from westbound San Timoteo Canyon Road, approximately 0.7 miles east of Redlands Boulevard. The rural residential view captures portions of the three transmission lines that traverse the hills and ridgelines that define the southwest border of San Timoteo Canyon.

Visual Quality. Moderate. The landscape consists of open, panoramic views of the southern hills and ridgelines that define the southwest boundary of San Timoteo Canyon; these views are available throughout much of the length of San Timoteo Canyon Road. The hills are primarily grass-covered and offer subdued coloration and minimal visual variety but are primarily natural in appearance. The notable exception is the substantial transmission line corridor containing three transmission lines that traverse the hills and ridges.

Viewer Concern. High. Although energy transmission infrastructure features prominently in the foreground landscape, residents and travelers on San Timoteo Canyon Road would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky or ridges) an adverse visual change.

Viewer Exposure. Moderate to High. The project would be highly visible in the foreground views from San Timoteo Canyon Road and nearby residences. The number of viewers would be Low to Moderate, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 4, combining the equally weighted Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

Segment 3 Night Lighting

General. Compared to the surrounding, intensely urban environs, San Timoteo Canyon experiences a relatively dark night sky environment, which imparts a tangible sense of remoteness. There is minimal lighting within the canyon, and night lighting is primarily associated with the relatively few, scattered, rural residences. Also, there is no lighting of any kind within the transmission line corridor. The primary cluster of lighting within San Timoteo Canyon is at El Casco Substation.

FAA Hazard Lighting. There are no FAA hazard lights within or near the Segment 3 ROW, or within San Timoteo Canyon, in general.

D.18.1.2.4 Segment 4: Beaumont and Banning

This portion of the Proposed Project extends from the El Casco Substation through the cities of Calimesa, Beaumont, and Banning and spans I-10. The route travels in an established transmission line corridor, with three existing transmission lines, along the foothills of the San Bernardino Mountains and passes adjacent to numerous existing and new residential developments. The landscape along the majority of this segment is decidedly suburban with well-defined residential developments interspersed with occasional park and recreation facilities and backdropped to the north by the San Bernardino Mountains.

Views of the Proposed Project along this segment would be available from I-10 at the freeway span, local roads paralleling and crossing under the utility corridor, residential areas adjacent to the utility corridor, and park facilities either crossed by, or adjacent to, the existing transmission lines.

KOP 5 – Boros Boulevard – Tukwet Canyon

Figure D.18-12A presents a life-size scale view to the northeast from the intersection of Boros Boulevard and Venturi Avenue, in the Tukwet Canyon residential development, at the eastern end of San Timoteo Canyon. The view encompasses a residential neighborhood and a portion of Segment 4 between the El

Casco Substation and I-10. Three transmission lines traverse the ridgelines that define the northern boundary of the Tukwet Canyon residential development.

Visual Quality. Moderate. The foreground landscape is of a new suburban residential landscape of two-story, single-family homes. Prominent (though partially screened) energy transmission infrastructure (structures and conductors) is adjacent to, and to the rear (north) of, the northern perimeter of the development. The landscape generally lacks distinctive features or elements of visual interest.

Viewer Concern. High. Although energy transmission infrastructure features prominently in the foreground of views from the adjacent neighborhood, residents would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background ridges or sky) an adverse visual change.

Viewer Exposure. Moderate to High. The Proposed Project would be highly visible in the foreground views of residents in the adjacent neighborhood. The number of viewers would be Low to Moderate, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 5, combining the equally weighted Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

KOP 6 – Stetson Community Park

Figure D.18-13A presents a life-size scale view to the northwest from the east end of Stetson Community Park, viewing down the park that has been developed within the ROW, in the City of Beaumont. The view encompasses a residential ROW park setting and a portion of Segment 4 just east of I-10. Three transmission lines pass through the residential development.

Visual Quality. Low to Moderate. The foreground to middleground landscape is of a suburban electric utility corridor with substantial industrial character but hosting developed park facilities within the ROW. Suburban residential areas border both sides of the ROW. Vegetation within, and adjacent to, the corridor provides color contrast but is dominated by the larger, complex, industrial forms of the transmission structures.

Viewer Concern. High. Although energy transmission infrastructure dominates the foreground views from the park within the corridor, from adjacent residential neighborhoods, and from roads that are spanned by the ROW and adjacent to the park, viewers would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky or ridgelines) an adverse visual change.

Viewer Exposure. High. The Proposed Project would be highly visible in the foreground views from the park within the corridor, from adjacent residential neighborhoods, and from roads that are spanned by the ROW and adjacent to the park. The number of viewers would be Moderate, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 6, combining the equally weighted Low to Moderate visual quality, High viewer concern, and High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

KOP 6A – Sagura Road – Solera Residential Golf Community

Figure D.18-13C presents a life-size scale view to the northwest from Sagura Road in the Solera residential golf community, in the City of Beaumont. The view encompasses a portion of the residential development backing onto the south side of the existing ROW containing three transmission lines of different design and conductor spans that pass through the residential development.

Visual Quality. Low to Moderate. The foreground suburban, residential landscape is of well-maintained, one-story, single-family homes. Prominent (though partially screened) energy transmission infrastructure (towers and conductors) with notable complex industrial form and character is immediately adjacent and to the north of the residences.

Viewer Concern. High. Although energy transmission infrastructure features prominently in the foreground of views from the adjacent neighborhood, residents would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky or ridgelines to the north) an adverse visual change.

Viewer Exposure. Moderate to High. The Proposed Project would be highly visible in the foreground views from the adjacent residential neighborhood. The number of viewers would be Low, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 6A, combining the equally weighted Low to Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

KOP 7 – Oak Valley Golf Course

Figure D.18-14A presents a life-size scale view to the east toward the Proposed Project route, from the Solera Oakmont Golf Course Clubhouse in the City of Beaumont. The view encompasses a residential golf community and a portion of Segment 4 north of Oak Valley Parkway and east of I-10. Three transmission lines are prominently visible as they pass through this landscape.

Visual Quality. Moderate. The foreground landscape is of manicured grass and trees designed to provide open views and aesthetic appeal for recreational visitors. Adjacent residential developments are also visible. Prominent in views are the existing electric transmission facilities of various designs, which impart prominent industrial character. Mount San Jacinto is prominently visible in the background and is a landscape feature of visual interest.

Viewer Concern. High. Visitors to the golf course and adjacent residents expect to see a landscape with high aesthetic appeal, characterized by a mosaic of natural and managed vegetative forms. Any additional intrusion of built structures with industrial character or blockage of views from any of the golf course grounds would be seen as an adverse visual change.

Viewer Exposure. Moderate to High. The Proposed Project would be highly visible in the foreground views from the golf course and golf course residences. The number of viewers would be Low to Moderate, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 7, combining the equally weighted Low to Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

KOP 8 – Stargazer Street and Rose Avenue in The Estates

Figure D.18-15A presents a life-size scale view to the east-southeast toward the Proposed Project route from the intersection of Stargazer Street and Rose Avenue in The Estates subdivision, in the City of Beaumont. The view encompasses a portion of the subdivision backing onto the existing ROW containing three prominently visible transmission lines.

Visual Quality. Moderate. The foreground suburban, residential landscape is of one-story, single-family homes. Prominent (though partially screened) energy transmission infrastructure (towers and conductors) is adjacent, and to the rear of, the southern perimeter of the development. While the landscape generally lacks distinctive features or elements of visual interest, Mount San Jacinto is partially visible in the background, being somewhat obscured from view by residential structures and transmission towers.

Viewer Concern. High. Although energy transmission infrastructure features prominently in the foreground of views from the adjacent neighborhood, residents would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky and Mt. San Jacinto) an adverse visual change.

Viewer Exposure. Moderate to High. The Proposed Project would be highly visible in the foreground views from the adjacent residential neighborhood. The number of viewers would be Low, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 8, combining the equally weighted Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

KOP 9 – Cedar Hollow Road in Beaumont

Figure D.18-16A presents a life-size scale view to the southwest from Cedar Hollow Road, just west of Cherry Avenue, toward the Proposed Project in Segment 4 as it passes through the northern residential areas in the City of Beaumont. Three transmission lines are prominently visible in the ROW.

Visual Quality. Low to Moderate. The foreground suburban, residential landscape is of one- and two-story, single-family homes dominated by an adjacent energy transmission corridor. The landscape generally lacks distinctive features or elements of visual interest.

Viewer Concern. High. Although energy transmission infrastructure features prominently in the foreground of views from the adjacent neighborhood, residents would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky) an adverse visual change.

Viewer Exposure. Moderate to High. The Proposed Project would be highly visible in the foreground views from the adjacent residential neighborhood. The number of viewers would be Low, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance

zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 9, combining the equally weighted Low to Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

Segment 4 Night Lighting

General. There is very limited night lighting within the ROW throughout Segment 4, and it generally occurs where a local roadway with lighting is spanned by the ROW or where there is a park area developed within the ROW. Night lighting in the immediate vicinity of Segment 4 is primarily limited to the suburban lighting of the various residential developments that back onto the ROW in the cities of Beaumont and Banning. Such lighting consists of residential lighting and occasional street lights and traffic signal lights. One exception is where the ROW corridor passes adjacent to the Nobel Creek Park athletic field complex in Beaumont with its numerous night lights for the baseball fields. However, much of the central portion of Segment 4 passes through very dark, undeveloped areas at the base of the San Bernardino Mountains.

FAA Hazard Lighting. With one exception (a radio tower adjacent to the ROW span of I-10), there is no FAA hazard lighting either within, or in the immediate vicinity of, the Segment 4 ROW. However, there are two FAA hazard lights (one flashing and one static) on communication towers in downtown Banning; four static hazard lights on the light standards at Banning High School south of I-10; and one static hazard light on a 500 kV transmission tower, also south of I-10 and near SR 243 and Banning High School.

D.18.1.2.5 Segment 5: Morongo Tribal Lands and Surrounding Areas

Segment 5 crosses Morongo Tribal Lands in San Gorgonio Pass east to Milepost 37 at the eastern boundary of the tribal lands. Throughout this segment, the arid landscape is dominated by the imposing Mount San Jacinto located immediately south of San Gorgonio Pass. Views of the Proposed Project along this route would be available from I-10 and local roads. The Proposed Project would also be visible from the Morongo Community Center, the Outlet Mall at Cabazon, and nearby residences in eastern Banning.

KOP 10 – Bluff Street in Banning

Figure D.18-17A presents a life-size scale view to the southeast toward the Proposed Project at the border of Segments 4 and 5, as the Proposed Project passes through the northern portion of the City of Banning, before extending to the east across Morongo Tribal Lands. The view encompasses the western end of Segment 5 as it spans Bluff Street and passes into Morongo Tribal Lands.

Visual Quality. Moderate. The landscape is semi-arid, rural-to-suburban residential with foreground grass- and shrub-covered hills and ridges with muted hues of tans and yellows with some darker contrasting greens from within residential yards. The background is dominated by Mount San Jacinto. Existing vertical forms of energy infrastructure (lattice and wood-pole structures) with industrial character feature prominently in the landscape, particularly where structure skylining occurs.

Viewer Concern. High. Although energy transmission infrastructure features prominently in the foreground landscape at the base of the hills, travelers on Bluff Street and adjacent residents would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky, hills, and mountains) an adverse visual change.

Viewer Exposure. Moderate to High. The Proposed Project would be highly visible in the foreground views from the Bluff Street and the adjacent residences. The number of viewers would be Low, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 10, combining the equally weighted Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

KOP 11 – Hathaway Street in Banning

Figure D.18-18A presents a life-size scale view to the northeast toward the Proposed Project across the southwest corner of the Morongo Tribal Lands, from the entrance to the Summit Ridge Apartments on Hathaway Street, in eastern Banning. The view encompasses the ROW as it passes across the corner of the tribal lands, north of I-10, and adjacent to the eastern border of the City of Banning. The San Bernardino Mountains provide a backdrop of visual interest in views to the north and northeast.

Visual Quality. Low to Moderate. The foreground landscape is disturbed and undeveloped, is generally lacking features of visual interest, and exhibits minimal visual variety. Existing utility infrastructure (distantly visible) further compromises views of the background San Bernardino Mountains, which do provide a backdrop of visual interest.

Viewer Concern. High. Although the foreground landscape is disturbed, and existing utility infrastructure is noticeable in views from Hathaway Street, travelers and adjacent residents would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky, hills, and mountains) an adverse visual change.

Viewer Exposure. Moderate to High. The Proposed Project would be highly visible in the foreground views from travelers on Hathaway Street and adjacent residences. The number of viewers would be Low, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 11, combining the equally weighted Low to Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

KOP 12 – Morongo Community Center

Figure D.18-19A presents a life-size scale view to the southwest toward the Proposed Project route as it passes south of the Morongo Community Center at 13000 Fields Road, north of I-10. The view encompasses a portion of the community center parking lot and the ROW as it passes between the community center and I-10. The ROW contains three transmission lines, two consisting of lattice-steel structures and one wood-pole H-frame line.

Visual Quality. Low to Moderate. The foreground landscape is dominated by the flat, arid landscape of San Gorgonio Pass with prominent energy transmission infrastructure (towers and conductors), paved parking surfaces, and I-10 immediately to the south. It is backdropped by steeply rising ridges both to the north and south of the pass.

Viewer Concern. High. Although energy transmission infrastructure features prominently in the foreground landscape when viewed from the community center, visitors to the community center would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky, ridges, and Mount San Jacinto) an adverse visual change.

Viewer Exposure. Moderate to High. The Proposed Project would be highly visible in the foreground views from the community center. The number of viewers would be Low to Moderate, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 12, combining the equally weighted Low to Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

Segment 5 Night Lighting

General. There is no night lighting within the ROW throughout Segment 5. Night lighting in the vicinity of Segment 5 is primarily limited to the scattered rural residential lighting of the western portion of Segment 5 on Morongo Tribal Lands and the much more substantial lighting that is present in the central to eastern portion of Segment 5 as part of, and in proximity to, the Morongo Casino and Resort and the western portion of San Gorgonio Pass. Lighting sources include residential lights, street lights and signalization, lighting from commercial and retail developments, lighting from the Morongo Casino complex, the outlet retail complex, and the numerous vehicle lights along the I-10 corridor and at the truck scale stop. The casino tower lighting is the most prominent lighting feature in the San Gorgonio Pass.

FAA Hazard Lighting. There is no FAA hazard lighting within the Segment 5 ROW. However, southeast of the Morongo Casino area, there are a number of FAA hazard lights mounted on wind turbines on the south side of I-10 in the Cabazon area. These red flashing lights are quite prominent in the night landscape, even in proximity to the Morongo Casino lighting. Also south of I-10, along the base of the ridgeline that forms the southern boundary of the pass, are several static hazard lights on 500 kV transmission structures.

D.18.1.2.6 Segment 6: Whitewater and Devers

This section of the Proposed Project extends from Milepost 37 at the eastern boundary of the Morongo Tribal Lands east to the Devers Substation. It would pass through the Community of Whitewater first through a neighborhood accessed via Haugen-Lehmann Way. Moving eastward, it would pass through existing wind farm developments before spanning Whitewater Canyon south of another rural residential enclave also known as Bonnie Bell. It would then pass through existing wind farm developments and south of the eastern extent of the Community of Whitewater, accessed via Painted Hills Road, before crossing SR 62 (an Officially Designated State Scenic Highway). Finally, it would pass through more wind farm developments before entering the Devers Substation.

Views of the Proposed Project along this route segment would be available from roads including I-10, SR 62, SR 111 (an Eligible State Scenic Highway), Dillon Road, Painted Hills Road, Whitewater Canyon Road (a County Eligible Scenic Highway), and other local roads. The Proposed Project would also be visible from several residential enclaves comprising the broader Whitewater residential community north of I-10 including those accessed via Haugen-Lehmann Way and Painted Hills Road. Views of the Proposed Project would also be available to travelers on the Pacific Crest National Scenic Trail (PCT) as the trail passes through Whitewater and is spanned by the Proposed Project.

North of I-10, between Haugen-Lehmann Way and Whitewater Canyon Road, the Proposed Project would also cross a small area (less than 1 mile wide) of public land managed by the BLM, most of which is assigned Visual Resource Management (VRM) Class II with a smaller portion assigned VRM Class IV.

KOP 13 – Haugen-Lehmann Way in Central Whitewater

Figure D.18-20A presents a life-size scale view to the west toward the Proposed Project route, from Haugen-Lehmann Way, near the intersection with Amethyst Drive, in the central portion of the residential Community of Whitewater.

Visual Quality. Low to Moderate. The foreground desert landscape is rural residential dominated by the vertical forms of utility poles and electric transmission line structures and backdropped by a low range of rolling hills and angular ridges with muted, earth-toned colors. The view encompasses a portion of Segment 6 as the ROW passes through the central portion of Whitewater, which includes several residential enclaves extending from just east of the Morongo Tribal Lands eastward toward SR 62. The ROW contains three prominently visible transmission lines including one with lattice-steel structures and two with wood-pole structures.

Viewer Concern. High. Although energy transmission infrastructure features prominently in the landscape visible within this community, residential viewers would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky, ridges, or Mount San Jacinto if viewing to the south) an adverse visual change.

Viewer Exposure. Moderate to High. The Proposed Project would be highly visible in the foreground views from the residential community. The number of viewers would be Low, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 13, combining the equally weighted Low to Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

KOP 14 – Pacific Crest Trail (PCT) Trailhead and Parking Lot

Figure D.18-21A presents a life-size scale view to the south toward the Proposed Project route passing through the western portion of the Community of Whitewater, from the PCT trailhead and parking lot north of Haugen-Lehmann Way. From the parking lot, the PCT travels north and south. To the south, the PCT passes through the western portion of the Community of Whitewater (where it would be spanned by the Proposed Project) before crossing under I-10, turning east, and then eventually south toward Mount San Jacinto.

Visual Quality. Moderate to High. The foreground flat desert landscape of low-growing shrubs and grasses of muted earth-tone colors of tans, browns, and greens, is dominated by the massive, angular form of Mount San Jacinto that rises dramatically from the flat, desert floor that comprises the eastern end of San Gorgonio Pass. The view also encompasses the vertical structural forms of a portion of the existing transmission lines passing through the central portion of the Community of Whitewater, which includes several residential enclaves extending from just east of the Morongo Tribal Lands eastward toward SR 62. Also visible are numerous wind turbines along the foot of the ridges (south of I-10) leading to Mount San Gorgonio.

Viewer Concern. High. Although energy transmission infrastructure features prominently in the western San Gorgonio Pass landscape visible from the PCT and parking lot, trail users would consider any

increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky, ridges, or Mount San Jacinto) an adverse visual change.

Viewer Exposure. Moderate to High. The Proposed Project would be moderately visible in the foreground of views from the PCT parking lot but highly visible from the PCT farther south. The number of viewers would be Low, but the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For travelers on the PCT in the vicinity of KOP 14, combining the equally weighted Moderate to High visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

BLM-managed Land Between Haugen-Lehmann Way and Whitewater Canyon

East of Haugen-Lehmann Way and west of Whitewater Canyon is an approximately one-mile segment of BLM-managed land that is crossed by the Proposed Project. The landscape consists primarily of low-growing grasses and shrubs on rocky, alluvial fans, hill slopes, and ridge tops to the north of I-10. Views of this area are primarily limited to the open and unobstructed foreground views from I-10 and the I-10 rest stop, immediately south of the parcel. The smooth to granular and coarse landform exhibits colors of light tans and gray. The low-growing vegetation exhibits primarily subdued hues of tans, yellows, and greens, with an overall matte-textured appearance. Also present in the landscape are the complex structures of multiple transmission lines within the corridor at different elevations and numerous wind turbines along the ridgetops. The complex of industrial forms imparts substantial industrial character to the hill slope landscape north of I-10. The VRM classification assigned to this area is Class II. The VRM Class II Management Objective is:

> *…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.*

KOP 15 – Whitewater Canyon Road

Figure D.18-22A presents a life-size scale view to the southeast toward the Proposed Project route, at the east rim of Whitewater Canyon, from Whitewater Canyon Road, south of Bonnie Bell (a residential enclave in the Community of Whitewater). The view encompasses a portion of the ROW in Segment 6 as it spans Whitewater Canyon and Whitewater Canyon Road. The ROW contains three transmission lines of different designs and heights, which are noticeably visible on the canyon rim from Whitewater Canyon Road.

Visual Quality. Moderate. The foreground landscape is of a desert river canyon defined by low, canyon walls and the vertical, industrial forms of wind turbines and electric transmission structures, all backdropped by the massive angular form of Mount San Jacinto that rises dramatically from the flat desert floor.

Viewer Concern. High. Travelers on Whitewater Canyon Road, including residents from the nearby residential enclave of Bonnie Bell, would consider any increase in industrial character or built structural prominence in the canyon, or view blockage of the background sky and Mount San Jacinto an adverse visual change.

Viewer Exposure. Moderate to High. The Proposed Project would be highly visible in the foreground views of travelers on Whitewater Canyon Road and residents in Bonnie Bell. The number of viewers would be Low to Moderate, and the duration of view would be Moderate to Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 15, combining the equally weighted Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

KOP 16 – Painted Hills Road in Whitewater

Figure D.18-23A presents a life-size scale view to the south-southeast toward the Proposed Project route at the eastern end of Segment 6, from Painted Hills Road immediately east of Verbena, in the eastern portion of the Community of Whitewater immediately west of SR 62. The view encompasses the eastern portion of the Segment 6 ROW as it passes the easternmost portion of the Community of Whitewater before spanning SR 62 and the continuing east to the Devers Substation just east of SR 62. The ROW contains three transmission lines, although they are somewhat obscured by the complexity of the background wind turbines and adjacent transmission and utility lines.

Visual Quality. Low to Moderate. The foreground to middleground flat, desert landscape consists of grasses and low shrubs of muted tones, dominated by a profusion of energy infrastructure consisting of the predominantly vertical forms of wind turbines, electric transmission line structures, and other utility poles. A background of distant hills and mountains low on the horizon adds visual interest. Mount San Jacinto, to the south (and out of the frame of view in Figure D.18-23A), is the dominant natural feature in the region.

Viewer Concern. High. Residential viewers in this portion of Whitewater would consider any increase in industrial character, structure prominence, or view blockage of higher value landscape features (background sky, ridges, and Mount San Jacinto) an adverse visual change.

Viewer Exposure. Moderate to High. The Proposed Project would be highly visible in the foreground views of travelers on Painted Hills Road and adjacent residents. The number of viewers would be Low, and the duration of view would be Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 16, combining the equally weighted Low to Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

KOP 17 – Southbound State Route 62

Figure D.18-24A presents a life-size scale view to the southeast toward the Proposed Project span of SR 62, from southbound SR 62, just north of the span. The view encompasses the eastern portion of the Segment 6 ROW as it spans SR 62, an Officially Designated State Scenic Highway, and then continues east to the Devers Substation just east of SR 62. The ROW contains three transmission lines, although they are somewhat obscured by the complexity of the background wind turbines and transmission lines.

Visual Quality. Low to Moderate. The foreground to middleground landscape is of flat, desert landforms dominated by a profusion of energy infrastructure consisting of the predominantly vertical forms of wind turbines and electric transmission line structures. This industrial-appearing landscape is backdropped by Mount San Jacinto, which rises dramatically from the desert floor and adds considerable visual interest.

Viewer Concern. High. SR 62 is an Officially Designated State Scenic Highway and, therefore, warrants a high rating for viewer concern. Although travelers on this stretch of SR 62 would not likely notice the change in conductors and structure configurations that would occur from the Proposed Project, given the existing structural context, any perceived increase in industrial character, structure prominence, or view blockage would be experienced as an adverse visual impact.

Viewer Exposure. High. The Proposed Project would be highly visible in the foreground views of travelers on SR 62. The number of viewers would be High, and the duration of view would be Moderate to Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 17, combining the equally weighted Low to Moderate visual quality, High viewer concern, and High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

Segment 6 Night Lighting

General. There is no night lighting within the ROW throughout Segment 6. North of I-10, night lighting in the vicinity of Segment 6 is minimal and is primarily associated with the scattered rural residences (and the occasional street light at a road intersection) in the disbursed residential enclaves that make up the greater residential Community of Whitewater, which extends from the Morongo Tribal Lands in the west to SR 62 in the east. Also, aside from a few billboard lights adjacent to I-10, there is minimal night lighting within Whitewater Canyon, which is spanned by Segment 6. There is, however, substantial lighting associated with the numerous vehicles and occasional billboards along the I-10 and SR 62 travel corridors.

FAA Hazard Lighting. There is no FAA hazard lighting within the Segment 6 ROW. However, south of Whitewater Canyon and I-10, in the eastern portion of San Gorgonio Pass, there is a substantial and prominent presence of FAA hazard lights associated with wind turbine developments. From the vicinity of the Bonnie Bell residential enclave, viewing south down Whitewater Canyon, the prominent lighting features are the FAA hazard lights south of I-10. Continuing east, into the western portion of Coachella Valley and in the vicinity of Devers Substation, the synchronized flashing of the FAA hazard lights mounted on the numerous wind turbines becomes the dominant night lighting characteristic of Segment 6 and the surrounding landscape.

