3.2 AESTHETICS AND VISUAL RESOURCES

This section addresses the effects on aesthetics and visual resources that would be caused by the proposed Tule Wind Project. The following discussion describes the existing environmental setting in the surrounding area, existing federal, state, and local regulations regarding visual resources, and an analysis of the impacts from the proposed project and alternatives. A Draft Visual Resources Assessment, prepared by HDR Engineering, Inc. (April 2010), was used to evaluate potential impacts to the visual environment and is included in Appendix F.

The project area is subject to Bureau of Land Management (BLM) and County of San Diego (County) jurisdiction. Both of these governing bodies have guidelines and criteria to assess visual resources and potential impacts. The BLM portion of the project will be subject to the National Environmental Policy Act (NEPA) and the County portion will be subject to the California Environmental Quality Act (CEQA). The BLM Visual Resource Management (VRM) guidelines were utilized for the project impact analysis on visual resources; however, the County Visual Resource Guide was also consulted in this analysis.

The BLM is required to designate VRM Classes for all areas of BLM land based on three key elements (scenic quality, sensitivity level, and distance zones). The BLM is required to manage all uses and activities consistent with an area's VRM Class as established in the Eastern San Diego County Resource Management Plan/Record of Decision (RMP/ROD). It is not BLM policy to determine, at the RMP level, which land uses or activities to restrict based on VRM Class. Rather, the BLM must consider, at the site-specific activity level, all uses proposed for an area with a given VRM Class and determine if those uses would be consistent with the objectives for that Class.

3.2.1 Affected Environment/Environmental Setting

Regional Setting

The proposed facilities associated with the Tule Wind Project traverse BLM, tribal, state, and privately owned land parcels in the expansive deserts east of Southern California's highly urbanized coastal area. The visual study area is located entirely within the basin and range physiographic province in the Salton Trough, which is characterized by desert basins, jagged mountain ranges, and wide valleys bounded by alluvial slopes, or bajadas. Views from travel routes tend to be of broad, sweeping desert, bordered by north-south trending rugged terrain in semi-arid landscape.

Other federally administered land includes the Cleveland National Forest to the northwest, and the Anza-Borrego National Forest to the east. The project area also neighbors the Manzanita, Ewiiaapaayp, La Posta, and Campo Indian Reservations.

Project Setting

The project area is located in the eastern portion of San Diego County and lies in McCain Valley in the In-Ko-Pah Mountains. It is north of Interstate 8 (I-8) and the community of Boulevard. The topography of the area is gently-to-steeply sloping with an elevation ranging between 3,600 and 5,600 feet above mean sea level (AMSL). The project area is accessible via I-8, State Route 94 (SR-94) and Ribbonwood Road, Old Highway 80, and McCain Valley Road. Due to the rugged topography, existing access to the project site is restricted to established roadways and trails. The main project site access points are from Ribbonwood Road, McCain Valley Road, and Crestwood Road. Development within the region includes

sporadic sprawling ranchland and large residential lots. Existing wind turbines are located approximately 5 miles to the southwest of the project area on the Campo Indian Reservation.

The project area is located within the McCain Valley Conservation Area, which includes the McCain Valley (including Lark Canyon Off-Highway Vehicle (OHV) Area, Lark Canyon Campground, and the Cottonwood Campground), located north of I-8 and west of the Carrizo Gorge Wilderness. The area is identified by BLM as McCain Valley West Visual Resource Area, as shown in **Figure 3.2-1.**

Vegetation within the study area contains four major vegetation communities: interior live oak woodland, southern mixed chaparral, disturbed southern mixed chaparral, and big sagebrush scrub. There are visible water features located within the project area, although most of the drainages present flow only seasonally or during precipitation. Tule Creek is the primary drainage feature in the project vicinity and drains the central portion of McCain Valley, towards the southeast.