D.18.1.2.7 Subtransmission

In addition to the proposed transmission lines, there would be additional subtransmission and distribution facilities associated with the Proposed Project. The two facilities of principal concern with regards to visual effects would be the SB-Redlands-Tennessee and SB-Redlands-Timoteo overhead 66 kV subtransmission lines that would be located east of Segment 1 in an area bounded by W. San Bernardino Avenue on the north, Nevada and Iowa streets on the east, and Barton Road on the south. The area landscape is generally comprised of commercial, office, and light industrial uses, along with diminishing tracts of agricultural land and limited residential development. Views in the commercial, more developed areas tend to be more confined, while views in the less developed (residential and agricultural) areas tend to be more open, with some extended views to the San Bernardino Mountains to the north. KOP 18 was established on Iowa Street for evaluation of the subtransmission facilities.

KOP 18 – Northbound Iowa Street in Redlands

Figure D.18-25A presents a life-size scale view to the north along the Iowa Street, near the southwest corner of the Cottage Lane residential subdivision, south of Orange Avenue and North of Barton Road in the City of Redlands. The view encompasses a portion of the proposed SB-Redlands-Tennessee overhead 66 kV subtransmission line as is passes immediately adjacent and to the west of the Cottage Lane residential subdivision.

Visual Quality. Moderate. The foreground suburban landscape consists of one- and two-story, single-family homes, undeveloped land, and some commercial development. There are no visually prominent or dominant energy or utility facilities in the immediate vicinity of KOP 18, though there are single, wood-pole utility lines along Orange Avenue and a portion of Iowa Street. Also visible are a very few vertical street light poles and a more distant communication tower.

Viewer Concern. High. Travelers on Iowa Street and adjacent residents would consider the introduction of prominent energy infrastructure with its associated industrial character and view blockage of higher value landscape features (background sky and mountains) an adverse visual change.

Viewer Exposure. Moderate to High. The subtransmission line would be highly visible in the foreground views of travelers on Iowa Street and adjacent residents. The number of viewers would be Low to Moderate, and the duration of view would be Moderate to Extended. Combining the four equally weighted factors (i.e., visibility, distance zone, number of viewers, and duration of view) results in an overall rating of Moderate to High for viewer exposure.

Overall Visual Sensitivity. Moderate to High. For viewers in the vicinity of KOP 18, combining the equally weighted Moderate visual quality, High viewer concern, and Moderate to High viewer exposure results in an overall rating of Moderate to High for visual sensitivity of the visual setting and viewing characteristics.

D.18.1.3 Environmental Setting for Connected Actions

The visual resources setting for the Connected Actions is divided into two general geographic areas described in the following sections.

Desert Center Area. The Desert Center area comprises much of the northern Chuckwalla Valley along the I-10 corridor, which is crossed by both Kaiser Road and SR 177 (Rice Road). The Chuckwalla Valley is a broad, predominantly natural appearing, enclosed landscape that is gradually transitioning to an energy production and transmission landscape. The valley is surrounded on most sides by dramatic mountain ranges including the Chuckwalla Mountains to the south, the Eagle Mountains to the west and northwest, the Coxcomb Mountains to the north and the Palen Mountains to the east. The surrounding mountains offer dramatic relief to the landscape and contain more diverse vegetation. The mountains are sometimes more than 1,000 feet higher than the valley floor.

From most vantage points, the valley landscape appears as vast open space and is generally flat with localized areas of erosion and gently rolling terrain that has light brown to tan and buff-colored soils and rock. Vegetation tends to be rounded, clumpy, and mottled in form and follows the line of the terrain. Vegetation colors are tan, brown, green, and dark green. The texture of the vegetation is moderately coarse consisting primarily of grasses, creosote bushes, and other shrubs with some isolated groupings of palm trees.

Clusters of buildings and structures are found along I-10 at Desert Center, Lake Tamarisk, the landing field southwest of the Desert Lily Sanctuary, and at the Eagle Mountain mining complex (former Kaiser

iron ore mining facility). Other dispersed development such as residences, utility poles and structures, solar energy facilities, and substations also punctuate the landscape.

Residences at Lake Tamarisk and vehicles using the roadways are the primary sources of night light. One of the attractions for residents in this area is the brilliance of the night sky on clear nights, unencumbered by lighting scattered over a large urban area.

The viewshed encompasses much of the northern Chuckwalla Valley with views available from I-10, SR 177, Kaiser Road, four-wheel drive trails, the Desert Center commercial area, the Lake Tamarisk residential development, and the surrounding mountains and ridges. Although limited by a lack of trails or facilities, backcountry recreationists do access the surrounding mountains, Joshua Tree National Park, Palen McCoy Wilderness, and Chuckwalla Mountains Wilderness and would be afforded elevated viewing perspectives of the northern Chuckwalla Valley.

Blythe Area. The Blythe area straddles the I-10 corridor and is comprised of the western portion of Palo Verde Mesa (west of Blythe) and the eastern portion of Chuckwalla Valley. It consists of broad, open, and predominantly natural appearing arid and undeveloped landscapes that gradually transition to an energy production and transmission landscape. The mesa and valley are partially bordered by the Mule Mountains to the south, the McCoy Mountains to the north, and agricultural fields to the east. The rugged mountain ranges and ridges add visual variety to the otherwise flat desert landscape.

The mesa and valley floor are generally flat with localized areas of erosion and some sloping terrain. The landscape is generally horizontal with vast open space. The terrain has light brown to tan and buff-colored soils and rock and desert pavement openings. Vegetation tends to be rounded, clumpy, and mottled in form and follows the line of the terrain. Vegetation colors are tan, brown, green, and dark green. The texture of the vegetation is moderately coarse consisting primarily of grasses, desert scrub (largely scattered creosote bush), and a few palm trees.

Clusters of buildings and structures are found along I-10 at, and in the vicinity of, the Blythe Airport and associated with the Nicholls Warm Springs/Mesa Verde residential development south of the airport. Other dispersed development such as residences, utility poles and structures, solar energy facilities, and substations also punctuate the landscape. Nicholls Warm Springs/Mesa Verde residences and vehicles using the roadways (I-10 in particular) are the primary sources of night light

The viewshed encompasses much of the Palo Verde Mesa and eastern Chuckwalla Valley with views available from I-10, four-wheel drive recreational trails, the Blythe Airport area, the Nicholls Warm Springs/Mesa Verde residential development, and the Mule Mountains to the south and McCoy Mountains to the north. Although limited by a lack of trails or facilities, backcountry recreationists do access the Mule and McCoy mountains and would be afforded elevated viewing perspectives of the Blythe area.

D.18.2 Applicable Regulations, Plans, and Standards

Public agencies and planning policy establish visual resource management objectives in order to protect and enhance public scenic resources. Goals, objectives, policies, and implementation strategies and guidance are typically contained in resource management plans, comprehensive plans and elements, and local specific plans. There are 23 jurisdictional planning documents containing 62 policies pertinent to visual resources for the Proposed Project. These planning directives and the Proposed Project's consistency with them are evaluated in Appendix 9.

D.18.2.1 Federal

Federal Land Policy and Management Act. The Federal Land Policy and Management Act (FLPMA; 90 Stat. 2743; 43 U.S. Code 1601, et seq.) mandates protection of scenic values. It established the BLM as the jurisdictional agency for expanses of land in the West to be managed as multi-use lands. In order to meet its responsibility to maintain the scenic values of public lands, BLM developed a VRM System. The following sections of the FLPMA relate to the management of visual resources on federal lands.

- § 102(a): "The public lands [shall] be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values."
- § 201(a): "The Secretary shall prepare and maintain on a continuing basis an inventory of all public lands and their resources and other values (including… scenic values)."
- § 202(c)(1-9): "...in developing land use plans, the BLM shall use… the inventory of the public lands; consider present and potential uses of the public lands, consider the scarcity of the values involved and the availability of alternative means and sites for realizing those values; weigh long-term benefits to the public against short term benefits."
- § 505(a): "Each right-of-way shall contain terms and conditions which will … (ii) minimize damage to the scenic and esthetic values."

California Desert Conservation Area Plan. The CDCA includes approximately 25 million acres of land. The CDCA overlaps the eastern section (Segment 6) of the Proposed Project. The FLPMA directed BLM to inventory CDCA resources and to prepare a comprehensive land-use management plan for the area — the CDCA Plan (BLM, 1980, amended 1999). The CDCA Plan did not include BLM VRM System Classes. However, the CDCA Plan was further amended in 2002 to include the Coachella Valley Plan. This CDCA Plan amendment was prepared under the regulations implementing the FLPMA of 1976. In the Coachella Valley Plan, BLM-managed lands were assigned VRM System Classes I through IV. Segment 6 of the Proposed Project is located within a portion of the Coachella Valley Planning Area southwest of Desert Hot Springs and northwest of Palm Springs. Segment 6 crosses a small portion of BLM land (less than 1 mile in length and comprising approximately 258 acres), which is designated VRM Class II, with a smaller adjacent area designated as VRM Class IV (Figure 2-2 in BLM, 2002a).

South Coast Resource Management Plan and Draft South Coast Resource Management Plan Revision. The 1994 South Coast Resource Management Plan (SCRMP) guides the management of approximately 296,000 acres of BLM-managed lands in portions of five counties: San Diego, Riverside, San Bernardino, Los Angeles, and Orange. The Riverside–San Bernardino County Management Area includes the western portions of these two counties (BLM, 1994), which are outside of the CDCA. The overall visual management directive in the 1994 SCRMP stipulates that all areas will be managed as VRM Class III, except within the Potrero and Santa Margarita reserve Areas of Critical Environmental Concern (Class II) and eligible segments of the Santa Margarita River (Class I; BLM, 1994). The only SCRMP area within the Proposed Project study area is the USDA Forest Service-managed San Jacinto Wilderness Area (BLM, 2011) located south of I-10 and approximately 3 miles from the Proposed Project. As part of the Draft SCRMP Revision, a visual inventory was conducted, and visual resource management classifications were proposed for each of four alternatives including a no action alternative (BLM, 2011). Since the preferred alternative has not been selected, and the revised SCRMP has not yet been adopted, the VRM Classes from the existing 1994 SCRMP would apply to the Proposed Project (i.e., Class III). However, none of the Proposed Project route segments cross BLM-managed land outside of the CDCA.

D.18.2.2 State

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

Two Officially Designated State Scenic Highways are located within view of the Proposed Project: SR 62 (from I-10 to the San Bernardino County line) and SR 243 from SR 74 to the Banning city limit. SR 62 passes through the Proposed Project study area just west of the Devers Substation. One Eligible State Scenic Highway is also located within view of the Proposed Project: SR 111 (from SR 74 north to I-10).

Two other Eligible State Scenic Highways occur in the vicinity of the Proposed Project: SR 38 east of I-10 and SR 330 north of I-10 but would not be within view of the Proposed Project. While I-10 is shown as an Eligible State Scenic Highway in the Proposed Project study area in Riverside County plan area documents (General Plan Circulation Element; and The Pass, Reche Canyon/Badlands, and Western Coachella Valley area plans), it was removed from eligibility in 2013.

D.18.2.3 Local

The California Public Utilities Commission (CPUC) has State jurisdiction over the siting and design of the Proposed Project because the CPUC regulates and authorizes the construction of investor-owned public utility facilities. Such projects are exempt from local land use and zoning regulations and permitting in accordance with General Order No. 131-D, which is applicable to all components of a project including but not limited to the transmission lines and staging yards. However, Section XIV.B requires "the utility to communicate with, and obtain the input of, local authorities regarding land-use matters and obtain any non-discretionary local permits."

D.18.3 Environmental Impacts of the Proposed Project

This section discusses adverse visual effects that would occur with implementation of the Proposed Project including the direct and indirect effects of construction and the long-term presence of the Proposed Project (including operations and maintenance activities). This section also presents mitigation measures to avoid or reduce visual effects within the Proposed Project viewshed, or Proposed Project study area, previously shown in Figures D.18-1 through D.18-6 (all figures are presented at the end of this section). Cumulative effects are considered in Section E.

D.18.3.1 Approach to Impact Assessment

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

The factors considered in determining adverse effects on visual resources included: (1) scenic quality of the Proposed Project landscape; (2) available visual access and visibility, frequency, and duration that the landscape is viewed; (3) viewing conditions (distance, angle of observation, relative size or scale, spatial relationships, motion, light conditions, seasonable variability, and atmospheric conditions) and the degree to which the Proposed Project components would dominate the view of the observer; (4) resulting contrast (form, line, color, and texture) of the Proposed Project facilities or activities with existing landscape characteristics and expected vegetation recovery time; (5) the extent to which project features or activities would block views of higher value landscape features; and (6) the level of public interest in the existing landscape characteristics and concern over potential changes. Digital techniques were used to produce simulations of the Proposed Project as it would appear with implementation as seen from several representative KOPs. The project simulations assisted in the assessment of the contrast of the Proposed Project with existing landscape elements. Effects on visual resources within the Proposed Project study area could result from various activities including facility construction, establishment of construction staging areas and access roads, and Proposed Project operation or presence of the built facilities.

The effects on visual resources can be either direct or indirect. The impact discussions presented later in this section primarily address the direct effects on visual resources since visual resources effects tend to almost always be direct. Two exceptions include increased traffic on roadways beyond the Proposed Project study area during construction and perceptions of (visible) regional industrialization. Perceptions of regional industrialization are addressed under Cumulative Effects (Section E). Where distinctions can be made between direct and indirect effects, they are discussed under the Proposed Project phases of construction and operation.

The assessment of environmental consequences utilized two fundamentally similar technical methods in combination — the **Visual Sensitivity–Visual Change (VS-VC) System** method for private and public lands not managed by the BLM and the **BLM's Visual Resource Management (VRM) System Contrast Rating** method for BLM-managed public lands. While both methods utilize similar inputs and terminology to arrive at a visual change conclusion, it is what is done with that conclusion where they differ the most. For example, the VS-VC method assesses the resulting level of visual change (or impact) associated with a project and then determines the significance of that level of change or impact based on a set of established criteria (per the California Environmental Quality Act [CEQA]). The vast majority of the Proposed Project is not located on BLM-managed land. The BLM's VRM method employs a visual contrast analysis to assess the level of change that would occur with a given project (action) but then determines if that level of change would be consistent with an applicable VRM classification (and management objective) that has previously been assigned to a given management area by the BLM. Approximately 1 mile of the Proposed Project is located on BLM-managed land.

None of the KOPs selected for detailed analysis are located on the one-mile segment of BLM-managed land crossed by the Proposed Project, and the area of BLM-managed land is not visible from any of the selected KOPs. Therefore, the KOP analyses utilized the VS-VC System of analysis, but the one-mile segment of BLM-managed land is addressed separately per the BLM's VRM System as directed by BLM staff. Each of these methods is discussed in more detail in the following paragraphs.

Visual Sensitivity–Visual Change System. Under the VS-VC System, overall visual change is determined at each KOP based on an assessment and equal weighting of project-induced visual contrast, project dominance, and view blockage (or view impairment) and an evaluation of a visual simulation of the Proposed Project. Each of the key factors contributing to visual change is discussed below.

Visual Contrast describes the degree to which a project's visual characteristics or elements (consisting of form, line, color, and texture) differ from the same visual elements established in the existing landscape. The degree of contrast can range from Low to High. The presence of forms, lines, colors, and textures in

the landscape similar to those of a project's indicates a landscape more capable of accepting those project characteristics than a landscape where those elements are absent. This ability to accept alteration is often referred to as visual absorption capability and typically is inversely proportional to visual contrast.

Project Dominance is a measure of a feature's apparent size relative to other visible landscape features and the total field of view. A feature's dominance is affected by its relative location in the field of view and the distance between the viewer and the feature. The level of dominance can range from Subordinate to Dominant.

View Blockage or ***Impairment*** describes the extent to which any previously visible landscape features are blocked from view as a result of a project's scale and/or position. Blockage of higher-quality landscape features by lower-quality project features causes adverse visual impacts. The degree of view blockage can range from None to High.

Overall Visual Change is a concluding assessment as to the degree of change that would be caused by a project. Overall visual change is derived by combining the three equally weighted factors of visual contrast, project dominance, and view blockage, and can range from Low to High. In some cases, however, where view blockage is reduced by a project, overall visual change may be Improved.

Overall visual change is then considered within the context of the determined overall visual sensitivity of the existing landscape and viewing dynamics, and an impact significance conclusion is made per CEQA requirements. Table D.18-9 illustrates the general interrelationship between visual sensitivity and visual change and is used as a consistency check between individual KOP evaluations. Actual parameter determinations (e.g., visual contrast, project dominance, and view blockage) are based on analyst experience and site-specific circumstances.

Table D.18-9. General Guidance for Review of Adverse Impact Significance (per CEQA)

OVERALL VISUAL SENSITIVITY	OVERALL VISUAL CHANGE				
	Low	Low to Moderate	Moderate	Moderate to High	High
Low	Minor and Less than Significant[1] (Class III)	Minor and Less than Significant[1] (Class III)	Less than Significant[2] (Class III)	Less than Significant (Class III)	Less than Significant (Class III)
Low to Moderate	Minor and Less than Significant[1] (Class III)	Less than Significant (Class III)	Less than Significant (Class III)	Less than Significant (Class III)	Potentially Significant[3] (Class I, II, or III)
Moderate	Less than Significant (Class III)	Less than Significant (Class III)	Less than Significant (Class III)	Potentially Significant (Class I, II, or III)	Potentially Significant (Class I, II, or III)
Moderate to High	Less than Significant (Class III)	Less than Significant (Class III)	Potentially Significant (Class I, II, or III)	Potentially Significant (Class I, II, or III)	Significant[4] (Class I or II)
High	Less than Significant (Class III)	Potentially Significant (Class I, II, or III)	Potentially Significant (Class I, II, or III)	Significant (Class I or II)	Significant (Class I or II)

1 - Minor and Less than Significant – Impacts are visible but may not be noticeable. To the extent that are noticed, they are perceived as negative but Less than Significant in the context of existing landscape characteristics and viewing opportunities.
2 - Less than Significant – Impacts are generally noticeable and perceived as negative but do not exceed environmental thresholds of significance — they are still considered less than significant in the context of existing landscape characteristics and viewing opportunities.
3 - Potentially Significant – Impacts are readily perceived as negative and may exceed environmental thresholds depending on project- and site-specific circumstances. Implementation of effective mitigation may reduce a potentially significant impact to a less than significant level.
4 - Significant – Impacts are readily perceived as negative and exceed environmental thresholds. Implementation of effective mitigation may reduce a significant impact to a less than significant level.

While the interrelationships presented in Table D.18-9 are intended as guidance only, it is reasonable to conclude that lower visual sensitivity ratings paired with lower visual change ratings will generally correlate well with lower degrees of impact significance when viewed in the field. Conversely, higher visual sensitivity ratings paired with higher visual change ratings will tend to result in higher degrees of visual impact.

Implicit in this rating methodology is the acknowledgment that for a visual impact to be considered significant, two conditions generally exist: (1) the existing landscape is of reasonably high-quality and is relatively valued by viewers, and (2) the perceived incompatibility of one or more project elements or characteristics tends toward the high extreme, leading to a substantial reduction in visual quality.

The results of the visual change analysis and impact significance conclusions are summarized by KOP in Appendix 10. Additional explanation of the VS-VC System is also provided in Table Ap.10-2 in Appendix 10. Impact significance under CEQA is discussed in Sections D.18.3.2 CEQA Impact Significance Criteria and D.18.3.4 CEQA Significance Determination.

BLM Visual Resource Management System Contrast Rating Method. Under the Contrast Rating Method (BLM, 1986b, 1984), a project is analyzed for its effects on visual resources by comparing the landscape characteristics that would be created by the project to the existing landscape characteristics and arriving at an assessment of visual contrast that would result from changes in landforms and water, vegetation, and structures. The degree of contrast can range from None to Strong and essentially evaluates a project's consistency with the visual elements of form, line, color, and texture already established in the project viewshed. In a sense, visual contrast indirectly indicates a particular landscape's ability to absorb a project's components and location without resulting in an uncharacteristic appearance. In other words, the amount of visual contrast between the project and the existing landscape character directly determines the degree to which the project would adversely affect the visual quality of an existing landscape.

Other elements that are considered in evaluating visual contrast include the degree of natural screening by vegetation and landforms; placement of structures relative to existing vegetation, landforms and other structures; observer's angle of view relative to the project; distance from the point of observation; viewing duration/spatial relationships; atmospheric conditions; season of use; lighting conditions; and relative size or scale of the project.

Once the degree of anticipated contrast is determined, a conclusion on the overall level of change is made (ranging from Very Low to High) and compared to the applicable VRM Classification (Interim or Final) for a determination of conformance with the VRM Class management objectives.

In the case of the Proposed Project, and as previously mentioned, the small section of BLM-managed land (approximately 1 mile) crossed by the Proposed Project's Segment 6, between Haugen-Lehmann Way and Whitewater Canyon Road, is designated VRM Class II. The VRM Class II Management Objective is defined as follows:

> **VRM Class II.** *The objective is 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.*

Although a KOP was not established for the one-mile segment of BLM-managed land crossed by the Proposed Project, a representative Contrast Rating form for the affected area is provided in Appendix 10.

The overall perceptible visual change and consistency with applicable visual resource management policy for the Proposed Project will be assessed within the context of the significance criteria presented in the following section.

D.18.3.1.1 Applicant Proposed Measures

SCE proposed no Applicant Proposed Measures for visual resources.

D.18.3.2 CEQA Significance Criteria

The criteria listed below were used to determine if the Proposed Project would result in substantial or significant impacts on visual resources and were derived from the Environmental Checklist Form in Appendix G of the State CEQA Guidelines.

1. *Would the Proposed Project have a substantial adverse effect on a scenic vista?*

   A scenic vista is generally considered a specific viewpoint or viewing location (often an elevated overlook) that provides expansive views of a highly valued landscape for the benefit of the general public. Scenic vistas are frequently officially designated by public agencies and are often signed and accessible to the public for the express purposes of viewing and sightseeing. Although there are expansive views of the surrounding landscape throughout the I-10 corridor, and there are slightly elevated perspectives providing slightly superior (elevated) views of the Proposed Project as a result of terrain variation, there are no officially designated or community recognized scenic vista viewpoints ~~per se~~ in the Proposed Project study area. Therefore, there will be no impact conclusions made for this criterion.

2. *Would the Proposed Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway?*

   SR 62 and SR 243 are Officially Designated State Scenic Highways with views of the Proposed Project. SR 111 is an Eligible State Scenic Highway with views of the Proposed Project. This criterion will be utilized to determine visual impact conclusions relative to these three State scenic highways.

3. *Would the Proposed Project substantially degrade the existing visual character or quality of the site and its surroundings?*

   The majority of project impacts associated with construction or long-term presence of project components fall into the category of degradation of visual character or quality. Substantial degradation results from higher levels of visual contrast, project dominance, and view blockage. Visual contrast relates to spatial characteristics, visual scale, texture, form, line, and color. Therefore, this criterion will be utilized for making impact conclusions regarding the Proposed Project's effects on existing landscapes and views.

4. *Would the Proposed Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?*

   Proposed Project construction or the long-term presence of the Proposed Project could create a new source of substantial light or glare that could adversely affect day or nighttime views in the area or be hazardous to motorists or pedestrians. Therefore, this criterion will be utilized for making impact conclusions regarding the Proposed Project's light and glare effects.

Two additional criteria (operating as distinct impact thresholds) that could potentially lead to a determination of a substantial or significant visual impact include the following. These criteria will also be components of the determination of impact significance.

5. *The presence of the Proposed Project would result in a long-term (greater than five years) inconsistency with established BLM VRM Class management objectives (applies only to public lands managed by the BLM).*

   There would be an occurrence where BLM land would be affected by the Proposed Project, and the applicable VRM Class management objective would not be met. Therefore, this criterion will be utilized for making an impact conclusion regarding the Proposed Project's consistency with BLM resource management objectives.

6. *Proposed Project construction or the presence of Proposed Project components would result in an inconsistency with local regulations, plans, and standards applicable to the protection of visual resources.*

   There would be occurrences where the presence of Proposed Project components would be inconsistent with applicable local regulations, plans, and standards pertaining to visual resources. Therefore, this criterion will be utilized for making impact conclusions regarding the Proposed Project's consistency with local plans and policies.

D.18.3.3 Impacts and Mitigation Measures

This section addresses project impacts by timeframe: construction and operation. The impact discussion concludes with an overall assessment of the Proposed Project's visual impacts. Where appropriate, mitigation measures are provided for each impact.

Construction Impacts

Impacts VR-1 through VR-7 address construction impacts of the Proposed Project.

Impact VR-1: Construction would result in adverse visual effects due to the presence of equipment, vehicles, materials, and workforce

Construction of the Proposed Project would cause temporary visual effects due to the presence of equipment, vehicles, materials, and workforce. These effects would occur throughout the Proposed Project study area. Construction would involve the use of cranes, heavy construction equipment, temporary storage and office facilities, and temporary laydown/staging areas.