According to the San Diego County Scenic Highway Criteria, I-8 is designated as a second priority scenic route from El Cajon city limits to State Route 79 (SR-79) located west of the project area. Under the County of San Diego General Plan Update (not yet adopted), this designation will continue to the Arizona border. If the General Plan Update is approved prior to the construction of the project, then visual impacts to a County scenic highway would exist. Additionally, the California Assembly and Senate passed a resolution in 2006 designating Old Highway 80 through San Diego County as "Historic U.S. Highway 80." Portions of SR-94 are part of the County Scenic Highway System, although not in the project vicinity.

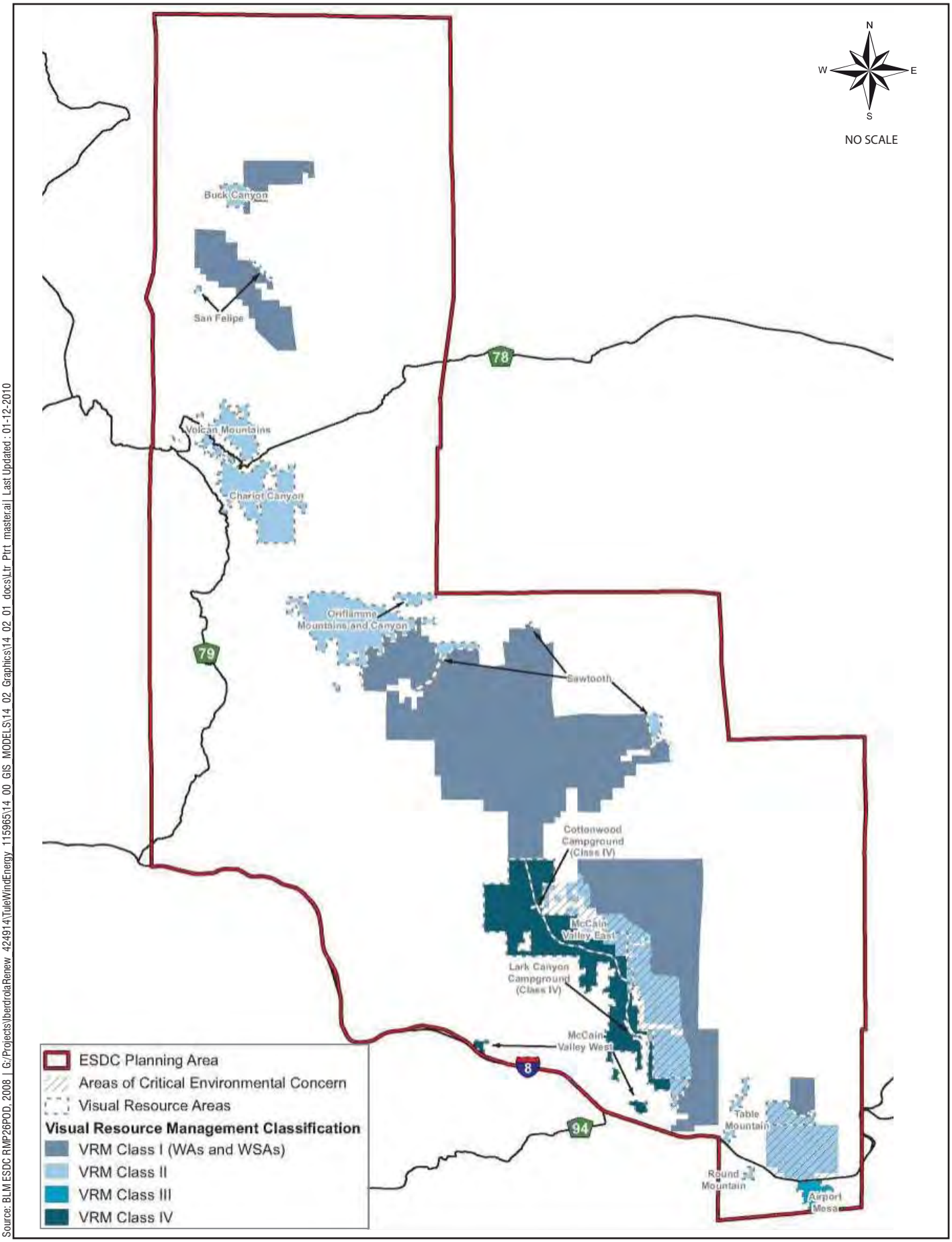
The community of Boulevard is seeking designation as a Dark Sky community. The San Diego Astronomy Association Observatory is located on Tierra Del Sol Road, approximately 8 miles south of the project area. In addition, the Palomar Observatory is located in the Cleveland National Forest approximately 5 miles northwest of the Ewiiaapaayp portion of the project area.