In many locations, SCE would also install temporary tower structures, called shoo-flies, to facilitate construction and minimize interruptions to existing electrical and telecommunication facilities. The numbers of shoo-flies and work areas are preliminary and will not be known for certain until final engineering is complete. However, SCE currently estimates that ~~300~~ 51 shoo-flies could be required (see Table B-13 in Section B for details). ~~The shoo-flies are expected to be clustered in localized work areas as follows:~~

~~4 areas in Segment 1~~

~~6 areas in Segment 2~~

~~1 area in Segment 3~~

~~3 areas in Segment 4~~

~~2 areas in Segment 5~~

~~There are no shoo-fly work areas in Segment 6.~~

Construction activities would include site clearing and grading, erection of the structures, conductor stringing and pulling, and site cleanup and restoration. Construction activities would be visible from I-15, I-10, SR 62, SR 111, SR 243, San Timoteo Canyon Road, and other local roads, recreational access roads, nearby residential areas, residential enclaves, and recreational areas and facilities. Throughout the construction period, the industrial character of the activities would cause substantial visual contrast and visual change and constitute adverse visual effects when viewed from the general project vicinity, roads in the Proposed Project vicinity, and all of the KOPs. Groups or clusters of shoo-flies may be particularly noticeable, though the incremental visual effect of these structures would be substantially attenuated by the visual context of the existing transmission line structures, new transmission line structures, and construction equipment (cranes).

The majority of construction activities and equipment brought into the Proposed Project study area and onto the Proposed Project sites would be temporary in nature (as would be the shoo-flies) and would, therefore, not result in a substantial long-term visual impact. However, the Proposed Project's substantial visual contrast associated with the longer-term construction activities (e.g., use of construction yards) can be reduced through the implementation of Mitigation Measure VR-1a (Screen construction activities from view).

Mitigation Measure for Impact VR-1: Construction would result in adverse visual effects due to the presence of equipment, vehicles, materials, and workforce

VR-1a **Screen construction activities from view.** Construction yards, staging areas, and material and equipment storage areas~~, including storage sites for excavated materials,~~ shall be visually screened using temporary screening fencing. Fencing will be of an appropriate structure, material, and color for each specific location. This requirement shall not apply if SCE can demonstrate that construction yards are located away from areas of high public visibility including public roads, residential areas, and public recreational facilities. For any site that SCE proposes to exempt from the screening requirement, SCE shall define the site on a detailed map demonstrating its visibility from nearby roads, residences, or recreational facilities to the CPUC and BLM for review and approval at least 60 days prior to the start of construction at that site.

Impact VR-2: Construction would result in visual contrast due to vegetation removal

Areas of ground surface disturbance (characterized by high color, line, and texture contrasts) and vegetation removal would remain visible from various vantage points for an extended period after the conclusion of construction activities because revegetation of areas in arid and semi-arid environments where the Proposed Project would be located can be difficult and generally of limited success. Due to the extended length of construction and the slow pace of revegetation in the Proposed Project area, this impact and the visual contrast created could appear prominent from some viewing locations for many years, and cause Moderate to High levels of visual change, which could result in substantial visual effects. This would also be inconsistent with the VRM Class II Management Objective. The Proposed Project's prominent visual contrast associated with vegetation removal can be reduced through the implementation of Mitigation Measures VR-2a (Minimize vegetation removal and ground disturbance) and Mitigation Measure VEG-1d (Restore or revegetate temporary disturbance areas; Section D.4, Biological Resources – Vegetation). Table D.18-11 (presented at the end of Section D.18) identifies the specific locations where Mitigation Measure VR-2a should be implemented.

Mitigation Measures for Impact VR-2: Construction would result in visual contrast due to vegetation removal

VR-2a **Minimize vegetation removal and ground disturbance.** Only the minimum amount of vegetation necessary for the construction of structures and facilities shall be removed during construction. ~~In particular, vegetation within the ROW and ground clearing at the foot of each tower and between towers shall be limited to the clearing necessary to comply with requirements of CPUC General Order 95 and other regulatory requirements.~~ ~~**Limit ground disturbance in Segments 2, 3, and 6.**~~ ~~Within these segments~~At the structure locations defined in Table D.18-11, structure and access road scars may be highly visible when located on hill slopes and along ridges, or when visible from elevated vantage points. In order to reduce visual impacts, the boundaries of all areas to be disturbed at the locations defined in Table D.18-11 shall be delineated consistent with the requirements of Biological Resources Mitigation Measure VEG-1c. Staking shall define staging areas, access roads, spur roads, tower locations, pulling sites, and sites for temporary placement of spoils. Stakes and flagging shall be installed before construction and in consultation with the Project Biologist and the CPUC/BLM Environmental Monitor or Visual Specialist. Areas staked shall be as small as possible in order to minimize the visibility of ground disturbance from sensitive viewing locations such as roads, trails, residences, and recreation facilities and areas. Parking areas and staging and disposal site locations shall be similarly located in areas approved by the Project Biologist and CPUC/BLM's Environmental Monitor or Visual Specialist prior to the start of construction. All disturbances by Proposed Project vehicles and equipment shall be confined to the staked and flagged areas.

VEG-1d **Restore or revegetate temporary disturbance areas** (Section D.4, Biological Resources – Vegetation)

Impact VR-3: Construction would result in visual contrast associated with retaining walls, land scarring, and establishment of graveled surfaces

New retaining walls, those areas of temporary disturbance where the soil surface (characterized by high color, line, and texture contrasts) is exposed and/or removed, or where lighter-colored gravel is placed could exhibit considerable color contrast with adjacent darker vegetation and soil colors. This long-term visual contrast could appear prominent from some viewing locations and cause Moderate to High levels of visual change, which would also be inconsistent with the VRM Class II Management Objective. The prominent visual contrast associated with retaining walls, land scarring, and graveled surfaces can be reduced through the implementation of Mitigation Measure VR-3a (Reduce color contrast of retaining walls, land scars, and graveled surfaces). Table D.18-11 (presented at the end of Section D.18) identifies the specific locations where Mitigation Measure VR-3a should be implemented.

Mitigation Measure for Impact VR-3: Construction would result in visual contrast associated with retaining walls, land scarring, and establishment of graveled surfaces

VR-3a **Reduce color contrast of retaining walls, land scars, and graveled surfaces.** Where construction would unavoidably create land scars or retaining walls visible from sensitive public viewing locations (as defined in Table D.18-11), disturbed soils and new walls shall be treated with an appropriate color or material (Natina Concentrate, Eonite, or Permeon, or similar). The material shall be approved by the CPUC and BLM, and the intent shall be to reduce the visual contrast created by the lighter-colored disturbed soils and rock with the darker soil and vegetated surroundings. SCE shall consult with the CPUC and BLM and/or their author-

ized representative(s) on a site-by-site basis and obtain written approval prior to the use of any colorants.

Impact VR-4: Construction could result in visual contrast associated with in-line views of retaining walls and land scars

~~Within Segments 2, 3, 4, and 6~~At the structure locations defined in Table D.18-11, the Proposed Project would be located in highly visible areas or on hillsides or hilltops. Construction of Proposed Project structures and access and/or spur roads to individual structure locations has the potential to create extended, in-line views of newly graded terrain. These types of views can exacerbate the visibility, prominence, and overall visible contrast of graded surfaces such that the overall level of visual change becomes Moderate to High. This would also not be consistent with the VRM Class II Management Objective. The potential for prominent visual contrast associated with in-line views of land scars can be reduced through the implementation of Mitigation Measure VR-4a (Minimize in-line views of retaining walls and land scars). Table D.18-11 (presented at the end of Section D.18) identifies the specific locations where Mitigation Measure VR-4a should be implemented.

Mitigation Measures for Impact VR-4: Construction could result in visual contrast associated with in-line views of retaining walls and land scars

VR-4a **Minimize in-line views of retaining walls and land scars.** Prior to final Project design, SCE shall prepare a map book and description detailing the preliminary design and location of all access and spur roads, retaining walls, and ground disturbance areas at the locations defined in Table D.18.11 ~~within Segments 2, 3, 4, and 6~~. The map book and description shall be submitted to the CPUC and BLM for field evaluation by the CPUC's Visual Specialist and Designated Project Biologist. In these locations, t~~T~~he CPUC's Visual Specialist or Environmental Monitor will evaluate all proposed access roads, spur roads, retaining walls, and ground disturbance areas ~~within Segments 2, 3, 4, and 6~~ to assess in-line visibility of these Proposed Project features and characteristics from sensitive viewing locations. The analysis shall include consideration of viewing angles, screening, view duration, and other pertinent viewing characteristics. This analysis shall be subsequently provided to SCE for response and final design.

In response, SCE shall develop design options to reduce the in-line visibility of these components, including alternative access and spur road routes, the use of "drive and crush" access, and redesign and placement of retaining walls to reduce the need for new roads and retaining walls and to reduce or eliminate the in-line visibility of these facilities. SCE's redesign shall document the proposed resolution for each access road or other visible road feature and shall include the following:

- Approximate location, length, and design of alternative access or spur road routes that would replace proposed roads.
- Vegetation that would be affected and steepness of terrain for consideration of vegetation and erosion impacts.
- Areas where "drive and crush" access is a feasible measure to avoid access road scars (i.e., no grading or vegetation removal is required). SCE shall define frequency of driving, vehicle types to be used, and likelihood of vegetation recovery.
- The CPUC/BLM Visual Specialist and Designated Project Biologist shall evaluate whether the overall impacts of the alternate road designs are less than that of the original access road designs.

Impact VR-5: Construction could result in visual contrast associated with the marking of natural features

Often during the course of project construction, paint or permanent discoloring agents are applied to rocks or vegetation to indicate survey or construction activity limits or to provide direction for construction activities. In some cases, such markings can result in long-term visible color contrast and substantial visual change, which would also be inconsistent with the VRM Class II Management Objective. The visual contrast associated with the marking of natural features can be reduced through the implementation of Mitigation Measure VR-5a (Prohibit construction marking of natural features).

Mitigation Measure for Impact VR-5: Construction could result in visual contrast associated with the marking of natural features

VR-5a **Prohibit construction marking of natural features.** SCE shall not apply paint or permanent discoloring agents to rocks or vegetation to indicate survey or construction activity limits or for any other purpose. This measure does not apply to temporary marking agents used to identify underground utilities.

Impact VR-6: Construction could result in visual contrast associated with fugitive dust, waste, and trash

Grading activities for the construction of specific sites, access roads, and spur roads have the potential to generate dust clouds, creating visual contrast that can substantially degrade the quality of a site. Implementation of Mitigation Measure AQ-1a (Control fugitive dust; Section D.3, Air Quality) can reduce this impact. Also, during construction, there is the potential for trash and food-related waste to be discarded inappropriately at construction sites and then be transported by wind and/or animals across the landscape, resulting in additional visual contrast and degradation of landscape quality and character. Implementation of Mitigation Measure WIL-1b (Ensure wildlife impact avoidance and minimization) can reduce this impact. Neither of these effects would be consistent with the VRM Class II Management Objective.

Mitigation Measures for Impact VR-6: Construction could result in visual contrast associated with fugitive dust, waste, and trash

AQ-1a **Control fugitive dust** (Section D.3, Air Quality)

WIL-1b **Ensure wildlife impact avoidance and minimization** (Section D.4, Biological Resources – Vegetation)

Impact VR-7: Construction could result in the use of night lighting or installation of reflective surfaces, which could cause undesirable night light and glare effects

It is anticipated that some construction activity would take place at night, which could result in substantial adverse night lighting visual effects given the general lack of lighting along much of the Proposed Project route. There is also potential for daytime (or nighttime) glare off of the Proposed Project's transmission structures that could cause undesirable glare effects. Such visual degradation would also be inconsistent with the VRM Class II Management Objective. However, the potential glare and night lighting effects can be reduced and managed through the implementation of Mitigation Measures VR-7a (Minimize night lighting at project facilities) and VR-9a (Treat structure surfaces).

Mitigation Measures for Impact VR-7: Construction could result in the use of night lighting or installation of reflective surfaces, which could cause undesirable night light and glare effects

VR-7a **Minimize night lighting at project facilities.** SCE shall avoid night lighting where possible and minimize its use under all circumstances. To ensure this, SCE shall prepare a Night Lighting Management Plan for both construction and operation, incorporating the following general principles and specifications:

- Use of portable truck-mounted lighting.
- Emphasis on use of low-pressure sodium (LPS) or amber light-emitting diode (LED) lighting.
- White lighting (metal halide) would: a) only be used when necessitated by specific work tasks; b) would not be used for dusk-to-dawn lighting; and c) would be less than 3500 Kelvin color temperature.
- All lamp locations, orientations, and intensities including security, roadway, and task lighting.
- Each light fixture and each light shield.
- Total estimated outdoor lighting footprint expressed as lumens or lumens per acre.
- Detailed list of anticipated circumstances and activities that would require night lighting including the expected frequency of the activity, the duration of the activity, and the expected amount of lighting that would be necessary for that activity.
- Light fixtures that could be visible from beyond project facility boundaries shall have cutoff angles sufficient to prevent lamps and reflectors from being visible beyond the project facility boundary, including security lighting.
- Motion sensors and other controls to be used, especially for security lighting such that lights operate only when the area is occupied.
- Surface treatment specification that will be employed to minimize glare and sky glow.

The Night Lighting Management Plan shall also consider the following factors:

- All temporary construction lighting and permanent exterior lighting shall include: (a) lamps and reflectors that are not visible from beyond the construction site or facility including any off-site security buffer areas; (b) lighting that shall not cause excessive reflected glare; (c) direct lighting that shall not illuminate the nighttime sky, except for required FAA aircraft safety lighting (which, if required, shall be an on-demand, audio-visual warning system that is triggered by radar technology); (d) minimization of illumination of the Proposed Project and its immediate vicinity; (e) creation of sky glow caused by project lighting shall be avoided; and (f) compliance with local policies and ordinances to be outlined in the Night Lighting Management Plan. All permanent light sources shall be below 3,500 Kelvin color temperature (warm white) and shall be full cutoff fixtures.
- Always-on security lighting is to be limited to one low-wattage, fully shielded, full cutoff light fixture at the main entrance to facilities. All other security lighting is to be motion activated only through the use of passive infrared sensors and controlled as specific zones such that only targeted areas are illuminated. No other lighting is to be utilized on a nightly basis when a facility is not occupied.
- Lighted nighttime maintenance is to be minimized or avoided as a routine practice and should occur only during emergencies.

The draft Night Lighting Management Plan shall be submitted to the CPUC and BLM at least 60 days prior to the start of construction. Following the BLM's and CPUC's review of the draft plan, and at least 15 days prior to the start of construction, SCE shall submit to the CPUC and BLM for review and approval, a final Night Lighting Management Plan. Construction activities shall not start until CPUC's and BLM's approvals of the plan have been received.

Impact VR-8: Long-term presence of the project would result in landscape changes that degrade existing visual character or quality

Impact VR-8 considers the permanent impacts (i.e., operational effects) of the Proposed Project. The analysis of operational effects was conducted with respect to: (1) visual change perceived from representative static KOPs at sensitive public viewing locations, (2) visual change associated with FAA marker requirements, (3) visual change perceived from transient linear viewpoints along key local roadways, (4) the potential for project night lighting and daytime glare and visual effects, and (5) project consistency with regulatory plans and policies. As previously stated, visual resources effects associated with project operation are typically direct effects. Therefore, the operational effects addressed in this section should be considered direct effects, unless otherwise noted. Each of these features is illustrated in visual photosimulations presented in the KOP analyses described in the following sections.

KOP Analyses

An in-depth visual analysis of operational effects was conducted for the sensitive view areas represented by stationary KOPs 1 through 18 (Figures D.18-8a through D.18-25b). The results of the effects analysis are discussed below and presented in the Summary of Key Observation Point Analyses in Table Ap.10-1 included in Appendix 10. Although a formal KOP was not established for the one-mile segment of BLM-managed land crossed by the Proposed Project between Haugen-Lehmann Way and Whitewater Canyon Road, a representative VRM Contrast Rating Data Sheet is provided in Appendix 10 and discussed below. Discussions of impact significance as determined under the CEQA are presented in Section D.18.3.4 CEQA Significance Determination.

KOP 1 – Right-of-Way Crossing of Mission Road in Loma Linda. Figure D.18-8A presents a life-size scale view to the south from Mission Road, down the ROW and the park that has been developed under portions of the transmission line, in the City of Loma Linda. The view encompasses that portion of Segment 1 heading south from Mission Road, toward San Bernardino Junction, just beyond the first ridgeline at the far left of the image. The image captures the park setting beneath the transmission lines in the ROW, the residential developments that back onto the ROW, and the hills that provide a backdrop to the south. Figure D.18-8B presents a visual simulation of three existing transmission lines replaced by two taller, double-circuit facilities of identical lattice structure design. Given the unobstructed sightlines, road travelers, park users, and adjacent residents would be afforded Extended viewing durations of the structures, which would generally be consistent with the form and line of the existing utility structures. Also, given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in a reduction in the number and types of structures, and overall structural complexity and industrial character within the ROW, though the new taller structures would appear more visually prominent, and skylining would be increased. In the context of the existing towers and lines, the new foreground structural landscape with fewer towers would exhibit Slightly Reduced visual contrast and would appear Co-dominant relative to the scale of the existing landscape features. The visually prominent structures would attract the attention of the casual observer, but view blockage of higher value landscape features (background sky or ridgelines) would be Slightly Reduced.

The overall visual change would be *Improved*, and in the context of the existing landscape's *Moderate to High* visual sensitivity, the resulting visual effect would also be improved. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended, however, to further enhance the visual effect along Segment 1.

KOP 2 – Canyon Vista Drive and East Chase Canyon Lane in Colton. Figure D.18-9A presents a life-size scale view to the west toward the existing transmission lines along the ridgeline south of the residential development, from the intersection of Canyon Vista Drive and East Chase Canyon Lane, in the City of Colton. The view encompasses a residential neighborhood and a portion of Segment 2 between San Bernardino Junction and the Vista Substation. Three transmission lines are positioned along the ridgeline south of the subdivision. Figure D.18-9B presents a visual simulation of replacement of one of the three existing transmission lines with taller structures. Given the unobstructed sightlines, adjacent residents would be afforded Extended viewing durations of the new facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of one of the three existing transmission lines with taller, double-circuit lattice structures. Although structure skylining would increase slightly, overall ~~The taller structures would be positioned lower on the slope; therefore, the height of the new structures would appear only incrementally taller; skylining would be less noticeable; and~~ structural prominence, complexity, and industrial character would appear similar to the existing conditions.

In the context of the existing towers and lines, the complex vertical form of the Proposed Project's lattice-steel towers and curvilinear conductors would exhibit Low visual contrast and would appear as a foreground, Co-dominant feature relative to the scale of the existing landscape features. The structures would attract the attention of the casual observer, but view blockage of higher value landscape features (background sky or ridgelines) would be Low.

The overall visual change would be Low to Moderate, and in the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual effect would be less than substantial. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along Segment 2 of the Proposed Project.

KOP 3 – Pilgrim Road in San Timoteo Canyon. Figure D.18-10A presents a life-size scale view to the west toward the Proposed Project route, from Pilgrim Road, off of San Timoteo Canyon Road in San Timoteo Canyon in the City of Calimesa. The rural residential view captures portions of three transmission lines that traverse the hills and ridgelines that define the southern border of the canyon. Figure D.18-10B presents a visual simulation of replacement of three existing transmission lines with two facilities. Given the unobstructed sightlines, adjacent residents would be afforded Extended viewing durations of the new facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of three existing transmission lines of different design and size with two taller, double-circuit facilities of identical lattice structure design. Although the structures would typically be taller than the existing structures that they are replacing, the new structures would be placed lower on the slopes, so structural prominence would be similar to the existing conditions, and skylining would be less noticeable or similar to existing conditions. Also, the reduction in the overall number and types of structures would reduce: (1) structural complexity within the ROW, (2) asynchronous spans, (3) overall industrial character, and (4) view blockage of higher value landscape features.

In the context of the existing towers and lines, the new facilities would exhibit *Reduced* visual contrast and would collectively, constitute a foreground, Co-dominant feature relative to the scale of the existing landscape features. The structures would attract the attention of the casual observer, but view blockage of higher value landscape features (background sky or ridgelines) would be Reduced.

The overall visual change would be Improved, and in the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual effect would be improved. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended, however, to further enhance the visual effects along this portion of the Proposed Project.

KOP 4 – Westbound San Timoteo Canyon Road. Figure D.18-11A presents a life-size scale view to the southwest toward the Proposed Project route, from westbound San Timoteo Canyon Road, approximately 0.68 miles east of Redlands Boulevard. The rural residential view captures portions of the three transmission lines that traverse the hills and ridgelines that define the southwest border of San Timoteo Canyon. Figure D.18-11B presents a visual simulation of replacement of three existing transmission lines with two facilities. Given the unobstructed sightlines, residents and travelers on San Timoteo Canyon Road would be afforded Extended viewing durations of the new facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of three existing transmission lines of different design and size with two taller, double-circuit facilities of identical lattice structure design. Although the structures would typically be taller than the existing structures that they are replacing, the new structures would be placed lower on the slopes, so structural prominence would be similar to the existing conditions, and skylining would be less noticeable or similar to existing conditions. Also, the reduction in the overall number and types of structures would reduce: (1) structural complexity within the ROW, (2) asynchronous spans, (3) overall industrial character, and (4) view blockage of higher value landscape features.

In the context of the existing towers and lines, the new facilities would exhibit Reduced visual contrast and would be foreground, Co-dominant features relative to the scale of the existing landscape features. The structures would attract the attention of the casual observer, but view blockage of higher value landscape features (background sky or ridgelines) would be Reduced.

The overall visual change would be Improved, and in the context of the existing landscape's *Moderate to High* visual sensitivity, the resulting visual effect would be improved. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended, however, to further enhance the visual effects along this portion of the Proposed Project.

KOP 5 – Boros Boulevard – Tukwet Canyon. Figure D.18-12A presents a life-size scale view to the northeast from Boros Boulevard, one of the residential streets in the Tukwet Canyon residential development, at the eastern end of San Timoteo Canyon. The view encompasses a residential neighborhood and a portion of Segment 4 between the El Casco Substation and I-10. Three transmission lines traverse the ridgelines that define the northern boundary of the Tukwet Canyon residential development. Figure D.18-12B presents a visual simulation of replacement of three existing transmission lines with two facilities. Given the unobstructed sightlines, adjacent residents would be afforded Extended viewing durations of the new facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of three existing transmission lines of different design and size with two taller, double-circuit facilities of identical lattice

structure design. The taller structures would be more visible to residents and cause increased skylining due to their closer placement to the south side of the ROW, thereby appearing more visually prominent. However, unlike the case where existing structures are located at grade with adjacent south side residences and are somewhat less visible (particularly the more northerly placed transmission line), this portion of Segment 4 is elevated along the ridgeline, and the structures of all three existing lines are clearly visible from the adjacent south-side residences. Therefore, the reduction in the overall number and types of structures that would occur with the Proposed Project would reduce: (1) visible structural complexity within the ROW, (2) asynchronous spans, (3) overall industrial character, and (4) view blockage of higher value landscape features.

In the context of the existing towers and lines, the new facilities would exhibit Low visual contrast and would collectively, constitute a foreground, Co-dominant feature relative to the scale of the existing landscape features. The structures would attract the attention of the casual observer, but view blockage of higher value landscape features (background sky or ridgelines) would be Slightly Reduced.

The overall visual change would be Low, and in the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual effect would be less than substantial. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along this portion of the Proposed Project.

KOP 6 – Stetson Community Park in the City of Beaumont. Figure D.18-13A presents a life-size scale view to the northwest from the east end of Stetson Community Park, viewing down the park that has been developed within the ROW in the City of Beaumont. The view encompasses a residential ROW park setting and a portion of Segment 4 just east of I-10. Three transmission lines pass through the residential development. Figure D.18-13B presents a visual simulation of replacement of three existing transmission lines with two sets of structures. Given the unobstructed sightlines, park users, roadway travelers, and adjacent residents would be afforded Extended viewing durations of the new facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of three existing transmission lines with two taller, double-circuit facilities of identical lattice structure design. The taller structures would cause increased skylining and would appear more visually prominent. However, from within and north of the ROW, the reduction in the overall number and types of structures would reduce: (1) structural complexity within the ROW, (2) asynchronous spans, (3) overall industrial character, and (4) view blockage of higher value landscape features.

In the context of the existing towers and lines, the new facilities would exhibit Reduced visual contrast when viewed from within the ROW (KOP 6), from north of the ROW, and from most locations south of the ROW (including roads and approximately 48 percent of the south-side residences). From some residences bordering the south side of the ROW (approximately 36 percent of the south-side residences), project-induced visual contrast would appear Moderate, while from a more limited number of residential views south of the ROW and adjacent to a structure pair (approximately 16 percent of the south-side residences), visual contrast would appear High.

From all residences, the Proposed Project would appear as a foreground, Co-dominant feature relative to the scale of the existing landscape features (and transmission lines). The structures would attract the attention of the casual observer, and view blockage of higher value landscape features (golf course grounds, sky, and mountains) would be Reduced when viewed from within the ROW (KOP 6), from north of the ROW, and from most locations (roads and residences) south of the ROW. View blockage would be

Low to Moderate when viewed from some residences south of the ROW, and Moderate to High when viewed from a smaller percentage of south-side residences adjacent to a structure pair.

The overall visual change would be Improved when viewed from within the ROW (KOP 6), from north of the ROW, and from many locations south of the ROW. Overall visual change would appear Moderate when viewed from some residences south of the ROW, and Moderate to High when viewed from a more limited number of south-side residences adjacent to a structure pair. In the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual effect would be improved when viewed from north of, within, and many locations south of the ROW — for approximately 65 percent of all affected residences. The visual impact would be adverse but less than substantial for some residences south of the ROW, including approximately 25 percent of all affected residences. The sensitivity would be substantial for about 10 percent of south-side residences — all those that would be adjacent to a proposed new structure pair. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along this portion of the Proposed Project. In addition, the Tower Relocation Alternative defined in Section C and Appendix 5, would require that these structure pairs to be moved farther from residences, reducing the severity of the visual impact. The effects of this alternative are presented in Section D.18.4.1.

Residential Views Adjacent and to the South of the ROW in the Beaumont Area. As noted above for KOP 6, similar to all of the Proposed Project views from north of the ROW, or within the ROW, a substantial portion of the residential views bordering the south side of the ROW (approximately 48 percent of the south-side residences) would experience an improved visual change as a result of longer, synchronized conductor spans, fewer (or no) visible structures in the immediate proximity of the residences, and/or greater distance between the residences and structure pairs. By reducing visible industrial character and structural clutter associated with the different sized structures and unsynchronized conductor spans of the present condition, the Proposed Project would result in a reduction of overall visual contrast when viewed from these residential locations.

Approximately 36 percent of the residences bordering the south side of the ROW would be more substantially affected due to the generally closer proximity to the taller structures but without structure pairs being located adjacent to the residences. In this case, conductor spans may be located closer to the south side of the ROW (resulting in increased structural dominance and view blockage when viewed from the south). The severity of the effect from these residences would depend on the type of view that is compromised. For example, in some cases, the view from within a residence may capture no visible structures, but the view from the backyard may be more adversely affected by the increased prominence of a structure pair down the ROW or the series of overhead conductors in closer proximity to the residence. For these residences where Proposed Project structures would be located closer to residences than they are currently, the resulting incremental visual change (from the present condition) would tend to be Moderate and the overall visual effect would be less than substantial.

For approximately 16 percent of the residences bordering the south side of the ROW and directly adjacent to a proposed new structure pair, the degree of visual contrast, structure prominence, and view blockage that would be experienced from the residence and/or yard would be somewhat more severe and would result in an overall perceived Moderate *to High* level of incremental visual change that, in the context of the Moderate to High degree of visual sensitivity, would constitute a substantial visual effect. When viewed from most locations (roads, residences, and parks), this more severe visual effect would substantially compromise the landscape viewing experience from those relatively few residence-specific viewing locations as represented by the following analysis for KOP 6A.

KOP 6A – Sagura Road in the Solera residential golf community. Figure D.18-13C presents a life-size scale view to the northwest toward the Proposed Project route from Sagura Road, one of the residential streets in the Solera residential golf community and just west of Snowberry Road in the City of Beaumont. The view encompasses a portion of the residential development backing on to the existing ROW to the north containing three partially screened transmission lines. Figure D.18-13D presents a visual simulation of replacement of the three existing transmission lines with two transmission lines. Given the relatively unobstructed sightlines, adjacent residents would be afforded Extended viewing durations of the new facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission line structures, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of three existing transmission lines of different design with two taller, double-circuit facilities of identical lattice structure design. The taller structures would cause increased skylining and would appear more visually prominent due to their concentration in the southern half of the ROW and closer proximity to the residences on the south side of the ROW.

The closer proximity and substantially increased height of the new structures would contribute to the apparent structural dominance and high degree of visual contrast. From the residences in close proximity to the structures, the Proposed Project would appear as a foreground, Dominant feature relative to the scale of the existing landscape features (and transmission lines). The structures would attract the attention of the casual observer, and view blockage of higher value landscape features (sky, and mountains to the north) would be Moderate when viewed from the south side of the ROW.

The overall visual change would be Moderate to High. In the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual impact would be substantial. It should be noted that while the KOP 6A simulation is considered representative of similar views from close proximity residences along the south side of the ROW, at approximately 195 feet from the nearest residence and approximately 320 feet from the residence that appears directly in front of the two structures in Figure D.18-3D, KOP 6A *does not* present a "worst case" visual impact scenario. There are a number of residences between the City of Beaumont and the residential community of Whitewater to the east where the structure pairs would be located substantially closer to existing residences. In some cases, the structures would be within approximately 75 to 100 feet of existing residences. The views from these residences would be even more impacted.

Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along this portion of the Proposed Project. In addition, the Tower Relocation Alternative defined in Section C and Appendix 5, would require specific structure pairs with the most severe visual impacts to be moved farther from residences, reducing the severity of the visual impact. The effects of this alternative are presented in Section D.18.4.1.

~~The Tower Relocation Alternative (defined in Section C and Appendix 5) would require that these structure pairs be moved farther from residences, reducing the severity of the visual impact. The effects of this alternative are presented in Section D.18.4.1.~~

KOP 7 – Oak Valley Golf Course. Figure D.18-14A presents a life-size scale view to the east toward the Proposed Project route from the Oak Valley Golf Course in the City of Beaumont. The view encompasses a residential golf community and a portion of Segment 4 north of Oak Valley Parkway and east of I-10. Three transmission lines are prominently visible as they pass through this landscape. Figure D.18-14B presents a visual simulation of the replacement of the three existing transmission lines with two facilities. Given the relatively unobstructed sightlines, recreational visitors and adjacent residents would be afforded

Extended viewing durations of the new facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of three existing transmission lines with two taller, double-circuit facilities of identical lattice structure design. The taller structures would cause increased skylining and would appear more visually prominent. However, from north of, within, and from most locations south of the ROW, the reduction in the overall number and types of structures would reduce: (1) structural complexity within the ROW, (2) asynchronous spans, (3) overall industrial character, and (4) view blockage of higher value landscape features. From some viewing locations south of the ROW, however, the structures would appear more visually prominent due to their concentration in the southern half of the ROW (see the discussion in the section above — Residential Views Adjacent and to the South of the ROW in the Beaumont Area).

Similar to KOP 6, in the context of the existing towers and lines, the new facilities would exhibit Reduced visual contrast when viewed from north of the ROW (KOP 7), within the ROW, and from most locations (roads and residences) south of the ROW. From some residences bordering the south side of the ROW (approximately 36 percent of the south-side residences), project-induced visual contrast would appear Moderate, while from a more limited number of residential views south of the ROW and adjacent to a structure pair (approximately 16 percent of the south-side residences), visual contrast would appear High. From all residences, the Proposed Project would appear as a foreground, Co-dominant feature relative to the scale of the existing landscape features (and transmission lines). The structures would attract the attention of the casual observer, and view blockage of higher value landscape features (golf course grounds, sky, and mountains) would be Reduced when viewed from north of the ROW (KOP 7), within, and most locations south of, the ROW. View blockage would be Low to Moderate when viewed from some residences south of the ROW, and Moderate to High when viewed from a more limited number of south-side residences adjacent to a structure pair.

The overall visual change would be Improved when viewed from north of (KOP 7), within, and from most locations south of, the ROW. Overall visual change would appear Moderate when viewed from some residences south of the ROW and Moderate to High when viewed from a smaller percentage of south-side residences adjacent to a structure pair. In the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual impact would be Improved (when viewed from north of, within the ROW and from most locations south of the ROW. This improvement in visual setting would occur for approximately 65 percent of all affected residences. The effect would be adverse but less than substantial for about 25 percent of the affected residences, south of the ROW However, the visual impact would be substantial for about 10 percent of the south-side residences that would be adjacent to a proposed new structure pair. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along this portion of the Proposed Project.

The Tower Relocation Alternative (defined in Section C and Appendix 5) would require specific structure pairs with the most severe visual impacts to be moved farther from residences, reducing the severity of the visual impact. The effects of this alternative are presented in Section D.18.4.1.

KOP 8 – Stargazer Street and Rose Avenue in the Estates Residential Development in the City of Beaumont. Figure D.18-15A presents a life-size scale view to the east-southeast toward the Proposed Project route from the intersection of Stargazer Street and Rose Avenue in The Estates subdivision, in the City of Beaumont. The view encompasses a portion of the subdivision backing on to the existing ROW containing three prominently visible transmission lines. Figure D.18-15B presents a visual simulation of

replacement of the three existing transmission lines with two facilities. Given the relatively unobstructed sightlines, adjacent residents would be afforded Extended viewing durations of the new facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of three existing transmission lines with two taller, double-circuit facilities of identical lattice structure design. The taller structures would cause increased skylining and would appear more visually prominent. However, from north of, within, and from most locations (roads and residences) south of the ROW, the reduction in the overall number and types of structures would reduce: (1) structural complexity within the ROW, (2) asynchronous spans, (3) overall industrial character, and (4) view blockage of higher value landscape features. From some viewing locations south of the ROW, however, the structures would appear more visually prominent due to their concentration in the southern half of the ROW (see the discussion above under *Residential Views Adjacent and to the South of the ROW in the Beaumont Area*).

Similar to KOPs 6 and 7, in the context of the existing towers and lines, the new facilities would exhibit Reduced visual contrast when viewed from north of the ROW (KOP 8), within the ROW, and from most locations (roads and residences) south of the ROW. From some residences bordering the south side of the ROW (approximately 36 percent of the south-side residences), project-induced visual contrast would appear Moderate, while from a more limited number of residential views south of the ROW and adjacent a structure pair (approximately 16 percent of the south-side residences), visual contrast would appear High. From all residences, the Proposed Project would appear as a foreground, Co-dominant feature relative to the scale of the existing landscape features (and transmission lines). The structures would attract the attention of the casual observer, and view blockage of higher value landscape features (sky, and mountains) would be Reduced when viewed from north of the ROW (KOP 8), within, and from most locations south of, the ROW. View blockage would be Low to Moderate when viewed from some residences south of the ROW and Moderate to High when viewed from a more limited number of south-side residences adjacent to a structure pair.

The overall visual change would be Improved when viewed from north of (KOP 8), within the ROW, and from most locations south of the ROW. Overall visual change would appear Moderate when viewed from some residences south of the ROW and Moderate to High when viewed from a smaller percentage of south-side residences adjacent to a structure pair. In the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual impact would be *Improved* when viewed from north of, within, and most locations south of the ROW for approximately 65 percent of all affected north side and south-side residences. The visual impact would be less than substantial for about 25 percent of residences south of the ROW. The impact would be substantial for about 10 percent of south-side residences: those that would be located adjacent to a proposed new structure pair. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along this portion of the Proposed Project. In addition, the Tower Relocation Alternative defined in Section C and Appendix 5, would require specific structure pairs with the most severe visual impacts to be moved farther from residences, reducing the severity of the visual impact. The effects of this alternative are presented in Section D.18.4.1.

KOP 9 – Cedar Hollow Road in the City of Beaumont. Figure D.18-16A presents a life-size scale view to the southwest from Cedar Hollow Road, just west of Cherry Avenue, toward the Proposed Project in Segment 4 as it passes through the northern residential areas in the City of Beaumont. Three transmission lines are prominently visible in the ROW. Figure D.18-16B presents a visual simulation of replacement of the three existing transmission lines with two facilities. Given the unobstructed sightlines, adjacent residents would be afforded Extended viewing durations of the new facilities in the ROW. Also,

given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of three existing transmission lines with two taller, double-circuit facilities of identical lattice structure design. The taller structures would cause increased skylining and would appear more visually prominent. However, from north of, within, and from most locations (roads and residences) south of the ROW, the reduction in the overall number and types of structures would reduce: (1) structural complexity within the ROW, (2) asynchronous spans, (3) overall industrial character, and (4) view blockage of higher value landscape features. From some viewing locations south of the ROW, however, the structures would appear more visually prominent due to their concentration in the southern half of the ROW (see the discussion above under *Residential Views Adjacent and to the South of the ROW in the Beaumont Area*).

Similar to KOPs 6, 7, and 8, in the context of the existing towers and lines, the new facilities would exhibit Reduced visual contrast when viewed from north of the ROW (KOP 9), within the ROW, and from most locations south of the ROW. From some residences bordering the south side of the ROW (approximately 36 percent of the south side residences), Proposed Project-induced visual contrast would appear Moderate, while from a more limited number of residential views south of the ROW and adjacent to a proposed structure pair (approximately 16 percent of the south-side residences), visual contrast would appear High. From all residences, the Proposed Project would appear as a foreground, Co-dominant feature relative to the scale of the existing landscape features (and transmission lines). The structures would attract the attention of the casual observer, and view blockage of higher value landscape features (sky, and mountains) would be Reduced when viewed from north of the ROW (KOP 9), within the ROW, and from most locations south of, the ROW. View blockage would be Low to Moderate when viewed from some residences south of the ROW and Moderate *to* High when viewed from a more limited number of south-side residences adjacent to a structure pair.

The overall visual change would be Improved when viewed from north of the ROW (KOP 9), within the ROW, and from most locations south of the ROW. Overall visual change would appear Moderate when viewed from some residences south of the ROW and Moderate to High when viewed from a smaller percentage of south side residences that are located adjacent to a proposed new structure pair. In the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual effects would be Improved when viewed from the approximately 65 percent of affected residences located north of the ROW, within the ROW, and from most locations south of the ROW. The visual effects would be less than substantial for about 25 percent of the residences south of the ROW due to their locations (i.e., not adjacent to proposed new structures). The visual effects would be substantial for approximately 10 percent of south side residences — those located adjacent to a proposed new structure pair. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along this portion of the Proposed Project. In addition, the Tower Relocation Alternative defined in Section C and Appendix 5, would require specific structure pairs with the most severe visual impacts to be moved farther from residences, reducing the severity of the visual impact. The effects of this alternative are presented in Section D.18.4.1.

KOP 10 – Bluff Street in the City of Banning. Figure D.18-17A presents a life-size scale view to the southeast toward the Proposed Project at the border of Segments 4 and 5, as it passes north of the City of Banning, extending to the east across Morongo Tribal Lands. The view encompasses the western end of Segment 5 as it spans Bluff Street and then passes into the tribal lands north of the City of Banning. The ROW splits at this location with two prominently visible transmission lines following the southern route west, and one transmission line following a northern route. Figure D.18-17B presents a visual simulation

of the replacement of three transmission lines with two lines. Given the unobstructed sightlines, travelers on Bluff Street and adjacent residents would be afforded Extended viewing durations of the new facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of the three existing transmission lines of different design and size with two taller, double-circuit, tubular steel pole (TSP) facilities of identical design. The new poles would appear more massive and visibly more prominent at greater distance; however, the overall reduction in the number and types of structures would reduce structural complexity in the ROW.

In the context of the existing towers and lines, the new facilities would exhibit Moderate visual contrast and would be foreground, Co-dominant features relative to the scale of the existing landscape features. The structures would attract the attention of the casual observer, and view blockage of higher value landscape features (background sky, hills, and mountains) would be Moderate.

The overall visual change would be Moderate, and in the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual effect would be less than substantial. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along this portion of the Proposed Project.

KOP 11 – Hathaway Street in the City of Banning. Figure D.18-18A presents a life-size scale view to the northeast toward the Proposed Project across the southwest corner of the Morongo Tribal Lands, from the entrance to the Summit Ridge Apartments on Hathaway Street, in eastern Banning. The view encompasses the ROW as it passes across the corner of the tribal lands, north of I-10, and adjacent to the eastern border of the City of Banning. The San Bernardino Mountains provide a backdrop of visual interest in views to the north and northeast.

Figure D.18-18B presents a visual simulation of two new transmission lines that would be introduced into an area absent such features but with existing wood-pole utility lines present in the foreground of views. Given the relatively unobstructed viewing opportunities of the transmission line corridor and the mountains beyond, travelers on Hathaway Street and adjacent residents would be afforded Extended viewing durations of the Proposed Project. Also, given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, two double-circuit TSP transmission lines would be introduced into a foreground landscape presently absent similar features. The TSPs would appear as visually prominent, vertical structures that would result in Moderate to High visual contrast. The TSPs would appear Co-dominant in scale with the more distant background mountains. View blockage of the background sky, hills, and mountains would be Moderate to High. The overall visual change would be Moderate to High, and in the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual effect would be substantial. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects. These severe visual effects could be reduced if the proposed new structures were located about 500 feet farther east. However, as described in Appendix 5, Section 5.7, the structures are located on Morongo Tribal Lands, and the Morongo Band of Mission Indians is not willing to consider this relocation, so an alternative that would reduce the severity of this impact is not feasible.

KOP 12 – Morongo Community Center. Figure D.18-19A presents a life-size scale view to the southwest toward the Proposed Project route as it passes south of the Morongo Community Center at 13000 Fields Road, north of I-10. The view encompasses a portion of the community center parking lot and the ROW

as it passes between the community center and I-10. The ROW contains three transmission lines: two consisting of lattice-steel structures and one consisting of a wood-pole, H-frame line. Figure D.18-19B presents a visual simulation of the replacement of the three existing transmission lines in an existing corridor with two lines in a new east-west corridor farther to the south. Given the relatively unobstructed sightlines, visitors to the community center would be afforded Extended viewing durations of the new facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of three existing transmission lines of different design and size in an existing corridor with two double-circuit, TSP lines of identical design in a new corridor. The TSPs would be similar in height to the tallest of the existing lattice structures, but they would appear somewhat more massive. They would also appear more numerous when viewed from the community center because the TSPs have shorter conductor spans requiring more structures (19 structure pairs for the Proposed Project versus 11 structure pairs for the existing line). Also, unlike the current ROW alignment, the new ROW orientation would result in more structures being visible in the view orientation portrayed in Figures D.18-19A and 19B. However, a similar number of structures would be visible with the current ROW orientation if the view direction was west to northwest.

In the context of the existing towers and lines, the new facilities would exhibit Moderate visual contrast and would collectively constitute a foreground, Co-dominant feature relative to the scale of the existing landscape features. The structures would attract the attention of the casual observer, and view blockage of higher value landscape features (background sky, ridges, and Mount San Jacinto) would be Moderate.

The overall visual change would be Moderate, and in the context of the existing landscape's *Moderate to High* visual sensitivity, the resulting visual impact would be less than substantial. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along this portion of the Proposed Project.

KOP 13 – Haugen-Lehmann Way in the Central Portion of the Community of Whitewater. Figure D.18-20A presents a life-size scale view to the west toward the Proposed Project from Haugen-Lehmann Way, near the intersection with Amethyst Drive, in the central portion of the residential Community of Whitewater. Figure D.18-20B presents a visual simulation of the replacement of three existing transmission lines with two facilities. Given the relatively unobstructed sightlines, adjacent residents would be afforded Extended viewing durations of the new facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of three existing transmission lines of different design and size with two taller, double-circuit facilities of identical lattice structure design. The taller structures would cause increased skylining and would appear more visually prominent. However, the reduction in the overall number and types of structures would reduce: (1) structural clutter within the ROW, (2) asynchronous spans, (3) overall industrial character, and (4) view blockage of higher value landscape features.

In the context of the existing transmission facilities, the new facilities would exhibit Reduced visual contrast and collectively constitute a foreground, Co-dominant feature relative to the scale of the existing landscape features. The structures would attract the attention of the casual observer, but view blockage of higher value landscape features (background sky, ridges, and mountains) would be Reduced.

The overall visual change would be Improved, and in the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual effect would be improved. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended, however, to further enhance the visual effects along this portion of the Proposed Project. In addition, the Tower Relocation Alternative defined in Section C and Appendix 5, would require specific structure pairs with the most severe visual impacts to be moved farther from residences, reducing the severity of the visual impact. The effects of this alternative are presented in Section D.18.4.1.

KOP 14 – Pacific Crest Trail Trailhead and Parking Lot. Figure D.18-21A presents a life-size scale view to the south toward the Proposed Project from the PCT trailhead and parking lot, approximately 1 mile north of Haugen-Lehmann Parkway and the Community of Whitewater. Figure D.18-21B presents a visual simulation of the replacement of three existing transmission lines with two facilities. Given the relatively unobstructed sightlines, adjacent travelers on the PCT would be afforded Extended viewing durations of the new facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission lines (when viewed from certain locations along the PCT), atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of three existing transmission lines of different design and size with two taller, double-circuit facilities of identical lattice structure design. The new structures would be more noticeable from the PCT due to their greater heights and light-gray steel color compared to the weathered, darker colors of the existing transmission line structures. However, the reduction in the overall number and types of structures would reduce: (1) structural clutter within the ROW, (2) asynchronous spans, (3) overall industrial character, and (4) view blockage of higher value landscape features (desert plain, Mount San Jacinto, other background mountains and ridges, and sky — from closer viewing positions on the trail).

In the context of the existing transmission facilities, the new facilities would exhibit Low visual contrast, primarily associated with the vertical form and line of the structures and the color contrast of the light-gray steel against the darker colors of the background vegetation and landforms. In the context of the massive background form of Mount San Jacinto, the new line would appear Subordinate in scale. The resulting view blockage of higher value landscape features (background desert plain, mountains and ridges, and sky) would be Low and similar to the existing facilities. The new structures with their lighter-gray color would attract the attention of the casual observer.

The overall visual change would be Low, and in the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual effect would be less than substantial. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along this portion of the Proposed Project as viewed from the PCT.

BLM-managed Land Between Haugen-Lehmann Way and Whitewater Canyon. Views of the relatively short (approximately 1 mile long) segment of BLM-managed land crossed by the Proposed Project, located between Haugen-Lehmann Way on the west and Whitewater Canyon on the east, are primarily limited to I-10 and the I-10 rest stop immediately to the south. Given the openness of the terrain and the unobstructed sightlines, travelers on I-10 would be exposed to Extended viewing durations of the transmission line. Also, given the close proximity and relatively large scale of the transmission line, atmospheric conditions would have minimal effect on the viewing experience.

The Proposed Project would result in the replacement of three existing transmission lines of different design and size with two taller, double-circuit facilities of identical lattice structure design. While the new structures would be slightly more visible from I-10 (due to their greater heights and light-gray steel color), the reduction in the overall number and types of structures would reduce: (1) structural clutter

within the ROW, (2) asynchronous spans, and (3) overall industrial character. As a result, the new structures would not attract the attention of the casual observer.

In the context of the existing transmission facilities to be replaced, the new facilities would exhibit Weak form and line contrast at most (refer to Table Ap.10-3 in Appendix 10). The colors of the existing landscape are a blend of medium tans and browns for desert soils and rocks and muted tans and greens for vegetation. Therefore, within the context of the existing landscape colors and textures, the new structures would cause at most a *Moderate* level of color contrast, primarily as a result of the juxtaposition of the light-gray steel of the new structures against the darker colors of the background vegetation and landforms (refer to Table Ap.10-3 in Appendix 10). The smooth-surfaced structures would also cause at most a Weak level of texture contrast when compared to the matte to coarse textures of the natural vegetation and landforms. The resulting view blockage of higher value landscape features (background desert slopes and ridges and sky) would be Low and similar to the existing facilities, and the resulting overall level of visual change would be Low.

While the Proposed Project would have a Low level of visual change and would: (a) repeat the characteristics of the existing three lattice tower transmission lines that it would replace; (b) improve the characteristics of this portion of the ROW by reducing the ROW's structural complexity, industrial character, and associated visual contrast; and (c) introduce replacement structures that would not dominate the view of, nor attract the attention of, the casual observer, it would not repeat the basic elements of the existing natural features in the landscape, as required by the VRM Class II Management Objective which is:

> *…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.*

This inconsistency, however, is not considered substantial given the structural context that is already established with the existing multi-facility transmission line corridor and the adjacent wind energy facilities (wind turbines) through which much of this route segment passes. Furthermore, the location of the Proposed Project within an existing utility corridor and replacement of three transmission lines of different design with two new lines of identical design, ensures that sensitive values are not significantly diminished, which would likely occur if this portion of Segment 6 were sited as a stand-alone facility in a separate corridor.

This viewpoint analysis is considered representative of Proposed Project views from I-10 and the rest stop along I-10. Even though this inconsistency with the VRM Class II Management Objective is not considered substantial, Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along this portion of the Proposed Project on BLM-managed land, as viewed from I-10.

KOP 15 – Whitewater Canyon Road, South of Bonnie Bell. Figure D.18-22A presents a life-size scale view to the southeast toward the Proposed Project route, at the east rim of Whitewater Canyon, from Whitewater Canyon Road, south of Bonnie Bell (a residential enclave in the Community of Whitewater). The view encompasses a portion of the ROW in Segment 6 as it spans Whitewater Canyon and Whitewater Canyon Road. The ROW contains three transmission lines of different design and size, which are visible on the canyon rim from Whitewater Canyon Road. Figure D.18-22B presents a visual simulation of the replacement of the three existing transmission lines with two facilities. Given the relatively unobstructed sightlines, travelers on Whitewater Canyon Road and residents would be afforded Moderate to Extended viewing durations of the new facilities in the ROW. Also, given the relatively close proximity of

the transmission lines (viewing distance of approximately 0.7 miles), atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of three existing transmission lines of different design and size with two taller, double-circuit facilities of identical lattice structure design. The taller structures would cause increased skylining and would appear slightly more visually prominent to travelers on Whitewater Canyon Road. However, there would be a reduction in the number and types of structures, which would slightly reduce visible structural complexity and asynchronous conductor spans.