Bureau of Land Management Visual Resource Management Methodology

According to the BLM H-1601-1 Land Use Planning Handbook, the BLM makes land use decisions in accordance with the VRM objectives (management classes). VRM management classes are based on an inventory of visual resources and management considerations for other land uses. VRM management classes may differ from VRM inventory classes, based on management priorities for land uses. BLM manages resources uses and management activities consistent with the VRM objectives established in the land use plan.

The BLM identifies four VRM Classes (I through IV) with specific management prescriptions for each class, which are discussed further in Section 3.3.3. Contrast ratings are required for all major projects proposed on public lands that fall within VRM Class I, II, and III areas which have high sensitivity levels.

The McCain Valley West Visual Resource area was previously classified as a Class II. The increased OHV and camping use warranted a reconsideration of the areas BLM VRM classification. In recognition of concerns raised by the public, and in an effort to meet goals to support renewable energy development on public lands, the BLM has designated McCain Valley East and West sections as a VRM Class IV. The level of surface disturbance, loss of vegetative cover and resulting visual contrast are valid reasons for reclassifying the highest use areas as VRM Class IV. Class IV areas, as defined in the BLM Resource



Source: BLM ESDC RMP26POD_2008 | G:/Projects\IberdrolaRenew_424914\TuleWindEnergy_115965\14_00_GIS_MODELS\14_02_Graphics\14_02_01_docs\Ltr Prt_master.ai | Last Updated : 01-12-2010

BLM Visual Resource Management Areas

FIGURE 3.2-1

Management Plan is "to provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high." The BLM has determined that the high-quality wind resources in McCain Valley and its proximity to the existing utility corridor make it a logical area to focus wind energy development, and therefore warranted a change in the VRM Class in McCain Valley.

The project is not required to assess a Class IV area in accordance with the BLM Visual Resource Guidelines; however, the BLM visual resource methodology was used to make a visual assessment for lands located within the County of San Diego jurisdiction.

Approach to Baseline Analysis

This visual resource analysis set forth in this section follows the BLM VRM System to assess the aesthetic conditions of the landscape, characterize the current viewing environment, and evaluate the potential impacts of the proposed project on the visual environment utilizing the BLM Visual Contrast Rating System. Using BLM's Visual Contrast Rating System requires the identification of Key Observation Points (KOPs). BLM defines a "key observation point" as "one or a series of points on a travel route or at a use area or a potential use area, where the view of a management activity would be most revealing." The KOPs within the study area are used to determine the potential visual impacts of the proposed project facilities on the existing environment. The BLM Visual Contrast Rating System was applied to assess both public and privately owned land.

Key Observation Points

BLM's Visual Contrast Rating System requires identification of Key Observation Points (KOPs) within the study area to analyze the potential visual impacts of the proposed project facilities. KOPs were identified along commonly traveled routes and visual simulations were rendered from selected KOPs which were determined to have visual sensitivity. KOPs and potential visual impacts were rendered at nine key locations and are shown in **Figures 3.2-2 through 3.2-10**, respectively, and **Figure 3.2-11,** Visual Impact Map.

- KOP 1 – I-8 at Ribbonwood Road – This interchange at I-8 provides access to Ribbonwood Road which traverses north and south and provide access to SR-94 and Old Highway 80 to the south.
- KOP 2 – Ribbonwood Road north of I-8 – Along the Ribbonwood alignment, north of I-8,
- KOP 3 – I-8 at McCain Valley Road – I-8 is an overpass for McCain Valley Road which is accessible from Old Highway 80.
- KOP 4 – McCain Valley Road at Rough Acres Ranch – Located 2 miles north of the intersection of I-8 and McCain Valley Road.
- KOP 5 – McCain Valley Road at Lark Canyon OHV Area - Located approximately four miles north of the intersection of McCain Valley Road and I-8.
- KOP 6 – McCain Valley Road at Carrizo Gorge Scenic Lookout – Located approximately 3 miles from Lark Canyon OHV area at the entrance to Carrizo Gorge.
- KOP 7 – Cottonwood Campground – Located off McCain Valley Road in the McCain Valley Resource Conservation Area.
- KOP 8 – McCain Valley Road at northern terminus – The drivable portion of McCain Valley Road ends 6 miles north of Carrizo Gorge.

- KOP 9 – Old Highway 80 and Boulevard– Located along Old Highway 80, south of I-8 near Jewel Valley Road. Substation

Visual simulations were rendered from selected KOPs which were determined to be critical vies in areas of visual sensitivity. The KOPs were selected with guidance from BLM and Count visual resource professionals. The number of turbines visible in the visual simulations is listed below, although the visual simulations are limited to a 100-degree view, which is slightly narrower than the average vision span of 120 degrees. When considering additional factors such as peripheral vision, angle of view, lighting, topography and location of viewer, more turbines may be visible than the visual simulations illustrate. The following key view simulations are found in **Figures 3.1-2 through 3.1-3, 3.1-3a, 3.2-3b and 3.2-8 through 3.2-9**, respectively:

- *Boulevard* – A view oriented north toward McCain Valley from just south of I-8 near the town of Boulevard. From this view four turbines will be visible; R-11, R-12, G-18, and G-19.
- *Boulevard Substation Tie-In* – A view on Old Highway 80 where the proposed transmission lines connect with the proposed SDG&E Rebuilt Boulevard Substation. No turbines will be visible from this view.
- *Boulevard Substation Tie-In (Alternative 2)* – A view of Old Highway 80 where the proposed transmission lines connect with the Boulevard Substation. No turbines will be visible from this view.
- *Boulevard Substation Tie-In (Alternative 3)* – A view on Old Highway 80 where the proposed transmission lines connect with the Boulevard Substation.
- *McCain Valley Road* – A view looking north on McCain Valley Road near I-8. No turbines will be visible from this view.
- *McCain Valley Road* – A view looking north on McCain Valley Road with Rough Acres Ranch to the west. From this view three turbines will be visible; T-13, R-8, R-9.
- *Lark Canyon OHV* – A view looking west from the OHV staging area at Lark Canyon. From this view two turbines will be visible; R-10 and R-11.
- *Carrizo Gorge* – A view looking southwest from McCain Valley Road at the entrance to the Carrizo Gorge Scenic Area, with the Kumeyaay Wind Turbines in the background. From this view five turbines will be visible; F-1 through F-4, and F-6.
- Old Highway 80 – A view facing east on Old Highway 80 near the intersection of ribbon wood Road. No turbines will be visible from this view.
- Ribbonwood Road – A view facing northeast along Ribbonwood Road. From this view eight turbines will be visible; R-11, R-12, G-12 through G-17.

According to **Figure 3.2-10**, Critical View Map, the majority of the visual impacts would be looking northeast. BLM is required to designate VRM classes for all areas of BLM land, based on three key elements (scenic quality, visual sensitivity, and distance zones). These key elements are further described below.

A view oriented north toward McCain Valley from just south of I-8 near the town of Boulevard.

Source: HDR, 2010 | G:/Projects\IberdrolaRenew 424914\TuleWindEnergy 1159651\14 00 GIS MODELS\14 02 Graphics\14 02 01 docs\Ltr Prt master.ai | Last Updated : 01-21-2010

Key View from Boulevard

FIGURE 3.2-2

A view on Old Highway 80 where the proposed transmission lines connect with the Boulevard Substation.