In the context of the industrial forms of the existing electric transmission structures and wind turbines, the new facilities would exhibit Low visual contrast and would be foreground, Co-dominant features relative to the scale of the existing landscape features. The structures would attract the attention of the casual observer, but view blockage of higher value landscape features (background sky and Mount San Jacinto) would be Low (and similar to the existing facilities).

The overall visual change would be Low, and in the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual effect would be less than substantial. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along this portion of the Proposed Project.

KOP 16 – Painted Hills Road in the Community of Whitewater. Figure D.18-23A presents a life-size scale view to the south-southeast toward the Proposed Project at the eastern end of Segment 6, from Painted Hills Road, just east of Country View Road, in the eastern portion of the Community of Whitewater, immediately west of SR 62. The view encompasses the eastern portion of the Segment 6 ROW as it passes the easternmost portion of the Community of Whitewater, before spanning SR 62, and then continuing east to Devers Substation just east of SR 62. The ROW contains three transmission lines, although they are somewhat obscured by the complexity of the background wind turbines and transmission lines. Figure D.18-23B presents a visual simulation of replacement of three existing transmission lines with two facilities. Given the unobstructed sightlines, residents would be afforded Extended viewing durations of the new facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of three existing transmission lines of different design and size with two taller, double-circuit facilities of identical lattice structure design. The taller structures would appear slightly more visually prominent due to the greater structural heights. However, the overall structural complexity within the ROW would be slightly reduced, though it would not be readily apparent given the existing structural complexity of the background and adjacent landscape.

In the context of the industrial forms and lines of the existing electric transmission structures and wind turbines, the new facilities would exhibit Low visual contrast and would appear as foreground, Co-dominant features relative to the scale of the existing landscape features. The structures would minimally attract the attention of the casual observer, and view blockage of higher value landscape features (background sky, ridges, and Mount San Jacinto) would be Low.

The overall visual change would be Low to Moderate, and in the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual effect would be less than substantial. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along this portion of the Proposed Project.

KOP 17 – Southbound State Route 62 Scenic Highway. Figure D.18-24A presents a life-size scale view to the southeast toward the Proposed Project span of SR 62, from southbound SR 62, just north of the span. The view encompasses the eastern portion of the Segment 6 ROW as it spans SR 62, an Officially Designated State Scenic Highway, and then continues east to the Devers Substation just east of SR 62. The ROW contains three transmission lines, although they are somewhat obscured by the complexity of the background wind turbines and transmission lines. Figure D.18-24B presents a visual simulation of replacement of three existing transmission lines with two facilities. Given the unobstructed sightlines, travelers on SR 62 would be afforded Moderate to Extended viewing durations of the new facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission lines, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Proposed Project would result in the replacement of three existing transmission lines of different design and size with two taller, double-circuit facilities of identical lattice structure design. While there would be a reduction in the structural complexity in the ROW, the taller structures would appear slightly more visually prominent and would cause slightly greater view blockage of higher value background features.

In the context of the industrial forms of the existing electric transmission structures and wind turbines, the new facilities would exhibit Low visual contrast and would appear as foreground, Co-dominant features relative to the scale of the existing landscape features. The structures would attract the attention of the casual observer, and view blockage of higher value landscape features (Mount San Jacinto) would be Low to Moderate.

The overall visual change would be Low to Moderate, and in the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual effect would be less than substantial. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along this portion of the Proposed Project.

KOP 18 – Northbound Iowa Street in the City of Redlands. Figure D.18-25A presents a life-size scale view to the north along the Iowa Street, near the southwest corner of the Cottage Lane residential subdivision, south of Orange Avenue and North of Barton Road in the City of Redlands. The view encompasses a portion of the Proposed Project SB-Redlands-Tennessee overhead 66 kV subtransmission line as it passes immediately west of the Cottage Lane residential subdivision. There are no other substantial overhead utility structures apparent in the suburban landscape along this portion of Iowa Street. Figure D.18-25B presents a simulation of a new 66 kV subtransmission line in this suburban neighborhood.

As shown in the simulation, the Proposed Project would result in the introduction of a light-weight, steel-pole, 66 kV subtransmission line into a residential suburban landscape presently absent similar features. The light-weight steel poles would appear as visually prominent, vertical structures along the east side of Iowa Street adjacent to the Cottage Lane residential subdivision. The resulting visual contrast would be Moderate to High, and the light-weight steel poles would appear Co-dominant in scale with the more distant background mountains. View blockage of the mountains and sky would be Moderate to High.

The overall visual change would be Moderate to High, and in the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual effect would be substantial. Even with successful implementation of Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) the resulting effect would remain substantial. Because there is no mitigation that would adequately reduce the severity of this effect, an alternative has been developed to require that the subtransmission line be installed underground in a portion of the Iowa Street segment. The Iowa Street

66 kV Underground Alternative is described in Section C and Appendix 5 (Section 4.3), and the visual resources impact analysis is presented in Section D.18.4.2.

FAA Marker Requirements

FAA spherical markers ("marker balls") are used to identify certain spans of overhead wires (conductors) as aviation hazards. Conductor spans requiring three or fewer markers use equally spaced orange markers. Spans requiring more than 3 markers use markers with an alternating color scheme consisting of orange, white, and yellow. Based on a preliminary analysis, SCE has estimated the following number of potential spans requiring markers:

- Segment 1 – no spans
- Segment 2 – 14 spans
- Segment 3 – 46 spans
- Segment 4 – 22 spans
- Segment 5 – 2 spans
- Segment 6 – 10 spans

These numbers are preliminary, and the actual number and location of spans needing markers will not be certain until final engineering is completed and the FAA conducts its hazard analysis.

Two representative visual simulations were prepared to illustrate the addition of FAA markers to conductor spans. Figure D.18-9C presents a visual simulation of the Proposed Project with alternating colored markers as viewed from KOP 2 on Canyon Vista Drive in Segment 2. Figure D.18-11C presents a visual simulation of the Proposed Project with short spans of orange-only markers and a longer span of alternating colored markers as viewed from KOP 4 on San Timoteo Canyon Road in Segment 3.

The addition of markers to conductor spans would increase the visual contrast of the Proposed Project against the existing setting. The existing transmission lines have no marker balls, but FAA requirements are now stricter. The incremental change attributable to the markers, while visually adverse, would not be substantial given the existing structural context along the transmission line corridor (and ROW). The visual changes result from replacement of existing transmission line structures and the reduced number of structures overall. The overall visual effects of the Proposed Project with the marker balls would be less than substantial in most viewing cases. Therefore, no specific mitigation is proposed.

Linear Viewpoint Analyses

The following paragraphs discuss the Proposed Project effects on transient linear views along three major roads in the Proposed Project area including I-10, SR 62, and San Timoteo Canyon Road.

I-10 Linear Viewpoint Analysis. Section D.18.1.1.4 and Figures D.18-7A and 7B presented a linear viewpoint analysis for I-10, which is the major travel corridor in the Proposed Project study area. As noted in that analysis, unlike stationary KOP views, transient views while traveling along roadways are variable and constantly change depending on viewing angles, the presence of intervening screening, and even rate of travel speed. The following paragraph briefly encapsulates the overall effect on views from both the eastbound and westbound directions of travel on I-10.

The linear viewpoint analysis covered I-10 from its intersection with I-15 in the west (Segment 1) to just east of SR 62 in the east (Segment 6). As noted in the analysis, the Proposed Project would not appear visibly dominant at any time when viewed from I-10 and would be prominently visible for only approximately five percent of the combined eastbound/westbound travel distance. As shown in Figures D.18-7A and 7B, these areas of prominence only occur for very short distances as the Proposed Project either converges on and parallels, or spans I-10. The majority of these locations occur within existing corridors containing multiple transmission lines. Therefore, given the existing structural context, the minimal affected travel distance, and the relatively limited view duration during project prominence (less than four minutes combined for both eastbound and westbound viewing directions), the visual effect on views

from I-10 is not considered substantial. However, as with the stationary KOPs, Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along I-10.

SR 62 Linear Viewpoint Analysis. Section D.18.1.1.4 and Figure D.18-7B presented a linear viewpoint analysis for SR 62, which is a major travel corridor at the easternmost end of the Proposed Project study area and is spanned by Segment 6. The analysis covered SR 62 from its southern intersection with I-10 to approximately 3 miles north of the intersection and just south of Pierson Boulevard. As noted in the analysis, the Proposed Project would not appear visibly dominant at any time when viewed from SR 62 and would be prominently visible for less than one minute of the combined northbound/southbound travel time. As shown in Figures D.18-7B, the areas of prominence only occur for very short distances as drivers approach the span over the highway. Also, the span occurs within an existing corridor, which contains multiple transmission lines. Therefore, given the existing structural context, the minimal affected travel distance, and the relatively limited view duration during project prominence (less than one minute combined for both northbound and southbound viewing directions), the visual effect on views from SR 62 is not considered substantial. However, as with the stationary KOPs, Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along SR 62.

San Timoteo Canyon Road Linear Viewpoint Analysis. Section D.18.1.1.4 and Figure D.18-7C presented a linear viewpoint analysis for San Timoteo Canyon Road, which is a major travel corridor along Segment 3 in the western portion of the Proposed Project study area. The analysis covered San Timoteo Canyon Road from Barton Road in the north to just north of Palmer Avenue in the south. As noted in the analysis, the Proposed Project would not appear visibly dominant at any time when viewed from San Timoteo Canyon Road but would be prominently visible for approximately 43 percent of the combined northbound/southbound travel distance, or approximately 12 minutes. This represents a substantial portion of this route segment. As shown in Figure D.18-7C, the areas of visual prominence occur primarily in the southern half of the route segment where it closely parallels the south side of San Timoteo Canyon Road. However, this portion of the route would be located within an existing transmission line corridor containing multiple transmission lines. Because three of the existing lines would be replaced with the two new lines, the overall structural landscape and visual change within the ROW would be improved over the existing conditions. Therefore, given the existing structural context and anticipated improved visual change, the Proposed Project's visual effect on views from San Timoteo Canyon Road is not considered substantial. However, similar to the stationary KOPs, Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects along San Timoteo Canyon Road.

Mitigation Measure for Impact VR-8: Long-term presence of the project would result in landscape changes that degrade existing visual character or quality

VR-8a **Minimize visual contrast in project design.** In the final design of approved project structures, SCE shall use design fundamentals that reduce the visual contrast of new structures and components to the characteristic landscape. These include siting and location; reduction of visibility; repetition of form, line, color, and texture of the landscape; and reduction of unnecessary disturbance. SCE shall provide to the CPUC and BLM for review, a draft Project Design Plan describing the siting, placement, and other design considerations to be employed to minimize Proposed Project contrast. The draft plan must explain how the design will minimize visual intrusion and contrast by blending the earthwork, vegetation manipulation, and facilities with the landscape. Design strategies to address these fundamentals shall be based on the following factors.

- **Earthwork.** Select locations and alignments that fit into the landforms to minimize the sizes of cuts and fills.
- **Vegetation Manipulation.** Use existing vegetation to screen graded areas and facilities from public viewing to the extent feasible. Feather and thin the edges of cleared areas and retain a representative mix of plant species and sizes.
- **Reclamation and Restoration.** Blend the disturbed areas into the characteristic landscape including access and spur roads and disturbed areas created during construction (transmission line structures, and construction yards and staging areas). Replace soil, brush, rocks, and natural debris over these disturbed areas. Newly introduced plant species shall be of a form, color, and texture that blend with the landscape.

A draft Project Design Plan shall be submitted to CPUC and BLM at least 60 days prior to the start of construction. If the CPUC or BLM notifies SCE that revisions to the plan are needed before the plan can be approved, within 30 days of receiving that notification, SCE shall prepare and submit for review and approval a revised plan. Once the plan is made final, SCE shall provide a copy as a courtesy to each jurisdiction through which the project passes.

Impact VR-9: Project operation would create a new source of reflected light and glare

Operational Lighting. PEA Section 3.1.1.3 (Substation Lighting) describes 10 to 30 new permanent lights that would be required as a result of the Proposed Project. Therefore, even though these new lights would be at existing substations with already existing lighting, these lights could be distracting to motorists or pedestrians (see KOP discussions above). Also, some O&M activity could take place at night, which could result in substantial adverse night lighting visual effects. However, the potential glare and visual contrast effects associated with night lighting can be reduced and managed through the implementation of Mitigation Measure VR-7a (Minimize night lighting at project facilities).

FAA Lighting Requirements. SCE anticipates that FAA hazard lighting would be required for approximately 10 structure pairs in Segment 5, extending from the quarry area in the northeast corner of Banning to the southwest corner of the Morongo Tribal Lands. Although there is currently no night lighting within this portion of Segment 5, there are other noticeable night lighting sources in the vicinity including: (1) two FAA hazard lights (one flashing and one static) on communication towers in downtown Banning; (2) four static hazard lights on the Banning High School light standards to the southwest; (3) the substantial night lighting associated with the Morongo Casino complex to the east (the most dominant night light source in the San Gorgonio Pass); (4) numerous vehicle lights on I-10; (5) numerous flashing FAA hazard lights on wind turbines on the south side of I-10 in the Cabazon area; and (6) several static FAA hazard lights on 500 kV transmission structures along the base of the pass' southern ridge. Given the established night lighting context in the immediate vicinity of Segment 5, the resulting visual effect from the addition of FAA Hazard lights is not expected to be substantial, and no specific mitigation is proposed.

Steel Structure Glare and Reflectivity. Components of new steel transmission structures can be reflective and highly visible in sunlight, even creating distractions to motorists and nearby residents. Therefore, the long-term presence of the Proposed Project could create a new source of reflective glare and surface color contrast that could adversely affect daytime views along much of the Proposed Project route. However, the visibility and reflectivity of new structures can be minimized with various surface treatments. Mitigation Measure VR-9a (Treat structure surfaces) is recommended to minimize the views of these facilities.

Mitigation Measure for Impact VR-9: Project operation would create a new source of reflected light and glare

VR-9a **Treat structure surfaces.** SCE shall treat the surfaces of all structures and new buildings visible to the public such that: a) their colors minimize visual contrast by blending with the characteristic landscape colors; b) their colors and finishes do not create excessive glare; and c) their colors and finishes are consistent with local policies and ordinances. The transmission structures and conductors shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive. SCE shall consider the use of special galvanizing treatments or post-manufacture application of chemical treatments (such as Natina Steel) to ensure that transmission structures are sufficiently dulled and non-reflective and are of the appropriate color to blend effectively with the surrounding landscape. SCE shall comply with CPUC and BLM requirements regarding appropriate surface treatments for Proposed Project elements.

SCE shall provide to the CPUC and BLM for review, a draft Surface Treatment Plan describing the application of colors and textures to all new facility structures, buildings, walls, fences, and components comprising all facilities to be constructed. The draft Surface Treatment Plan must explain how the design will reduce glare and minimize visual intrusion and contrast by blending the facilities with the landscape. The draft plan shall be submitted to CPUC and BLM at least 60 days prior to ordering the first structures that are to be color-treated during manufacture or prior to construction of any of the facility components, whichever comes first. If the BLM or CPUC notifies SCE that revisions to the plan are needed before the plan can be approved, within 30 days of receiving that notification, SCE shall prepare and submit for review and approval a revised plan. The draft Surface Treatment Plan shall include the following components and specifications.

- Specification, and 11” x 17” color simulations at life-size scale, of the treatment proposed for use on structures, including structures treated during manufacture.
- A list of each major structure, building, tower and/or pole, and fencing specifying the color(s) and finish(es) proposed for each (colors must be identified by name and by vendor brand or a universal designation).
- Two sets of brochures and/or color chips for each proposed color.
- A detailed schedule for completion of the treatment.
- A procedure to ensure proper treatment maintenance for the life of the Proposed Project.
- Until SCE receives notification of approval of the Surface Treatment Plan by the CPUC and BLM, SCE shall not specify to the vendors the treatment of any buildings or structures for manufacture and shall not perform the final treatment on any buildings or structures treated on site. Additionally, construction activities shall not start until approval of the plan from the CPUC and BLM has been received. Within 14 days following the completion of treatment on any facility component, SCE shall notify the CPUC and BLM that the component (e.g., structure or building) is ready for inspection.

D.18.3.4 Impacts of Connected Actions

Visual impacts of connected actions are evaluated more broadly than the Proposed Project, though all impacts defined for the Proposed Project are still considered in the connected action analysis. Construction impacts are all assessed in Impact VR-1C and operational impacts are all covered in Impact VR-8C.

Impact VR-1C: Construction would result in adverse visual effects due to the presence of equipment, vehicles, materials, and workforce, or use of night lighting

Desert Center Area. Connected actions in the Desert Center area would include the EDF Desert Harvest Solar Project (solar photovoltaics, or PV), the Palen Solar Power Project (solar trough), and two confidential and undefined solar PV projects. Construction activities associated with these connected actions would be similar to those described above for the Proposed Project in Section D.18.3.3 and would include the visual intrusion of construction vehicles, equipment, materials, and workforce into the predominantly natural appearing landscape as well as the possible use of night lighting. Construction would include site clearing and grading, construction of the actual facilities, and site cleanup and restoration. Grading activities have the potential to generate dust clouds, which can be visually distracting if not controlled properly. Depending on the project and location, construction activities would be potentially visible from I-10, SR 177, Kaiser Road, other local access and recreation roads, the commercial area at Desert Center, the Lake Tamarisk residential area, ACECs, and the elevated vantage points in the surrounding mountains, ridges, Joshua Tree National Park, and wilderness areas. ~~Erection of the Palen power tower would be particularly noticeable given the 750-foot height of the structure.~~

Throughout the construction periods for these projects, the industrial character of the activities and visible contrast associated with substantial ground disturbance and vegetation removal would constitute adverse visual effects. However, the majority of construction activities and equipment and personnel brought onto the project sites would be temporary in nature, including the use of any night lighting during construction. However, if construction of multiple projects were sequenced such that ongoing construction activities in the same viewshed were to extend into several years (typically five or more), the extended time frame of construction would constitute a long-term adverse visual impact.

The connected actions' substantial visual contrast associated with the construction activities can be reduced through the implementation of Mitigation Measures VR-1a (Screen construction activities from view) and VR-7a (Minimize construction night lighting), both described above under the Proposed Project in Section D.18.3.3.

Blythe Area. Connected actions in the Blythe area would include three confidential and undefined solar PV projects. Construction activities associated with these connected actions would be similar to those described above for the Desert Center connected actions and the Proposed Project in Section D.18.3.3 and would include the visual intrusion of construction vehicles, equipment, materials, and workforce into the predominantly natural appearing landscape as well as the possible use of night lighting. Construction would include site clearing and grading, construction of the actual facilities, and site cleanup and restoration. Grading activities have the potential to generate dust clouds, which can be visually distracting if not controlled properly. Depending on the project and location, construction activities would be potentially visible from I-10, four-wheel drive recreational trails, the Blythe Airport area, the Nicholls Warm Springs residential development, and the Mule Mountains to the south and McCoy Mountains to the north. Although limited by a lack of trails or facilities, backcountry recreationists do access the Mule and McCoy mountains and would be afforded elevated viewing perspectives of the Blythe development area during construction.

Throughout the construction periods for these projects, the industrial character of the activities and visible contrast associated with substantial ground disturbance and vegetation removal would constitute adverse visual effects. However, the majority of construction activities and equipment and personnel brought onto the project sites would be temporary in nature, including the use of any night lighting during construction. However, if construction of multiple projects were sequenced such that ongoing construction activities in the same viewshed were to extend into several years (typically five or more), the extended time frame of construction would constitute a long-term adverse visual impact.

The connected actions' substantial visual contrast associated with the construction activities can be reduced through the implementation of Mitigation Measures VR-1a (Screen construction activities from view) and VR-7a (Minimize construction night lighting), both described above under the Proposed Project in Section D.18.3.3.

Impact VR-8C: Long-term presence of the project would result in landscape changes or new sources of light and glare that degrade existing visual character or quality

Desert Center Area. The Desert Center area solar projects include both a solar ~~power tower~~trough and solar photovoltaic projects. They would result in the introduction of large-scale, industrial appearing facilities and graded surfaces forming a spatially and visually prominent series of geometric patterns on the valley floor. These characteristics would noticeably contrast with the predominantly natural appearance of the northern Chuckwalla Valley landscape and background mountains.

Depending on the location of the viewer on the valley floor, the connected actions could appear centrally located within the field of view and impair views of the valley floor and lower elevations of surrounding mountains. The light-tan color of the graded soils would result in a moderate degree of visual contrast relative to the darker earth-tone colors of the surrounding landforms. From the more elevated vantage points in the surrounding mountains, Joshua Tree National Park, and wilderness areas, the relatively prominent, hard lines associated with the new vegetation demarcations would result in a Moderate degree of line contrast. The prominent geometric patterns of the panel arrays and troughs and vertical elements of interconnecting gen-tie lines ~~and power tower (Palen Solar Project)~~ would result in Strong form contrast and Moderate to Strong line contrast with the naturally irregular landforms and lines of the existing landscape. The color and reflective characteristics of the various structures would contribute Moderate to Moderate-High color contrast with the existing light tans of the valley soils and darker grey-greens, tans, and reddish hues of the foreground/middleground vegetation and terrain.

The prominent geometric characteristics and structural patterns would not repeat the basic elements of the existing natural features in the landscape (rugged and coarse valley floor punctuated with irregular distributions of vegetation clumps and individuals, backdropped by jagged and angular mountains and ridgelines). The Palen Solar Power Project was also found to have the potential to create a new source of substantial nighttime light during operation that would adversely affect nighttime view and result in daytime glare that would affect views and safety due to the proximity of Highway I-10 (CEC, 2010; Section IV.E).~~Of particular note, the substantial glare from the solar receiver atop the power tower would exhibit considerable visual contrast and make viewing of the background mountain features uncomfortable.~~ The resulting levels of visual change would range from Moderate-High to High and the overall visual impact would typically be substantial.

The degradation of existing visual character or quality associated with the long-term presence of the connected action and introduction of new sources of light and glare can be reduced somewhat through the implementation of Mitigation Measures VR-7a (Minimize night lighting at project facilities), VR-8a (Minimize visual contrast in project design), and VR-9a (Treat structure surfaces), all of which are described above under the Proposed Project in Section D.18.3.3.

Blythe Area. The Blythe area connected actions (three solar PV projects totaling almost 5,000 acres of development) would result in the introduction of large-scale, industrial appearing facilities and graded surfaces forming a spatially and visually prominent series of geometric patterns on the relatively flat mesa and valley floor. These characteristics would noticeably contrast with the predominantly natural appearance of the eastern Chuckwalla Valley and Palo Verde Mesa landscape and background mountains (McCoy Mountains and Mule Mountains).

Depending on the location of the viewer, the connected actions could appear centrally located within the field of view and impair views of the valley floor and lower elevations of any background mountains. The light-tan color of the graded soils would result in a Moderate degree of visual contrast relative to the darker earth-tone colors of the surrounding landforms. From the more elevated vantage points in the McCoy and Mule Mountains, the relatively prominent, hard lines associated with the new vegetation demarcations would result in a Moderate degree of line contrast. The prominent geometric patterns of the panel arrays and vertical elements of interconnecting gen-tie lines would result in Moderate to Strong form and line contrast with the naturally irregular landforms and lines of the existing landscape, particularly when viewed from static viewpoints such as the Nicholls Warm Springs residential area. The color and reflective characteristics of the various structures would contribute to the Moderate to Moderate-High color contrast with the existing darker tans, grey-greens, and rust hues of the foreground/middleground vegetation, soil, and rock features.

The prominent geometric characteristics and structural patterns would not repeat the basic elements of the existing natural features in the landscape (rugged and coarse valley floor punctuated with irregular distributions of vegetation clumps and individuals, backdropped by jagged and angular mountains and ridgelines). The resulting levels of visual change would range from Moderate-High to High depending on viewing location and the overall visual impact would typically be substantial.

The degradation of existing visual character or quality associated with the long-term presence of the connected action and introduction of new sources of light and glare can be reduced somewhat through the implementation of Mitigation Measures VR-7a (Minimize night lighting at project facilities), VR-8a (Minimize visual contrast in project design), and VR-9a (Treat structure surfaces), all of which are described above under the Proposed Project in Section D.18.3.3.

D.18.3.5 CEQA Significance Determination for Proposed Project and Connected Actions

This section provides a significance determination under CEQA for each of the 9 visual resources impacts associated with the Proposed Project. Connected actions are evaluated more generally for construction impacts (Impact VR-1C) and operational impacts (Impact VR-8C).

Impact VR-1: Construction would result in adverse visual effects due to the presence of equipment, vehicles, materials, and workforce (Class II)

Construction of the Proposed Project would cause temporary visual contrast and degradation of the construction sites and yards, staging areas, and surrounding landscapes due to the presence of equipment, vehicles, materials, and workforce. Due to the relatively short-term nature of this impact, these construction characteristics would be consistent with the BLM VRM Class II Management Objective. The overall visual impact would be adverse due to the substantial visual contrast associated with the construction activities; however, with implementation of Mitigation Measure VR-1a (Screen construction activities from view) this impact would be less than significant (Class II).