Source: HDR, 2010 | G:/Projects\IberdrolaRenew 424914\TuleWindEnergy 1159965\14 00 GIS MODELS\14 02 Graphics\14 02 01 docs\Ltr Prt1 master.ai | Last Updated : 01-21-2010

Key View Boulevard Substation Tie-In

FIGURE 3.2-3

A view on Old Highway 80 where the proposed transmission lines connect with the Boulevard Substation.

Source: HDR, 2010 | G:/Projects\IberdrolaRenew_424914\TuleWindEnergy_115965\14_00_GIS_MODELS\14_02_Graphics\14_02_01_docx\Tule_Master.ai | Last Updated : 01-21-2010

Key View Boulevard Substation Tie-In (Alternative 2)

FIGURE 3.2-3a

A view on Old Highway 80 where the proposed transmission lines connect with the Boulevard Substation.

Source: HDR, 2010 | G:/Projects\IberdrolaRenew_424914\TuleWindEnergy_115965\14_00_GIS_MODELS\14_02_Graphics\14_02_01_docs\Un-Interal| Last Updated : 01-21-2010

Key View Boulevard Substation Tie-In (Alternative 3)

FIGURE 3.2-3B

A view looking north on McCain Valley Road from I-8.

Key View McCain Valley from I-8

FIGURE 3.2-4

A view looking north on McCain Valley Road with Rough Acres Ranch to the west.

Key View from End of McCain Valley Road

FIGURE 3.2-5

A view looking west from the OHV staging area at Lark Canyon.

Key View from Lark Canyon OHV

FIGURE 3.2-6

A view looking southwest from McCain Valley Road at the entrance to the Carrizo Gorge Scenic Area. The existing Kumeyaay Wind Turbines are evident in the background.

Source: HDR, 2010 | G:/Projects\IberdrolaRenew_424914\TuleWindEnergy_115965\14_00_GIS_MODELS\14_02_Graphics\14_02_01_docx\Tule_Alternative | Last Updated : 01-21-2010

Key View from Carrizo Gorge

FIGURE 3.2-7

This view is facing east on Old Highway 80 near the intersection of Ribbonwood Road. From this area, the transmission line corridor connecting to the Boulevard Substation is visible.

Source: HDR, 2010 | G:/Projects\IberdrolaRenew 424914\TuleWindEnergy 115965\14 00 GIS MODELS\14 02 Graphics\14 02 01 docs\Ltr Prt master.ai | Last Updated : 01-21-2010

Key View from Old Highway 80 and Ribbonwood Road

FIGURE 3.2-8

This view is facing northeast along Ribbonwood Road. Views from this vantage reveal several wind turbines as well as the alternative transmission line. There are several residences located in this area with views affected by the proposed project facilities.

Source: HDR, 2010 | G:/Projects\IberdrolaRenew_424914\TuleWindEnergy_115965\14_00_GIS_MODELS\14_02_Graphics\14_02_01_docx\Ch3Aesthetics | Last Updated : 01-21-2010

Key View from Ribbonwood Road North of I-8 -East View

FIGURE 3.2-9

| G:\GIS_Production\Projects\IberdrolaRenew_424914\TuleWindEnergy_115965\14_00_GIS_MODELS\14_03_Map_Docs\14_03_04_mxd\EIR\Topography.mxd | Created by: AB, YL | Last Updated : 01-15-10