Impact VR-1C: Construction would result in adverse visual effects due to the presence of equipment, vehicles, materials, and workforce, or use of night lighting (Class II) **[For connected actions]**

Construction of the connected actions would cause temporary visual contrast and degradation of the construction sites and yards, staging areas, and surrounding landscapes due to the presence of equipment, vehicles, materials, workforce, and potentially, night lighting. Due to the relatively short-term nature of this impact, these construction characteristics would be consistent with the BLM VRM Class Management Objectives. The overall visual impact would be adverse due to the substantial visual contrast associated with the construction activities; however, with implementation of Mitigation Measures VR-1a (Screen construction activities from view) and VR-7a (Minimize night lighting at project facilities), this impact would be less than significant (Class II).

Impact VR-2: Construction would result in visual contrast due to vegetation removal (Class I)

Construction of the project would cause long-term color, line, and texture contrast as a result of the removal of vegetation. This long-term visual contrast could appear prominent from some viewing locations, especially in Segments 2, 3, and 6, where impacts would result in significant and unmitigable (Class I) visual effects for these three segments of the Proposed Project, and would also be inconsistent with the VRM Class II Management Objective. Mitigation Measures VEG-1d (Restore or revegetate temporary disturbance areas) and VR-2a (Minimize vegetation removal and ground disturbance) are required to reduce this visual impact (though not to a level that would be less than significant) by placing limits on disturbance areas, minimizing road impacts, and requiring the revegetation of temporarily disturbed areas.

Impact VR-3: Construction would result in visual contrast associated with retaining walls, land scarring, and establishment of graveled surfaces (Class II)

Construction of the Proposed Project would cause the installation of new retaining walls, disturbance to soils, and/or placement of new gravel, which would lead to visible long-term visual contrast associated with color, line, and texture differences with surrounding landscapes. This visual contrast would appear prominent from certain viewing locations and would not be consistent with the BLM VRM Class II Management Objective. The resulting visual impact would be significant but mitigable to less than significant level (Class II). Mitigation Measure VR-3a (Reduce color contrast of retaining walls and land scars) requires the application of an appropriate colorant (e.g., Natina Concentrate) to graded surfaces or light-colored gravel in order to reduce the visual contrast.

Impact VR-4: Construction could result in visual contrast associated with in-line views of retaining walls and land scars (Class II)

The construction of access and/or spur roads to individual tower locations has the potential to create extended, in-line viewing opportunities of newly graded terrain, which can exacerbate the visibility, prominence, and overall visible contrast of graded surfaces resulting in Moderate to High levels of change. The effect would be inconsistent with the BLM VRM Class II Management Objective, and the impact would be significant but mitigable to a less than significant level (Class II). Mitigation Measure VR-4a (Minimize in-line views of retaining walls and land scars) requires that access roads and structure spur roads be constructed at appropriate angles from the originating, primary travel facilities to minimize extended, in-line views of newly graded terrain.

Impact VR-5: Construction could result in visual contrast associated with the marking of natural features (Class II)

Proposed Project construction could result in the marking of natural features (rocks, soil, vegetation) with paint or colorants resulting in the long-term visibility of visual contrast and substantial visual change, which would be inconsistent with the BLM VRM Class II Management Objective. The resulting visual impact would also be significant but mitigable to a less than significant level (Class II). Mitigation Measure VR-5a (Prohibit construction marking of natural features) prohibits the application of paint or other permanent coloring agents to rocks, soil, or vegetation to indicate survey or construction activity limits or for any other construction purpose.

Impact VR-6: Construction could result in visual contrast associated with fugitive dust, waste, and trash (Class II)

Construction grading activities have the potential to generate dust clouds, which can create visual contrast that can substantially degrade the quality of a site. Also, uncontrolled waste and trash can become dispersed across the landscape by wind or animals resulting in additional visual contrast and degradation of landscape quality and character. Both of these impacts would be inconsistent with the BLM VRM Class II Management Objective. However, with implementation of mitigation to control dust (Mitigation Measures AQ-1a) and to protect wildlife (Mitigation Measure WIL-1b) the resulting visual impact would be less than significant (Class II). Local air quality rules and regulations and mitigation previously identified (Section D.3) for controlling fugitive dust would further reduce the generation of fugitive dust, and mitigation previously identified (Section D.5) would control trash and food-related waste at all construction sites and yards and staging areas, to reduce this impact to less than significant levels.

Impact VR-7: Construction could result in the use of night lighting or installation of reflective surfaces, which could cause undesirable night light and glare effects (Class II)

Construction activity taking place at night with night lighting could result in substantial adverse visual effects associated with excessive light and glare. Such visual degradation impacts would be significant but mitigable to less than significant levels (Class II). The impacts would also be inconsistent with the VRM Class II Management Objective. Mitigation Measure VR-7a (Minimize night lighting at project facilities) requires the preparation of a Night Lighting Management Plan that would stipulate the lighting control strategies and equipment that would be used to ensure that significant night lighting visual impacts do not occur. Potential glare effects can be reduced through the implementation of Mitigation Measure VR-9a (Treat structure surfaces).

Impact VR-8: Long-term presence of the project would result in landscape changes that degrade existing visual character or quality (Class I, III, or IV depending on location)

The long-term presence of the Proposed Project would result in various levels of perceived landscape changes ranging from Significant and Unmitigable (Class I) to Less Than Significant (Class III) to Beneficial (Class IV), depending on the location:

- ***Significant and Unmitigable*** **(Class I)** visual impacts would occur for the Proposed Project in the following locations:

  (a) Segment 4 for approximately 16 percent of the residences on the south side of the ROW between Palmer Avenue and Mockingbird Lane.

  (b) Segment 5 when viewed from residences on North Hathaway Street, North Allen Street, North Evans Street, and North Cherry Street in eastern Banning.

(c) Segment 6 when viewed from several residences along the north sides of Amethyst Drive and Haugen-Lehmann Way in the central portion of the community of Whitewater.

(d) The Subtransmission Line Route when viewed from the Cottage Lane residential subdivision on Iowa Street and Orange Avenue in the City of Redlands.

In all cases, Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are required to reduce the severity of adverse visual impacts, though they would remain significant. These impacts would be less than significant with implementation of the Tower Relocation Alternative and the Iowa Street 66 kV Underground Alternative, as discussed in Sections D.18.4.1 and D.18.4.2, respectively.

- ***Less than Significant*** **(Class III)** visual impacts would occur for the Proposed Project, as a whole, and specifically along Segments 2, 4, 5, and 6. In all cases, Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to further reduce the adverse visual effects.
- ***Beneficial*** **(Class IV)** visual impacts would occur for the Proposed Project, as a whole, and specifically along Segments 1, 3, 4, and 6 as a result of the consolidation of structure types within the ROW, more synchronized conductor spans, and overall reduction of structural complexity and visual contrast within the ROW when viewed from most locations. Although the visual impact would be *Beneficial*, Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) would further ensure that the resulting impacts are an improvement and are, in fact, beneficial.

Impact VR-8C: Long-term presence of the project would result in landscape changes or new sources of light and glare that degrade existing visual character or quality (Class I or III depending on location) **[For connected actions]**

For connected actions, their long-term presence would result in various levels of perceived landscape changes ranging from Significant and Unmitigable (Class I) to Less Than Significant (Class III), depending on location.

- ***Significant and Unmitigable*** **(Class I)** visual impacts would occur for the connected actions in the Desert Center area, specifically:

  (a) When the connected actions are viewed from viewpoints immediately adjacent to the development areas and from elevated viewpoints in the surrounding mountains, wilderness areas, and Joshua Tree National Park.

  (b) When the Palen Solar Power Project (~~power tower~~solar trough) is viewed from eastbound Interstate 10, BLM Access Road to Palen Dry Lake, the Chuckwalla Valley floor and elevated viewpoints in the surrounding mountains, wilderness areas, and Joshua Tree National Park (CEC, 2010; Section IV.E).

  In all cases, Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are required to reduce the severity of adverse visual impacts, though they would remain significant.

- ***Less Than Significant*** **(Class III)** visual impacts would occur:

  For the connected actions in the Blythe area, as documented in the Blythe Mesa Solar Project Draft EIR/EA, a solar PV project (like the Blythe area connected actions) would not alter the development sites in a manner that would substantially degrade the scenic value of the sites that have no unique or outstanding visual features. Therefore, less than significant visual impacts would occur with regard to degrading the existing visual character or quality of the sites.

Because NEPA requires implementation of feasible mitigation for impacts regardless of severity and this Final EIR retains consistent mitigation measures with the Final EIS, Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) would further reduce the adverse visual effects.

Impact VR-9: Project operation would create a new source of reflected light and glare (Class II, Class III)

The long-term presence of the project would result in Class II or Class III impacts depending on location, as defined in the following paragraphs.

Less than Significant with Mitigation **(Class II).** The presence of the Proposed Project would result in visual impacts that are significant but mitigable to less than significant levels (Class II). The Proposed Project would introduce numerous industrial surfaces and colors with the potential for causing substantial daytime reflective glare and visual contrast when viewed from nearby and adjacent residences and public roads, and it would include the installation of additional or replacement night lighting at substation facilities and use of night lighting along the ROW during maintenance activities. These significant impacts would be reduced to levels that would be less than significant, however, with effective implementation of required Mitigation Measures VR-9a (Treat structure surfaces) and VR-7a (Minimize night lighting at project facilities).

Less than Significant **(Class III).** It is anticipated that FAA hazard lighting would be required for approximately 10 structure pairs in Segment 5, extending from the quarry area in the northeast corner of Banning to the southwest corner of the Morongo Tribal Lands. Although there is presently no night lighting within this portion of Segment 5, there are other noticeable night lighting sources in the vicinity including: (1) two FAA hazard lights (one flashing and one static) on communication towers in downtown Banning; (2) four static hazard lights on the Banning High School light standards to the southwest; (3) the substantial night lighting associated with the Morongo Casino complex to the east (the most dominant night light source in the San Gorgonio Pass); (4) numerous vehicle lights on I-10; (5) numerous flashing FAA hazard lights on wind turbines on the south side of I-10 in the Cabazon area; and (6) several static FAA hazard lights on 500 kV transmission structures along the base of the pass' southern ridge. Given the established night lighting context in the immediate vicinity of Segment 5, the resulting visual impact from the addition of FAA Hazard lights would be adverse but less than significant (Class III) for the Proposed Project as a whole. No mitigation is proposed.

D.18.4 Environmental Impacts of Project Alternatives

D.18.4.1 Tower Relocation Alternative

The Tower Relocation Alternative would locate certain transmission structures in Segments 4, 5, and 6 farther from existing homes than would be the case under the Proposed Project.

Nine impacts to visual resources were identified for the Proposed Project. These impacts would also apply as well to the Tower Relocation Alternative, which overall would be the same as the Proposed Project. The full text of all mitigation measures referenced in this section is presented in Section D.18.3.3, except where otherwise noted.

Impact VR-1: Construction would result in adverse visual effects due to the presence of equipment, vehicles, materials, and workforce

Similar to the Proposed Project, construction of the Tower Relocation Alternative in Segments 4, 5, and 6 would cause temporary visual effects due to the presence of equipment, vehicles, materials, and workforce. The construction process would also necessitate the use of temporary tower structures, called shoo-flies. ~~The shoo-flies are expected to be clustered into three areas for Segment 4. There are no shoo-fly work areas in Segment 6.~~

Construction activities in Segments 4, 5, and 6 would include site clearing and grading, erection of the structures, conductor stringing and pulling, and site cleanup and restoration. Construction activities would be visible from I-10, SR 243, nearby and adjacent local roads, nearby residential areas and enclaves, and recreational areas and facilities. Throughout the construction period in Segments 4, 5, and 6, the industrial character of the activities would cause substantial visual contrast and visual change and constitute adverse visual effects when viewed from the Proposed Project vicinity, in general, and the adjacent residences in particular. ~~The three clusters of shoo-flies in Segment 4 may be particularly noticeable, though the incremental visual effect of these structures would be substantially attenuated by the visual context of the existing transmission line structures, new transmission line structures, and construction equipment (cranes).~~

Visibility of construction activities and equipment (including shoo-flies) would be temporary in nature and would not result in a substantial long-term visual impact, which would be the same as for the Proposed Project. However, the substantial short-term visual contrast associated with the construction of this alternative can be reduced somewhat through the implementation of Mitigation Measure VR-1a (Screen construction activities from view; see Section D.18.3.3 above).

Impact VR-2: Construction would result in visual contrast due to vegetation removal

Areas of ground surface disturbance (characterized by high color, line, and texture contrasts) and vegetation removal would remain visible from various vantage points for an extended period after the conclusion of construction activities because revegetation of areas in arid and semi-arid environments (particularly where a portion of the Tower Relocation Alternative would be located in Segment 6) can be difficult and generally of limited success. Due to the extended length of construction and the slow pace of revegetation, this impact and the visual contrast created could appear prominent from some viewing locations ~~in the vicinity of Segment 6~~ for many years and cause Moderate to High levels of visual change, which could result in substantial visual effects. This would also be inconsistent with the VRM Class II Management Objective (applicable to BLM-managed land in Segment 6).

These visual effects would be the same as for the Proposed Project, and like the Proposed Project, the Tower Relocation Alternative's prominent visual contrast associated with vegetation removal can be reduced somewhat through the implementation of Mitigation Measures VR-2a (Minimize vegetation removal and ground disturbance; see Section D.18.3.3 above) and Mitigation Measure VEG-1d (Restore or revegetate temporary disturbance areas; see Section D.4, Biological Resources – Vegetation), though not to levels that would be less than substantial.

Impact VR-3: Construction would result in visual contrast associated with retaining walls, land scarring, and establishment of graveled surfaces

Those areas of temporary disturbance where the soil surface (characterized by high color, line, and texture contrasts) is exposed and/or removed or where lighter-colored gravel is placed would exhibit considerable color contrast with adjacent darker vegetation and soil colors. This long-term visual con-

trast could appear prominent from some viewing locations and cause Moderate to High levels of visual change, which would also be inconsistent with the VRM Class II Management Objective (for BLM land in Segment 6). These visual effects would be the same as for the Proposed Project. The prominent visual contrast associated with land scarring and graveled surfaces can be reduced through the implementation of Mitigation Measure VR-3a (Reduce color contrast of retaining walls, land scars, and graveled surfaces — see Section D.18.3.3 above).

Impact VR-4: Construction could result in visual contrast associated with in-line views of retaining walls and land scars

Within Segment 4, a portion of the Tower Relocation Alternative would be located on hillsides or hilltops (west of I-10). Construction of structures and access and/or spur roads to individual structure locations have the potential to create extended, in-line views of newly graded terrain. These types of views can exacerbate the visibility, prominence, and overall visible contrast of graded surfaces such that the overall level of visual change becomes Moderate to High, which would also occur with the Proposed Project. The potential for prominent visual contrast associated with in-line views of land scars can be reduced through the implementation of Mitigation Measure VR-4a (Minimize in-line views of retaining walls, land scars, and graveled surfaces — see Section D.18.3.3 above).

Impact VR-5: Construction could result in visual contrast associated with the marking of natural features

If during the course of construction of this alternative, paint or permanent discoloring agents are applied to rocks or vegetation to indicate survey or construction activity limits or to provide direction for construction activities, such markings can result in long-term visible color contrast and substantial visual change, which would also be inconsistent with the VRM Class II Management Objective (for BLM-managed land in Segment 6). This potential visual impact would be the same as for the Proposed Project. The visual contrast associated with the marking of natural features can be reduced through the implementation of Mitigation Measure VR-5a (Prohibit construction marking of natural features — see Section D.18.3.3 above).

Impact VR-6: Construction could result in visual contrast associated with fugitive dust, waste, and trash

Grading activities for the construction of specific sites, access roads, and spur roads have the potential to generate dust clouds, creating visual contrast that can substantially degrade the quality of a site. Implementation of Mitigation Measure AQ-1a (Control fugitive dust; see Section D.3, Air Quality) can reduce this impact. Also, during construction, there is the potential for trash and food-related waste to be discarded inappropriately at construction sites and then be transported by wind and/or animals across the landscape, resulting in additional visual contrast and degradation of landscape quality and character. Implementation of Mitigation Measure WIL-1b (Ensure wildlife impact avoidance and minimization) can reduce this impact. Both of these effects would be the same as for the Proposed Project and neither would be consistent with the VRM Class II Management Objective (for BLM-managed land in Segment 6).

Impact VR-7: Construction could result in the use of night lighting or installation of reflective surfaces, which could cause undesirable night light and glare effects

It is anticipated that some construction activity would take place at night, which could result in substantial adverse night lighting visual effects given the general lack of night lighting along portions of Segment 4 and much of Segments 5 and 6. There is also potential for daytime (or nighttime) glare off of the proposed transmission structures that could cause undesirable glare effects. Such visual degradation would also be inconsistent with the VRM Class II Management Objective (for BLM land in Segment 6). These

visual effects would be the same as for the Proposed Project, and as for the Proposed Project, the potential glare and night lighting effects of the Tower Relocation Alternative can be reduced and managed through the implementation of Mitigation Measures VR-7a (Minimize night lighting at project facilities) and VR-9a (Treat structure surfaces) as previously described in Section D.18.3.3.

Impact VR-8: Long-term presence of the project would result in landscape changes that degrade existing visual character or quality

Impact VR-8 considers the permanent impacts of the Tower Relocation Alternative along Segments 4, 5, and 6 with respect to visual change perceived from sensitive viewing locations including adjacent residences, local roadways, and nearby recreation areas and facilities. The perceived visual change would be associated with new towers, conductors, and FAA hazard markers.

While the structural elements of the Tower Relocation Alternative are the same as for the Proposed Project, the Tower Relocation Alternative differs in the location of some of those elements. With the Proposed Project, some new tower centerlines in Segment 4 (Beaumont and Banning), Segment 5 (Banning), and Segment 6 (Whitewater and Devers) would be sited approximately 50 feet from the edge of the ROW and closer to residences along the south side of the ROW than the existing structures (see Table Ap.5-1 and Figures Ap.5-3a through Ap.5-3~~h~~i). In some cases, the structures and/or conductors would appear immediately adjacent to residential property lines. As a result, the increased visual contrast, structure prominence, and view blockage associated with the close proximity of the structure pairs would result in a Moderate to High degree of visual change, which would constitute a substantial visual effect under the Proposed Project (see the Proposed Project discussion of KOP 6A in Section D.18.3.3 (Impacts and Mitigation Measures) above.

~~In contrast, the~~ In contrast, the Tower Relocation Alternative would produce a somewhat less severe visual impact (compared to the Proposed Project) by relocating various tower pairs approximately 50 feet to the north of the P~~p~~roposed Project tower locations in Segments 4, 5, and 6, as shown in Figures Ap.5-3a through Ap.5-~~3h~~3i. By shifting structures farther away from the closest residences, the Tower Relocation Alternative would achieve structure placements within the ROW that would appear more similar to the existing structure locations and result in slightly less visual change than the change resulting from the Proposed Project. Specifically, and depending on the residential viewing location, the resulting visual contrast would range from Moderate-to-High to High while project dominance would range from Co-Dominant to Dominant. View blockage would generally be Moderate when viewed from all locations. ~~As a result, the Tower Relocation Alternative would cause less incremental visual contrast, structure prominence, and view blockage compared to the Proposed Project when viewed from residential locations along the south side of the ROW.~~, When viewed from some south side residences, the resulting visual change would be Moderate to High, similar to that of the Proposed Project. However, from other residences that are closer to a structure pair (ranging from approximately 75 to 100 feet in distance from the structures), the positional shift of the Tower Relocation Alternative would sufficiently reduce the looming overhead structural presence, such that the resulting overall visual change would appear less substantial (Moderate), particularly when viewed from the back yards of affected residences. ~~From the most adversely affected residences (those closest to a structure pair), the resulting incremental visual change (from the present condition) would be Moderate and the overall visual effect would be less than substantial. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) as described in Section D.18.3.3 above, are recommended to reduce the visual effects of the Tower Relocation Alternative.~~

Impact VR-9: Project operation would create a new source of reflected light and glare

Under the Tower Relocation Alternative, operational lighting at substations and night lighting associated with O&M activity along the ROW would be the same as that for the Proposed Project, resulting in potentially substantial adverse night lighting visual effects. However, the potential glare and visual contrast effects associated with night lighting can be reduced and managed through the implementation of Mitigation Measure VR-7a (Minimize night lighting at project facilities), as discussed in Section D.18.3.3 above.

Steel structure glare and reflectivity and surface color contrast would also be the same as the Proposed Project and can also adversely affect daytime views along much of the route in Segments 4, 5, and 6, even creating distractions to motorists and nearby residents. However, the visibility and reflectivity of new structures can be minimized with various surface treatments. Mitigation Measure VR-9a (Treat structure surfaces — see Section D.18.3.3 above) is recommended to reduce the apparent structure contrast and reflectivity.

CEQA Significance Determination for Tower Relocation Alternative

This section provides a significance determination under CEQA for each of the 9 visual resources impacts associated with the Tower Relocation Alternative.

Impacts VR-1 through VR-7 and VR-9.

The impact significance for 8 of the 9 visual resources impacts resulting from the Tower Relocation Alternative would be the same as under the Proposed Project (see Section D.18.3.5 above), and would include the following impacts and associated mitigation measures.

- VR-1: Construction would result in adverse but less than significant visual effects due to the presence of equipment, vehicles, materials, and workforce (Class III) – Apply Mitigation Measure VR-1a (Screen construction activities from view).
- VR-2: Construction would result in visual contrast due to vegetation removal (Class I) – Apply Mitigation Measures VR-2a (Minimize vegetation removal and ground disturbance) and VEG-1d (Restore or revegetate temporary disturbance areas).
- VR-3: Construction would result in visual contrast associated with retaining walls, land scarring, and establishment of graveled surfaces (Class II) – Apply Mitigation Measure VR-3a (Reduce color contrast of retaining walls, land scars, and graveled surfaces).
- VR-4: Construction could result in visual contrast associated with in-line views of retaining walls and land scars (Class II) – Apply Mitigation Measure VR-4a (Minimize in-line views of retaining walls and land scars).
- VR-5: Construction could result in visual contrast associated with the marking of natural features (Class II) – Apply Mitigation Measure VR-5a (Prohibit construction marking of natural features).
- VR-6: Construction could result in visual contrast associated with fugitive dust, waste, and trash (Class III) – Apply Mitigation Measures AQ-1a (Control fugitive dust) and WIL-1b (Ensure wildlife impact avoidance and minimization).
- VR-7: Construction could result in the use of night lighting or installation of reflective surfaces, which could cause undesirable night light and glare effects (Class II) – Apply Mitigation Measure VR-7a (Minimize night lighting at project facilities).

- VR-9: Project operation would create a new source of reflected light and glare (Class II and Class III) – Apply Mitigation Measures VR-7a (Minimize night lighting at project facilities) and VR-9a (Treat structure surfaces).

Impact VR-8: Long-term presence of the project would result in landscape changes that degrade existing visual character or quality (Class I, III, or IV depending on location as discussed above in Section D.18.3.5)

Under the Proposed Project, the long-term presence of the project would result in significant (Class I) visual impacts in Segment 4 for approximately 16 percent of the residences on the south side of the ROW between Palmer Avenue and Mockingbird Lane, and in Segment 6 when viewed from several residences along the north sides of Amethyst Drive and Haugen-Lehmann Way in the central portion of the Community of Whitewater.

Under the Tower Relocation Alternative, some residences on the south side of the ROW would experience visual impacts similar to those of the Proposed Project (significant – Class I). However, when viewed from the fewer number, although more severely affected, residences where the structures are located in closer proximity (in some cases only 75 to 100 feet from a residence), these Class I visual impacts would be sufficiently reduced (by the Tower Relocation Alternative) to achieve adverse but less than significant (Class III) impact levels by moving the towers farther to the north away from the residences, thereby reducing the looming overhead structural presence, particularly when viewed from the back yards of affected residences. ~~However~~It should be noted that~~,~~ the significant (Class I) visual impact in Segment 5 on Morongo Tribal Lands (when viewed from North Hathaway Street [KOP 11], North Allen Street, North Evans Street, and North Cherry Street in eastern Banning) would remain Significant as the Morongo Band of Mission Indians opted not to consider tower relocation.

D.18.4.2 Iowa Street 66 kV Underground Alternative

The Iowa Street 66 kV Underground Alternative would place a 1,600-foot segment of subtransmission line underground, rather than overhead.

Impacts VR-2 through VR-6 and VR-8 and VR-9

Nine impacts were identified under the Proposed Project for visual resources. Of those 9 impacts, the following 7 impacts would not occur in the vicinity of the Iowa Street 66 kV Underground Alternative due to the placement of the subtransmission line underground along an existing paved road in an urban setting:

- Impact VR-2: Construction would result in visual contrast due to vegetation removal
- Impact VR-3: Construction would result in visual contrast associated with retaining walls, land scarring, and establishment of graveled surfaces
- Impact VR-4: Construction could result in visual contrast associated with in-line views of retaining walls and land scars
- Impact VR-5: Construction could result in visual contrast associated with the marking of natural features
- Impact VR-6: Construction could result in visual contrast associated with fugitive dust, waste, and trash
- Impact VR-8: Long-term presence of the project would result in landscape changes that degrade existing visual character or quality
- Impact VR-9: Project operation would create a new source of reflected light and glare

The remaining two impacts (VR-1 and VR-7) would occur, though the visual effects would be the same for the Iowa Street 66 kV Underground Alternative as they would be for the Proposed Project.

Impact VR-1: Construction would result in adverse visual effects due to the presence of equipment, vehicles, materials, and workforce

Similar to the Proposed Project, construction of the Iowa Street 66 kV Underground Alternative would cause temporary visual effects due to the presence of equipment, materials, and workforce. Construction activities along Iowa Street would include site clearing, trenching, placement of the facilities, site cleanup, and paving. Construction activities would be visible from adjacent local roads including Iowa Street, Barton Road, and Orange Avenue. Construction activities would also be visible from commercial and residential uses along Iowa Street including the Cottage Lane residential subdivision. Throughout the construction period, the industrial character of the activities would cause substantial visual contrast and visual change and would constitute adverse visual effects when viewed from the immediate project vicinity, in general, and the adjacent residences, in particular.

Visibility of construction activities and equipment would be temporary in nature and would not result in a substantial, long-term visual impact, which would be the same as for the Proposed Project. However, the substantial visual contrast associated with the construction of this alternative can be reduced through the implementation of Mitigation Measure VR-1a (Screen construction activities from view; see Section D.18.3.3 above).

Impact VR-7: Construction could result in the use of night lighting or installation of reflective surfaces, which could cause undesirable night light and glare effects

It is anticipated that some construction activity would take place at night, which could result in substantial adverse night lighting visual effects should it occur adjacent to the Cottage Lane residential subdivision. This visual effect would be the same as for the Proposed Project, and as with the Proposed Project, the potential night lighting effects of the Iowa Street 66 kV Underground Alternative can be reduced and managed through the implementation of Mitigation Measure VR-7a (Minimize night lighting at project facilities) as previously described in Section D.18.3.3.

CEQA Significance Determination for Iowa Street 66 kV Underground Alternative

As stated above, 7 of the 9 visual impacts associated with the Proposed Project would not occur in the Iowa Street segment. Implementation of the Iowa Street 66 kV Underground Alternative would eliminate the long-term presence of new aboveground, steel poles adjacent to a residential subdivision, which creates the significant (Class I) visual impact (VR-8) of the Proposed Project in this area. The remaining 2 visual impacts (VR-1, VR-7) that would occur with the Iowa Street 66 kV Underground Alternative would be less than significant with mitigation (Class II). The resulting visual impacts can be reduced and managed through the implementation of Mitigation Measures VR-1a (Screen construction activities from view) and VR-7a (Minimize night lighting at project facilities) as previously described in Section D.18.3.3.

D.18.4.3 Phased Build Alternative

The Phased Build Alternative would retain existing double-circuit 220 kV transmission structures to the extent feasible, remove single-circuit structures, add new double 220 circuit structures, and string all structures with higher-capacity conductors.

Nine impacts to visual resources were identified for the Proposed Project. These impacts would apply as well to the Phased Build Alternative, which would be located in the same corridor and would result in a similar number of structures as the Proposed Project. However, construction-related visual adverse effects would be less severe due to the reduction in construction activities. The full text of all mitigation measures referenced in this section is presented in Section D.18.3.3, except where otherwise noted.

Impact VR-1: Construction would result in adverse visual effects due to the presence of equipment, vehicles, materials, and workforce

Similar to the Proposed Project, construction of the Phased Build Alternative would cause temporary visual effects due to the presence of equipment, vehicles, materials, and workforce. The construction process would also necessitate the use of temporary tower structures, called shoo-flies. However, adverse visual effects from construction activities would be reduced because one set of double-circuit structures would be retained rather than replaced.

Construction activities would include site clearing and grading, erection of the structures, conductor stringing and pulling, and site cleanup and restoration. Construction activities would be visible from I-10, SR 243, nearby and adjacent local roads, nearby residential areas and enclaves, and recreational areas and facilities. Throughout the construction period, the industrial character of the activities would cause substantial visual contrast and visual change and constitute adverse visual effects when viewed from the project vicinity, in general, and the adjacent residences in particular.

Visibility of construction activities and equipment (including shoo-flies) would be temporary in nature and would not result in a substantial long-term visual impact, which would be the same as for the Proposed Project. This alternative would reduce the overall construction activity and the associated short-term visual adverse effect. The substantial short-term visual contrast associated with the construction of this alternative can be further reduced through the implementation of Mitigation Measure VR-1a (Screen construction activities from view; see Section D.18.3.3 above).

Impact VR-2: Construction would result in visual contrast due to vegetation removal

Areas of ground surface disturbance (characterized by high color, line, and texture contrasts) and vegetation removal would remain visible from various vantage points for an extended period after the conclusion of construction activities because revegetation of areas in arid and semi-arid environments (particularly where a portion of the Phased Build Alternative would be located in Segment 6) can be difficult and generally of limited success. This adverse effect would be less severe in this alternative due to the reduction in ground disturbance. However, due to the length of construction and the slow pace of revegetation, this impact and the visual contrast created could appear prominent from some viewing locations ~~in the vicinity of Segment 6~~ for many years and cause Moderate to High levels of visual change, which could result in substantial visual effects. This would also be inconsistent with the VRM Class II Management Objective (applicable to BLM-managed land in Segment 6).

These visual effects would be similar to the Proposed Project, and like the Proposed Project, the Phased Build Alternative's prominent visual contrast associated with vegetation removal can be reduced somewhat through the implementation of Mitigation Measures VR-2a (Minimize vegetation removal and ground disturbance — see Section D.18.3.3 above) and Mitigation Measure VEG-1d (Restore or revegetate temporary disturbance areas; see Section D.4, Biological Resources – Vegetation), though not to levels that would be less than substantial.

Impact VR-3: Construction would result in visual contrast associated with retaining walls, land scarring, and establishment of graveled surfaces

Areas of temporary disturbance where the soil surface (characterized by high color, line, and texture contrasts) is exposed and/or removed or where lighter-colored gravel is placed would exhibit considerable color contrast with adjacent darker vegetation and soil colors. Less ground disturbance would occur in this alternative, which would reduce the severity of this adverse effect. This long-term visual contrast could appear prominent from some viewing locations and cause Moderate to High levels of visual change, which would also be inconsistent with the VRM Class II Management Objective (for BLM land in Segment 6). These visual effects would be similar to the Proposed Project. The prominent visual contrast associated with land scarring and graveled surfaces can be reduced through the implementation of Mitigation Measure VR-3a (Reduce color contrast of retaining walls, land scars, and graveled surfaces see Section D.18.3.3 above).

Impact VR-4: Construction could result in visual contrast associated with in-line views of retaining walls and land scars

Portions of the Phased Build Alternative would be located on hillsides or hilltops. Construction of structures and access and/or spur roads to individual structure locations have the potential to create extended, in-line views of newly graded terrain. These types of views can exacerbate the visibility, prominence, and overall visible contrast of graded surfaces such that the overall level of visual change becomes Moderate to High, which would also occur with the Proposed Project. This adverse effect would be reduced in severity due to the smaller amount of ground disturbance and potentially fewer newly graded spur roads. The potential for prominent visual contrast associated with in-line views of land scars can be reduced through the implementation of Mitigation Measure VR-4a (Minimize in-line views of retaining walls and land scars — see Section D.18.3.3 above).

Impact VR-5: Construction could result in visual contrast associated with the marking of natural features

If during the course of construction of this alternative, paint or permanent discoloring agents are applied to rocks or vegetation to indicate survey or construction activity limits or to provide direction for construction activities, such markings can result in long-term visible color contrast and substantial visual change, which would also be inconsistent with the VRM Class II Management Objective (for BLM-managed land in Segment 6). This potential visual impact would be similar to the Proposed Project but reduced in severity due to the overall reduction in construction activity. The visual contrast associated with the marking of natural features can be further reduced through the implementation of Mitigation Measure VR-5a (Prohibit construction marking of natural features — see Section D.18.3.3 above).

Impact VR-6: Construction could result in visual contrast associated with fugitive dust, waste, and trash

Grading activities for the construction of specific sites, access roads, and spur roads have the potential to generate dust clouds, creating visual contrast that can substantially degrade the quality of a site. Implementation of Mitigation Measure AQ-1a (Control fugitive dust; see Section D.3, Air Quality) can reduce this impact. Also, during construction, there is the potential for trash and food-related waste to be discarded inappropriately at construction sites and then be transported by wind and/or animals across the landscape, resulting in additional visual contrast and degradation of landscape quality and character. Implementation of Mitigation Measure WIL-1b (Ensure wildlife impact avoidance and minimization) can reduce this impact. Both of these effects would be similar to the Proposed Project and neither would be consistent with the VRM Class II Management Objective (for BLM-managed land in

Segment 6). However, these adverse effects would be less severe than in the Proposed Project because the existing double-circuit structures would be retained and reconductored rather than replaced.

Impact VR-7: Construction could result in the use of night lighting or installation of reflective surfaces, which could cause undesirable night light and glare effects

It is anticipated that some construction activity would take place at night, which could result in substantial adverse night lighting visual effects given the general lack of night lighting along portions of the Phased Build Alternative. There is also potential for daytime (or nighttime) glare off of the proposed transmission structures that could cause undesirable glare effects. Such visual degradation would also be inconsistent with the VRM Class II Management Objective (for BLM land in Segment 6). These visual effects would be similar to the Proposed Project, but less severe due to the overall reduction in construction activity and the retention of existing double-circuit structures that have more dull surfaces compared to new structures. The potential glare and night lighting effects of the Phased Build Alternative can be reduced and managed through the implementation of Mitigation Measures VR-7a (Minimize night lighting at project facilities) and VR-9a (Treat structure surfaces) as previously described in Section D.18.3.3.

Impact VR-8: Long-term presence of the project would result in landscape changes that degrade existing visual character or quality

The Phased Build Alternative would result in permanent adverse effects related to visual change perceived from sensitive viewing locations including adjacent residences, local roadways, and nearby recreation areas and facilities. The perceived visual change would be associated with new towers, conductors, and FAA hazard markers. The permanent visual changes in this alternative would be substantially reduced due to the retention of the existing set of double-circuit towers.

For some portions of the Proposed Project, the structures and/or conductors would appear immediately adjacent to residential property lines. As a result, the increased visual contrast, structure prominence, and view blockage associated with the close proximity of the structure pairs would result in a Moderate to High degree of visual change, which would constitute a substantial visual effect under the Proposed Project. In contrast, the Phased Build Alternative would produce a less severe visual impact (compared to the Proposed Project) by retaining the set of existing double-circuit structures near the center of the ROW and constructing one new set of double-circuit structures that generally would be farther from the edge of the ROW (and in all cases no closer to the edge of the ROW) than the ~~comparable~~ northernmost Proposed Project structure~~s~~. By shifting structures farther away from the closest residences and retaining one of the existing structures,~~,~~ the Phased Build Alternative would achieve structure placements within the ROW that would appear more similar to the existing structure locations. As a result, the Phased Build Alternative would cause less incremental visual contrast, structure prominence, and view blockage compared to the Proposed Project when viewed from residential locations along the south side of the ROW, as presented in the following analysis for KOP 6A.

KOP 6A – Sagura Road in the Solera residential golf community. Figure D.18-26A presents a life-size scale view to the northwest toward the Phased Build Alternative route from Sagura Road, one of the residential streets in the Solera residential golf community and just west of Snowberry Road in the City of Beaumont. The view encompasses a portion of the residential development backing on to the existing ROW to the north containing three partially screened transmission lines. Figure D.18-26B presents a visual simulation of (a) the retention of the existing double-circuit 220 kV transmission line, (b) the removal of two smaller transmission lines, and (c) the introduction of a new 220 kV transmission line that would occupy the same location as the northern transmission line of the Proposed Project. Given the relatively unobstructed sightlines, adjacent residents would be afforded Extended viewing durations of the new

and existing facilities in the ROW. Also, given the close proximity and relatively large scale of the transmission line structures, atmospheric conditions would have minimal effect on the viewing experience.

As shown in the simulation, the Phased Build Alternative would result in the replacement of two existing transmission lines of different design with one taller, double-circuit facility with a lattice structure design similar to the transmission line being retained under this alternative. Although the taller structures would cause increased skylining and would appear somewhat more visually prominent, this structural prominence would be partially offset by the structure's more distant (from south side residences) location compared to the smaller transmission line (being replaced) that is currently located closer to the southern edge of the ROW. Also, the similar (to the existing 220 kV structures being retained) design of the new structures would lessen structural visual contrast and the overall structural clutter within the ROW caused by three transmission lines of significantly different designs and heights combined with asynchronous conductor spans.

In the context of the industrial forms and lines of the existing transmission line structures and conductors, the Phased Build Alternative configuration would exhibit Moderate visual contrast and would appear as a foreground, Co-dominant feature relative to the scale of the existing 220 kV line being retained and other landscape features. It should be noted that the slight increase in project dominance caused by the greater height of the new structures would be partially offset by the elimination of the closest (to south side residences) transmission line and northernmost line. Similar to the existing condition, view blockage of higher value landscape features (sky, and mountains to the north) would be Moderate when viewed from the south side of the ROW.

The overall visual change caused by the Phased Build Alternative would be Moderate, and in the context of the existing landscape's Moderate to High visual sensitivity, the resulting visual effect would be less than substantial. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) are recommended to reduce the visual effects of the Phased Build Alternative.

From the most adversely affected residences (those closest to a structure pair), the resulting incremental visual change (from the present condition) would be Moderate and the overall visual effect would be less than substantial. Mitigation Measures VR-8a (Minimize visual contrast in project design) and VR-9a (Treat structure surfaces) as described in Section D.18.3.3 above, are recommended to reduce the visual effects of the Phased Build Alternative.

Impact VR-9: Project operation would create a new source of reflected light and glare

Under the Phased Build Alternative, operational lighting at substations and night lighting associated with O&M activity along the ROW would be the same as that for the Proposed Project, resulting in potentially substantial adverse night lighting visual effects. However, the potential glare and visual contrast effects associated with night lighting can be reduced and managed through the implementation of Mitigation Measure VR-7a (Minimize night lighting at project facilities), as discussed in Section D.18.3.3 above.

Steel structure glare and reflectivity and surface color contrast would be reduced compared to the Proposed Project due to the retention of existing double-circuit structures with surfaces that have dulled over time. The visibility and reflectivity of new structures can be minimized with various surface treatments. Mitigation Measure VR-9a (Treat structure surfaces — see Section D.18.3.3 above) is recommended to reduce the apparent structure contrast and reflectivity.

CEQA Significance Determination for Phased Build Alternative

This section provides a significance determination under CEQA for each of the 9 visual resources impacts associated with the Phased Build Alternative.

Impacts VR-1 through VR-7 and VR-9.

The impact significance for 8 of the 9 visual resources impacts resulting from the Phased Build Alternative would be the same as under the Proposed Project (see Section D.18.3.5 above), but less severe due to the reduction in construction activity and ground disturbance, and the retention of existing double-circuit structures with surfaces that have dulled over time. The following impact significance conclusions and associated mitigation measures remain unchanged in the Phased Build Alternative compared to the Proposed Project:

- VR-1: Construction would result in adverse but less than significant visual effects due to the presence of equipment, vehicles, materials, and workforce (Class III) – Apply Mitigation Measure VR-1a (Screen construction activities from view).
- VR-2: Construction would result in visual contrast due to vegetation removal (Class I) – Apply Mitigation Measures VR-2a (Minimize vegetation removal and ground disturbance) and VEG-1d (Restore or revegetate temporary disturbance areas).
- VR-3: Construction would result in visual contrast associated with retaining walls, land scarring, and establishment of graveled surfaces (Class II) – Apply Mitigation Measure VR-3a (Reduce color contrast of retaining walls, land scars, and graveled surfaces).
- VR-4: Construction could result in visual contrast associated with in-line views of retaining walls and land scars (Class II) – Apply Mitigation Measure VR-4a (Minimize in-line views of retaining walls and land scars).
- VR-5: Construction could result in visual contrast associated with the marking of natural features (Class II) – Apply Mitigation Measure VR-5a (Prohibit construction marking of natural features).
- VR-6: Construction could result in visual contrast associated with fugitive dust, waste, and trash (Class III) – Apply Mitigation Measures AQ-1a (Control fugitive dust) and WIL-1b (Ensure wildlife impact avoidance and minimization).
- VR-7: Construction could result in the use of night lighting or installation of reflective surfaces, which could cause undesirable night light and glare effects (Class II) – Apply Mitigation Measure VR-7a (Minimize night lighting at project facilities).
- VR-9: Project operation would create a new source of reflected light and glare (Class II and Class III) – Apply Mitigation Measures VR-7a (Minimize night lighting at project facilities) and VR-9a (Treat structure surfaces).

Impact VR-8: Long-term presence of the project would result in landscape changes that degrade existing visual character or quality (Class I, III, or IV depending on location)

As with the Proposed Project, impacts of this alternative in other areas would range from beneficial (Class IV) to Class I (significant and unmitigable), depending on the location of existing towers and the distance of the new towers from residences. Under the Proposed Project, the long-term presence of the project would result in significant (Class I) visual impacts in Segment 4 for approximately 16 percent of the residences on the south side of the ROW between Palmer Avenue and Mockingbird Lane, and in Segment 6 when viewed from several residences along the north sides of Amethyst Drive and Haugen-Lehmann Way in the central portion of the Community of Whitewater. Under the Phased Build Alternative, these Class I visual impacts of the Proposed Project would be reduced to less than significant (Class III) levels by locating the new double-circuit towers farther to the north away from the residences. However, the significant (Class I) visual impact in Segment 5 on Morongo Tribal Lands (when viewed from North Hathaway Street, North Allen Street, North Evans Street, and North Cherry Street in eastern

Banning) would remain significant as the Morongo Band of Mission Indians opted not to consider tower relocation. ~~(Class I)~~

D.18.5 Environmental Impacts of No Project Alternative

D.18.5.1 No Project Alternative Option 1

The No Project Alternative Option 1 is described in Section C.6.3.1. It would consist of a new 500 kV circuit, primarily following the Devers-Valley transmission corridor and extending 26 miles between Devers Substation. It would also require a new 40-acre substation south of Beaumont, and 4 new 220 kV circuits extending 7 miles from the new Beaumont Substation to El Casco Substation, primarily following the existing El Casco 115 kV ROW. The remainder of the No Project Alternative, from El Casco Substation to the San Bernardino and Vista Substations, would be identical to the Proposed Project. Information on environmental resources and project impacts are derived for the Devers–Palo Verde 500 kV No. 2 Project EIR/EIS (CPUC and BLM, 2006) and the El Casco System Project Draft EIR (CPUC, 2007); which include nearly all of the No Project alignment.

Devers to Beaumont Substation. The eastern portion of the alignment is characterized by extensive wind turbines and energy transmission infrastructure and is ringed by rugged mountain ranges. South of I-10, the route passes through private lands and public lands administered by the BLM and the U.S. Forest Service, including the Santa Rosa and San Jacinto National Monument and a portion of the San Jacinto Wilderness. The existing transmission lines, with their large 500 kV structures, are a prominent built feature in the landscape along with the other energy infrastructure. This portion of the route is visible to travelers on I-10, SR 62 (a State-designated scenic highway), SR-111 (a State-eligible scenic highway), and Snow Creek Road; hikers on the Pacific Crest Trail; and residents in nearby residential areas. After traversing a portion of the northern ridges of the San Jacinto Mountains, the route descends rocky slopes and passes through the residential community of Cabazon in San Gorgonio Pass. West from Cabazon, the route crosses SR 243 (a State designated scenic highway) and passes through the cities of Banning and Beaumont. This portion of the route is visible at the base of the San Jacinto Mountains from I-10, numerous local roads, SR 243, scattered rural residences in Banning, and new residential subdivisions in Beaumont. The existing 500 kV lines are a prominent built feature in the landscape.

The introduction of an additional 500 kV transmission line would add an additional vertical (towers) and horizontal (conductors) elements to the landscape. Where space permits, the new line would be adjacent to the two existing lines. In areas where space is not available or there are jurisdictional restrictions (such as in the San Jacinto Wilderness) one of the existing single-circuit 500 kV lines would need to be removed and replaced with new double-circuit 500 kV structures. Where new single-circuit towers are installed, they would be generally adjacent to the existing towers. In locations where new double-circuit towers would be needed, these may be taller than the existing 500 kV structures that would remain and not always be aligned with them. Potential impacts associated with construction include the visibility of construction activities and equipment as well as long-term visibility of land scars in arid and semi-arid landscapes. Once installed, the transmission line would introduce contrasting structure color and result in skylining of structures as viewed from locations where the sky would be the backdrop to the structure. The visual impacts of a new line would require application of mitigation such as use of site treatment and restoration methods to reduce land scaring and contrast with the natural landscape texture and color, coloring structural steel to reduce its contrast and reflectance, locating structures to minimize skylining and reduce view blockage, and aligning new structures with existing structures. As with the DPV2 EIR/EIS's analysis of the Devers to Valley transmission line, visual impacts from the new Devers to Beaumont line could be significant and unavoidable.

Beaumont Substation. The substation location is on rolling grasslands at the base of the San Jacinto Mountains, adjacent to Highway 79, the major route connecting Beaumont and I-10 with Hemet and other communities south and of the San Jacinto Mountains. The site would be clearly visible from the highway and potentially visible from some portions of the residential area to the east, including the Childhelp Merv Griffin Village. Two to three sets of 500 kV transmission structures would enter the substation from the south, one to interconnect the new 500 kV line with the substation, the other to loop in one of the existing 500 kV lines. These structures, as well as the taller substation infrastructure would be highly visible and from many viewing angles would be visible against the sky. Exiting the north of the substation would be four 220 kV lines, mounted on pairs of adjacent double-circuit structures.

Strategies to reduce visual impacts would include measures identified for the 500 kV transmission line above, as well as the use of walls, berms, existing landforms, and vegetation to screen lower elements of the substation, and coloring of the substation steel to reduce contrast and reflectance. As well, the positioning of the substation within the property, relative to its visibility form key viewing locations, would be a consideration. However, the new substation would remain highly visible and in stark contrast to the current relatively flat open space.

Beaumont to El Casco Substation. The new 220 kV lines between Beaumont and El Casco Substations would be similar to the 220 kV lines proposed for the West of Devers Upgrade and would consist of adjacent double-circuit towers or poles located adjacent to the existing 115 kV line. The lines would be in existing ROW were available, or would require new adjacent ROW. Exiting the substation, the new lines would extend north approximately 500 feet to the existing 115 kV ROW, which leads to El Casco Substation. The lines would cross Highway 79 and extend west then northwest toward Highway 60 (Moreno Valley Freeway). The ROW is at the base of the foothills, passing through agricultural and low-density residential areas for 2 miles. It then follows San Timoteo Creek northwest for 1.5 miles, where the creek passes under the freeway. The lines remain on the west side of the freeway, paralleling it north for 2 miles, at which point the freeway turns west. Here the transmission lines would cross over the freeway and continue north 1.5 miles to El Casco Substation. The sparse vegetation and hilly terrain would result in the lines being visible from the Moreno Valley Freeway and, to a lesser extent, Oak Valley Parkway. Such visibility would be reduced by using non-reflective steel for towers and aligning tower structures with one another.

Approaches to lessening visual impacts would be similar to those that would apply to the 500 kV lines, including use of non-reflective steel, aligning structures with each other, and minimizing land scarring.

D.18.5.2 No Project Alternative Option 2

No Project Alternative Option 2 would require the construction of over 40 miles of new 500 kV transmission line, following the existing Valley-Serrano 500 kV line. The alternative is described in Section C.6.3.2, and illustrated on Figure C-6b. Construction activities for this alternative would result in temporary but substantial visual contrast from the presence of construction equipment and vehicles and from dust clouds. Visual contrast could also result from vegetation clearance and land scarring for new and improved access roads. These adverse effects would be reduced with implementation of mitigation measures to screen construction activities from view, revegetate disturbed areas, and to control fugitive dust. The new 500 kV circuit would be constructed mostly within an existing ROW, adjacent to an existing 500 kV transmission line.

Although this new 500 kV circuit would be located in and adjacent to an existing transmission corridor, the new 500 kV towers would introduce additional visual contrast, especially for residents in the Perris

Valley and the City of Orange. For residents nearest to the ROW, the resulting visual contrast from the presence of the new transmission structures would be high.

The visual contrast from the new 500 kV circuit would also be high in remote and visually sensitive areas such as the Lake Mathews–Estelle Mountain reserve and the Cleveland National Forest. The use of helicopters for construction and the minimization of new and improved access roads in these natural areas would reduce the resulting visual contrast. Once installed, the transmission line would introduce contrasting structure color and result in skylining of structures as viewed from locations where the sky would be the backdrop to the structure. The visual impacts of a new line would require application of mitigation such as use of methods to reduce land scaring and contrast with the natural landscape texture and color, coloring structural steel to reduce its contrast and reflectance, locating structures to minimize skylining and reduce view blockage, and aligning new structures with existing structures.

D.18.6 Mitigation Monitoring, Compliance, and Reporting

Table D.18-10 presents the mitigation monitoring, compliance, and reporting actions for visual resources.

Table D.18-10. Mitigation Monitoring Program – Visual Resources

MITIGATION MEASURE	VR-1a: Screen construction activities from view. Construction yards, staging areas, and material and equipment storage areas~~,~~ ~~including storage sites for excavated materials,~~ shall be visually screened using temporary screening fencing. Fencing will be of an appropriate structure, material, and color for each specific location. This requirement shall not apply if SCE can demonstrate that construction yards are located away from areas of high public visibility including public roads, residential areas, and public recreational facilities. For any site that SCE proposes to exempt from the screening requirement, SCE shall define the site on a detailed map demonstrating its visibility from nearby roads, residences, or recreational facilities to the CPUC and BLM for review and approval at least 60 days prior to the start of construction at that site.
Location	Construction yards, staging areas, storage areas.
Monitoring / Reporting Action	CPUC/BLM monitor confirms that screening is in place and in good repair.
Effectiveness Criteria	Screening is in place and effectively blocks views. Sites exempted from screening are not readily visible from roads, residences, or recreation facilities.
Responsible Agency	CPUC/BLM
Timing	At time yard or area is being set up, screening is installed. For sites proposed for exemption, maps are provided at least 60 days prior to construction at that site.

Table D.18-10. Mitigation Monitoring Program – Visual Resources

MITIGATION MEASURE	VR-2a: Minimize vegetation removal and ground disturbance. Only the minimum amount of vegetation necessary for the construction of structures and facilities shall be removed during construction. ~~In particular, vegetation within the ROW and ground clearing at the foot of each tower and between towers shall be limited to the clearing necessary to comply with requirements of CPUC General Order 95 and other regulatory requirements.~~Limit ground disturbance in ~~all~~s ~~Segments 2, 3, and 6. Within these segments~~ At the structure locations defined in Table D.18-11, structure and access road scars may be highly visible when located on hill slopes and along ridges, or when visible from elevated vantage points. In order to reduce visual impacts, the boundaries of all areas to be disturbed at the locations defined in Table D.18-11 shall be delineated consistent with the requirements of Biological Resources Mitigation Measure VEG-1c. Staking shall define staging areas, access roads, spur roads, tower locations, pulling sites, and sites for temporary placement of spoils. Stakes and flagging shall be installed before construction and in consultation with the Project Biologist and the CPUC/BLM Environmental Monitor or Visual Specialist. Areas staked shall be as small as possible in order to minimize the visibility of ground disturbance from sensitive viewing locations such as roads, trails, residences, and recreation facilities and areas. Parking areas and staging and disposal site locations shall be similarly located in areas approved by the Project Biologist and CPUC/BLM's Environmental Monitor or Visual Specialist prior to the start of construction. All disturbances by Proposed Project vehicles and equipment shall be confined to the staked and flagged areas.
Location	~~Entire project, with particular emphasis on Segments 2, 3 and 6~~All locations defined in Table D.18-11.
Monitoring / Reporting Action	Confirmation that disturbance areas are clearly delineated and staked or flagged.
Effectiveness Criteria	Project disturbance is limited to authorized areas.
Responsible Agency	CPUC/BLM
Timing	Prior to construction and site disturbance, staking/flagging delineating disturbance area is confirmed to be in place. Duration of project.
MITIGATION MEASURE	VR-3a: Reduce color contrast of retaining walls, land scars, and graveled surfaces. Where construction would unavoidably create land scars or retaining walls visible from sensitive public viewing locations (as defined in Table D.18-11), disturbed soils and new walls shall be treated with an appropriate color or material (Natina Concentrate, Eonite, or Permeon, or similar). The material shall be approved by the CPUC and BLM, and the intent shall be to reduce the visual contrast created by the lighter-colored disturbed soils and rock with the darker soil and vegetated surroundings. SCE shall consult with the CPUC and BLM and/or their authorized representative(s) on a site-by-site basis and obtain written approval prior to the use of any colorants.
Location	Land scars, retaining walls, and graveled surfaces visible from sensitive public viewing locations, as defined in Table D.18-11.
Monitoring / Reporting Action	Coordinate with SCE on locations needing treatment, and confirm treatment applied
Effectiveness Criteria	Visual contrast between land scars or retaining walls and surrounding soil, rock, and vegetation is reduced.
Responsible Agency	CPUC/BLM
Timing	When future disturbance of land surface is not anticipated and walls are complete; SCE and CPUC/BLM identify areas needing treatment.

Table D.18-10. Mitigation Monitoring Program – Visual Resources

MITIGATION MEASURE	VR-4a: Minimize in-line views of retaining walls and land scars. Prior to final Project design, SCE shall prepare a map book and description detailing the preliminary design and location of all access and spur roads, retaining walls, and ground disturbance areas at the locations defined in Table D.18-11 ~~within Segments 2, 3, 4, and 6~~. The map book and description shall be submitted to the CPUC and BLM for field evaluation by the CPUC's Visual Specialist and Designated Project Biologist. In these locations, t~~T~~he CPUC's Visual Specialist or Environmental Monitor will evaluate all proposed access roads, spur roads, retaining walls, and ground disturbance areas ~~within Segments 2, 3, 4, and 6~~ to assess in-line visibility of these Proposed Project features and characteristics from sensitive viewing locations. The analysis shall include consideration of viewing angles, screening, view duration, and other pertinent viewing characteristics. This analysis shall be subsequently provided to SCE for response and final design. In response, SCE shall develop design options to reduce the in-line visibility of these components, including alternative access and spur road routes, the use of "drive and crush" access, and redesign and placement of retaining walls to reduce the need for new roads and retaining walls and to reduce or eliminate the in-line visibility of these facilities. SCE's redesign shall document the proposed resolution for each access road or other visible road feature and shall include the following: ▪ Approximate location, length, and design of alternative access or spur road routes that would replace proposed roads. ▪ Vegetation that would be affected and steepness of terrain for consideration of vegetation and erosion impacts. ▪ Areas where "drive and crush" access is a feasible measure to avoid access road scars (i.e., no grading or vegetation removal is required). SCE shall define frequency of driving, vehicle types to be used, and likelihood of vegetation recovery. ▪ The CPUC/BLM Visual Specialist and Designated Project Biologist shall evaluate whether the overall impacts of the alternate road designs are less than that of the original access road designs.
Location	~~Segments 2, 3 and 6.~~ All locations defined in Table D.18-11.
Monitoring / Reporting Action	Confirmation of receipt of requested maps/tables. Consultation between SCE and CPUC/BLM on alternative approaches to reducing in-line views of scars.
Effectiveness Criteria	In-line views of scars are minimized
Responsible Agency	CPUC/BLM
Timing	Prior to final design, provide map and/or table identifying the retaining walls, roads, or portions of roads that have the potential to create in-line views or scars from sensitive viewing areas
MITIGATION MEASURE	VR-5a: Prohibit construction marking of natural features. SCE shall not apply paint or permanent discoloring agents to rocks or vegetation to indicate survey or construction activity limits or for any other purpose. This measure does not apply to temporary marking agents used to identify underground utilities.
Location	Entire project
Monitoring / Reporting Action	Monitor compliance
Effectiveness Criteria	No paint or permanent discoloring agents are applied to rocks or vegetation
Responsible Agency	CPUC/BLM
Timing	Duration of project

Table D.18-10. Mitigation Monitoring Program – Visual Resources

MITIGATION MEASURE	VR-7a: Minimize night lighting at project facilities. SCE shall avoid night lighting where possible and minimize its use under all circumstances. To ensure this, SCE shall prepare a Night Lighting Management Plan for both construction and operation, incorporating the following general principles and specifications: ▪ Use of portable truck-mounted lighting. ▪ Emphasis on use of low-pressure sodium (LPS) or amber light-emitting diode (LED) lighting. ▪ White lighting (metal halide) would: a) only be used when necessitated by specific work tasks; b) would not be used for dusk-to-dawn lighting; and c) would be less than 3500 Kelvin color temperature. ▪ All lamp locations, orientations, and intensities including security, roadway, and task lighting. ▪ Each light fixture and each light shield. ▪ Total estimated outdoor lighting footprint expressed as lumens or lumens per acre. ▪ Detailed list of anticipated circumstances and activities that would require night lighting including the expected frequency of the activity, the duration of the activity, and the expected amount of lighting that would be necessary for that activity. ▪ Light fixtures that could be visible from beyond project facility boundaries shall have cutoff angles sufficient to prevent lamps and reflectors from being visible beyond the project facility boundary, including security lighting. ▪ Motion sensors and other controls to be used, especially for security lighting such that lights operate only when the area is occupied. ▪ Surface treatment specification that will be employed to minimize glare and sky glow. The Night Lighting Management Plan shall also consider the following factors: ▪ All temporary construction lighting and permanent exterior lighting shall include: (a) lamps and reflectors that are not visible from beyond the construction site or facility including any off-site security buffer areas; (b) lighting that shall not cause excessive reflected glare; (c) direct lighting that shall not illuminate the nighttime sky, except for required FAA aircraft safety lighting (which, if required, shall be an on-demand, audio-visual warning system that is triggered by radar technology); (d) minimization of illumination of the Proposed Project and its immediate vicinity; (e) creation of sky glow caused by project lighting shall be avoided; and (f) compliance with local policies and ordinances to be outlined in the Night Lighting Management Plan. All permanent light sources shall be below 3,500 Kelvin color temperature (warm white) and shall be full cutoff fixtures. ▪ Always-on security lighting is to be limited to one low-wattage, fully shielded, full cutoff light fixture at the main entrance to facilities. All other security lighting is to be motion activated only through the use of passive infrared sensors and controlled as specific zones such that only targeted areas are illuminated. No other lighting is to be utilized on a nightly basis when a facility is not occupied. ▪ Lighted nighttime maintenance is to be minimized or avoided as a routine practice and should occur only during emergencies. The draft Night Lighting Management Plan shall be submitted to the CPUC and BLM at least 60 days prior to the start of construction. Following the BLM's and CPUC's review of the draft plan, and at least 15 days prior to the start of construction, SCE shall submit to the CPUC and BLM for review and approval, a final Night Lighting Management Plan. Construction activities shall not start until CPUC's and BLM's approvals of the plan have been received.
Location	Entire project
Monitoring / Reporting Action	Review draft plan, review and approve final plan, confirm implementation of plan
Effectiveness Criteria	Night lighting is minimized and in compliance with approved night lighting management plan
Responsible Agency	CPUC/BLM

Table D.18-10. Mitigation Monitoring Program – Visual Resources

Timing	At least 60 days prior to construction, draft Night Lighting Management Plan submitted to the CPUC and BLM. At least 15 days prior to the start of construction, final Night Lighting Management Plan submitted. Construction activities shall not start until plan has been approved.
MITIGATION MEASURE	VR-8a: Minimize visual contrast in project design. In the final design of approved project structures, SCE shall use design fundamentals that reduce the visual contrast of new structures and components to the characteristic landscape. These include siting and location; reduction of visibility; repetition of form, line, color, and texture of the landscape; and reduction of unnecessary disturbance. SCE shall provide to the CPUC and BLM for review, a draft Project Design Plan describing the siting, placement, and other design considerations to be employed to minimize Proposed Project contrast. The draft plan must explain how the design will minimize visual intrusion and contrast by blending the earthwork, vegetation manipulation, and facilities with the landscape. Design strategies to address these fundamentals shall be based on the following factors. ▪ Earthwork. Select locations and alignments that fit into the landforms to minimize the sizes of cuts and fills. ▪ Vegetation Manipulation. Use existing vegetation to screen graded areas and facilities from public viewing to the extent feasible. Feather and thin the edges of cleared areas and retain a representative mix of plant species and sizes. ▪ Reclamation and Restoration. Blend the disturbed areas into the characteristic landscape including access and spur roads and disturbed areas created during construction (transmission line structures, and construction yards and staging areas). Replace soil, brush, rocks, and natural debris over these disturbed areas. Newly introduced plant species shall be of a form, color, and texture that blend with the landscape. A draft Project Design Plan shall be submitted to CPUC and BLM at least 60 days prior to the start of construction. If the CPUC or BLM notifies SCE that revisions to the plan are needed before the plan can be approved, within 30 days of receiving that notification, SCE shall prepare and submit for review and approval a revised plan. Once the Plan is made final, SCE shall provide a copy as a courtesy to each jurisdiction through which the project passes.
Location	Entire project
Monitoring / Reporting Action	Receive and review/approve draft and final surface treatment plans
Effectiveness Criteria	Visual contrast of structures and components with local landscape is reduced
Responsible Agency	CPUC/BLM
Timing	At least 60 days prior to ordering structures

Table D.18-10. Mitigation Monitoring Program – Visual Resources

MITIGATION MEASURE	VR-9a: Treat structure surfaces. SCE shall treat the surfaces of all structures and new buildings visible to the public such that: a) their colors minimize visual contrast by blending with the characteristic landscape colors; b) their colors and finishes do not create excessive glare; and c) their colors and finishes are consistent with local policies and ordinances. The transmission structures and conductors shall be non-specular and non-reflective, and the insulators shall be non-reflective and non-refractive. SCE shall consider the use of special galvanizing treatments or post-manufacture application of chemical treatments (such as Natina Steel) to ensure that transmission structures are sufficiently dulled and non-reflective and are of the appropriate color to blend effectively with the surrounding landscape. SCE shall comply with CPUC and BLM requirements regarding appropriate surface treatments for Proposed Project elements. SCE shall provide to the CPUC and BLM for review, a draft Surface Treatment Plan describing the application of colors and textures to all new facility structures, buildings, walls, fences, and components comprising all facilities to be constructed. The draft Surface Treatment Plan must explain how the design will reduce glare and minimize visual intrusion and contrast by blending the facilities with the landscape. The draft plan shall be submitted to CPUC and BLM at least 60 days prior to ordering the first structures that are to be color-treated during manufacture or prior to construction of any of the facility components, whichever comes first. If the BLM or CPUC notifies SCE that revisions to the plan are needed before the plan can be approved, within 30 days of receiving that notification, SCE shall prepare and submit for review and approval a revised plan. The draft Surface Treatment Plan shall include the following components and specifications. ▪ Specification, and 11" x 17" color simulations at life-size scale, of the treatment proposed for use on structures, including structures treated during manufacture. ▪ A list of each major structure, building, tower and/or pole, and fencing specifying the color(s) and finish(es) proposed for each (colors must be identified by name and by vendor brand or a universal designation). ▪ Two sets of brochures and/or color chips for each proposed color. ▪ A detailed schedule for completion of the treatment. ▪ A procedure to ensure proper treatment maintenance for the life of the Proposed Project. ▪ Until SCE receives notification of approval of the Surface Treatment Plan by the CPUC and BLM, SCE shall not specify to the vendors the treatment of any buildings or structures for manufacture and shall not perform the final treatment on any buildings or structures treated on site. Additionally, construction activities shall not start until approval of the plan from the CPUC and BLM has been received. Within 14 days following the completion of treatment on any facility component, SCE shall notify the CPUC and BLM that the component (e.g., structure or building) is ready for inspection.
Location	Entire project
Monitoring / Reporting Action	Receive and review/approve draft and final surface treatment plans
Effectiveness Criteria	Visual contrast of structures and components with local landscape is reduced
Responsible Agency	CPUC/BLM
Timing	At least 60 days prior to ordering structures

Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a

The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.

Segment	Structures	Status	Visibility Discussion
1	1W03, 1E03	Proposed	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	M2-T5, M2-T5	Remove	
2	2N02	Proposed	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	M39-T4	Remove	
	2N03	Proposed	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	2N10	Proposed	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	M41-T1	Remove	
	2N11	Proposed	This elevated hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the northwest, north, and northeast.
	M41-T2	Remove	
	2N12	Proposed	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets and residents to the north and northeast.
	M41-T3	Remove	
	2N16	Proposed	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets (e.g., Prado Lane and Canyon Vista Drive) and residences to the northwest, north, and northeast.
	M42-T1	Remove	
	2N17	Proposed	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets (e.g., Prado Lane and Canyon Vista Drive) and residents to the northwest, north, east, and southeast.
	M42-T2	Remove	
	2N18	Proposed	This elevated and prominent hillslope location would be highly visible to travelers on the numerous nearby public streets (e.g., Prado Lane and Canyon Vista Drive) and residents to the northwest, north, east, and southeast.
	M43-T3	Remove	
	2N23	Proposed	This elevated hillslope location would be prominently visible to travelers on nearby public streets and residents to the northwest, north, and east.
	M43-T2	Remove	
	2N29	Proposed	This elevated hillslope location would be prominently visible to travelers on nearby public streets and residents to the north.
	M43-T6	Remove	
	2N32	Proposed	This elevated hillslope location would be prominently visible to travelers on the adjacent public roads (I-215 and S. Mt. Vernon Ave.) and a retail complex.
	M44-T3	Remove	
3	3S01	Modify	This elevated hillslope location would be prominently visible to travelers on San Timoteo Canyon Road and residents in the Tukwet Canyon residential development.
	M89-T1	Remove	
	3S02	Proposed	This elevated hilltop location would be prominently visible to travelers on San Timoteo Canyon Road and residents in the Tukwet Canyon residential development.
	M29-T2	Remove	
	M89-T2	Remove	
	3N03	Proposed	This elevated hillslope location would be prominently visible to travelers on San Timoteo Canyon Road.
	PP#123273	Remove	
	3S02	Proposed	This elevated hilltop location would be prominently visible to travelers on San Timoteo Canyon Road and residents in the Tukwet Canyon residential development.
	M29-T2	Remove	
	M89-T2	Remove	
	3S03	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road.

Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a

The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.

Segment	Structures	Status	Visibility Discussion
3 (continued)	3N04	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road.
	PP#123272	Remove	
	3S04	Modify	This elevated hilltop location would be prominently visible to travelers on San Timoteo Canyon Road and residents in the Tukwet Canyon residential development.
	M89-T3	Remove	
	3N08, 3S08	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road.
	PP#123270	Remove	
	M30-T1	Remove	
	M90-T1	Remove	
	3N12, 3S12	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road.
	PP#123268	Remove	
	M30-T3	Remove	
	M90-T3	Remove	
	3N16, 3S16	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123265	Remove	
	M31-T1	Remove	
	M91-T1	Remove	
	3N17, 3S17	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123264	Remove	
	M31-T2	Remove	
	M91-T2	Remove	
	3N19, 3S19	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123263	Remove	
	3N20, 3S20	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123262	Remove	
	M31-T3	Remove	
	M91-T3	Remove	
	3N21, 3S21	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123261	Remove	
	M32-T1	Remove	
	3N22, 3S22	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	M92-T1	Remove	
	3N23, 3S23	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123260	Remove	
	M32-T2	Remove	
	M92-T2	Remove	
	3N24, 3S24	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123259	Remove	

Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a

The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.

Segment	Structures	Status	Visibility Discussion
3 (continued)	3N25, 3S25	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123258	Remove	
	M32-T3	Remove	
	M92-T3	Remove	
	3N26, 3S26	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123257	Remove	
	3N27, 3S27	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123256	Remove	
	M33-T1	Remove	
	M93-T1	Remove	
	3N28, 3S28	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123255	Remove	
	M33-T2	Remove	
	M93-T2	Remove	
	3N29, 3S29	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123254	Remove	
	3N31, 3S31	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123253	Remove	
	M33-T3	Remove	
	3N32, 3S32	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123252	Remove	
	M33-T4	Remove	
	M93-T3	Remove	
	3N33, 3S33	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123251	Remove	
	M33-T5	Remove	
	M93-T4	Remove	
	3N35, 3S35	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123250	Remove	
	M34-T1	Remove	
	M94-T1	Remove	
	3N36, 3S36	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123249	Remove	
	3N37, 3S37	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123248	Remove	
	M34-T2	Remove	
	M94-T2	Remove	

Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a

The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.

Segment	Structures	Status	Visibility Discussion
3 (continued)	3N38, 3S38	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123247	Remove	
	M34-T3	Remove	
	M95-T1	Remove	
	3N39, 3S39	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123246	Remove	
	3N40, 3S40	Proposed	This elevated ridgeline location would be prominently visible to travelers on San Timoteo Canyon Road and nearby rural residents.
	PP#123245	Remove	
	M35-T1	Remove	
	M95-T2	Remove	
4	4N02, 4S02	Proposed	This ridgeline location would be prominently visible to visitors to San Gorgonio Memorial Park and Cemetery.
	M17-T3	Remove	
	M77-T3	Remove	
	PP#123351	Remove	This ridgeline location would be prominently visible to visitors to San Gorgonio Memorial Park and Cemetery.
	PP#123350	Remove	This ridgeline location would be prominently visible to visitors to San Gorgonio Memorial Park and Cemetery.
	4N03, 4S03	Proposed	This ridgeline location would be prominently visible to visitors to San Gorgonio Memorial Park and Cemetery.
	M18-T1	Remove	
	M78-T1	Remove	
	4N50, 4S50	Proposed	This elevated location would be prominently visible to travelers on Palmer Avenue and Cherry Valley Boulevard, as well as to residents in the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	PP#123287	Remove	
	M27-T1	Remove	
	M87-T1	Remove	
	4N51, 4S51	Proposed	This ridgeline location would be prominently visible from Palmer Avenue and residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	PP#123286	Remove	
	4N52, 4S52	Proposed	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	PP#123285	Remove	
	M27-T2	Remove	
	M87-T2	Remove	
	4N53, 4S53	Proposed	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	PP#123284	Remove	
	4N54, 4S54	Proposed	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	PP#123283	Remove	
	M27-T3	Remove	
	M87-T3	Remove	

Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a

The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.

Segment	Structures	Status	Visibility Discussion
4 (continued)	4N55, 4S55	Proposed	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	PP#123282	Remove	
	M27-T4	Remove	
	M87-T4	Remove	
	4N56	Modify	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	4S56	Proposed	
	PP#123281	Remove	
	M88-T1	Remove	
	4N57, 4S57	Proposed	This Ridgeline Location Would Be Prominently Visible From Residences And Roads Within The Tukwet Canyon Residential Development Located Immediately South And Adjacent To The Corridor.
	PP#123280	Remove	
	4N58	Proposed	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	PP#123279	Remove	
	4S58	Modify	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	M88-T2	Remove	
	4S59	Modify	This ridgeline location would be prominently visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
	4S60	Proposed	This hillslope location would be visible from residences and roads within the Tukwet Canyon residential development located immediately south and adjacent to the corridor.
5	PP#123359	Remove	This ridgeline location would be visible from residences and roads within the north Banning residential neighborhoods located immediately south and adjacent to the corridor.
	M17-T1	Remove	
	M77-T1	Remove	
	PP#123358	Remove	This ridgeline location would be visible from residences and roads within the north Banning residential neighborhoods located immediately south and adjacent to the corridor.
6	6N28	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M3-T2	Remove	
	M64-T1	Remove	
	6S28	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	T250	Remove	
	6S28A	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	T249	Remove	
	T248	Remove	
	6N29	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M4-T1	Remove	
	M64-T2	Remove	

Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a

The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.

Segment	Structures	Status	Visibility Discussion
6 (continued)	6S29	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T247	Remove	
	T247A	Remove	
	6N30	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M4-T2	Remove	
	M64-T3	Remove	
	6S30	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T246	Remove	
	6S30A	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T245	Remove	
	6N31	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M4-T3	Remove	
	M65-T1	Remove	
	6S31	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T244	Remove	
	6S31A	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T243	Remove	
	6N32	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	M5-T1(1)	Remove	
	M65-T2	Remove	
	6S32	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T241	Remove	
	6S33	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T240	Remove	
	T239	Remove	This ridgeline location would be prominently visible from the Interstate 10 travel corridor.
	6N34	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	M5-T2	Remove	
	M65-T3	Remove	
	6S34	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor.
	T238	Remove	
	6N35	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	M5-T3	Remove	
	M66-T1	Remove	
	6S35	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	T237	Remove	
	T236	Remove	This ridgeline location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.

Table D.18-11. Structure Locations Subject to Mitigation Measures VR-2a, VR-3a, and VR-4a

The following structure locations have been identified as subject to Visual Resource Mitigation Measures VR-2a, VR-3a, and VR-4a based on the high visibility of their respective installation/removal impact areas to nearby vantage points including residences, roads, recreational facilities, and other public locations. However, if structure installation, modification, or removal activities result in benign visual outcomes (lack of visual contrast), the mitigation described in Mitigation Measures VR-2a, VR-3a, and VR-4a would not be necessary.

Segment	Structures	Status	Visibility Discussion
6 (continued)	6S36	Proposed	This elevated hillslope location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	T235	Remove	
	6N37	Proposed	This ridgeline location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	M6-T1	Remove	
	M66-T2	Remove	
	6S37	Proposed	This elevated alluvial fan location would be prominently visible from the Interstate 10 travel corridor and the Whitewater residential community to the west.
	T234	Remove	
	T229	Remove	This location would be prominently visible from the nearby Pacific Crest Trail.
	6S41	Proposed	This location would be prominently visible from the nearby Pacific Crest Trail.
	T228	Remove	
	T228	Remove	This location would be prominently visible from the nearby Pacific Crest Trail.
	6N42	Proposed	This location would be prominently visible from the nearby Pacific Crest Trail.
	6S42	Proposed	This location would be prominently visible from the nearby Pacific Crest Trail.

D.18.7 References

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