Proposed Turbine Location

Sensitive Visual Receptors

Number of Visible Turbines

1-15

16-30

31-45

45-60

61-88

THING VALLEY RD
CANEBRAKE RD
CROSS RD
CRESTWOOD RD
BLACKWOOD RD
OLD MINE RD
HUBBLE RD
MANZANITA COTTONWOOD RD
LOST VALLEY RD
MC CAIN VALLEY RD
RIBBONWOOD RD
JEWEL VALLEY RD
JEWEL VALLEY WY
OLD HIGHWAY 80
HI PASS RD
RED SHANK LN
LILAC LN
QUAIL RUN
ANGEL DR
LIVE OAK SPRINGS RD
CHURCH RD
SHASTA WY
SOL WOOD
WORTHINGTON RD
PINION PINE TL
TIERRA DEL SOL RD
SHASTA TL
LA CINA VERDE
CRESTWOOD / BIA 12
WILLIAMS RD
MILLER VALLEY RD
CAM TRES AVES
GREAT BLUE HERON WY
STAGECOACH SPRINGS RD
GREAT EAGLE WY
HONEY BEE LN
LILAC TE
MANZANITA DUCE
CLUB PL
RIDGE VIEW LN
STARSHIP ST

N W E S

0 0.5 1 2 Miles

Visual Impact Map

FIGURE 3.2-10

Iberdrola | Tule Wind Project | Applicant's Environmental Document

HDR ONE COMPANY | *Many Solutions*℠

Scenic Quality

Scenic quality is determined by rating the distinctiveness and diversity of interest of a particular natural landscape in the context of form, line, color, and texture. **Table 3.2-1** presents the BLM Scenic Quality Class Rating definitions.

Table 3.2-1. BLM Scenic Quality Class Rating

Scenic Quality Class Rating	Definition
Class A - Unique	Landscapes are represented by unique lands of outstanding or distinctive diversity or interest, including high-relief mountains, escarpments, highly dissected canyons, monumental landforms, and scenic river ways.
Class B – Above Average	Landscapes are lands of above average diversity of interest and consist of rolling, vegetated hills and valleys, mesas, buttes, and unique landforms that define the environment.
Class C - Common	Landscapes are primarily common and of minimal diversity, such as high desert plateaus and desert plains areas with few distinguishing features.

Source: BLM Manual H-8410-1. Visual Resource Inventory 1986

A scenic quality evaluation was used to determine the natural landscape based on the degree of distinctiveness, which takes into consideration such factors as landform, vegetation, color, water, adjacent scenery, scarcity, and cultural modification. The following are baseline conditions of the overall scenic quality ratings from each of the nine identified KOPs:

1. I-8 at Ribbonwood Road

Location: The interchange at I-8 provides access to Ribbonwood Road which traverses north and south. This interchange also provides access to SR-94 and Old Highway 80 to the south.

Environmental Setting: At this viewpoint, both I-8 and Ribbonwood Road corridors are dominant in the viewshed. To the north, common desert landscape is visible and is bisected by a paved roadway which traverses north on rolling terrain. This roadway also provides access to several residences located on large lots with views of the proposed project area. This KOP is located outside of BLM land.

Overall Scenic Quality Rating: Class C – Common.

2. Ribbonwood Road North of I-8

Location: Along the Ribbonwood Road, north of I-8, there are some low density private residences and ranches. In this rural area, Ribbonwood Road provides access to expansive ranch lands and residences and a parcel of Campo land.

Environmental Setting: This area is located north of I-8 on Ribbonwood Road. Views are oriented to the west and a construction access road that would serve the project site. This area is characterized largely by open swaths of desert landscape typical of the area, as well as some residences located on large lots. This KOP is located outside of BLM land.

Overall Scenic Quality Rating: Class B – Above Average.

3. I-8 at McCain Valley Road

Location: There is no interchange located at McCain Valley Road and I-8; however, McCain Valley Road is accessible heading north off Old Highway 80. In this area, McCain Valley Road is paved and flanked by existing monopole transmission lines that parallel the road to the north and south.

Environmental Setting: I-8 is a dominant feature in this area; however, when the viewer is oriented to the north, the area is characterized by sprawling desert landscapes, with rolling hills and ridgelines present. Several exposed soil trails and private two-track roads are evident throughout the landscape. Low-lying desert scrub brush is prevalent throughout the area. This KOP is located outside of BLM land.

Overall Scenic Quality Rating: Class C – Common.

4. McCain Valley Road at Rough Acres Ranch

Location: This point is located approximately 2 miles north of the intersection of I-8 and McCain Valley Road. Rough Acres Ranch is signed and located to the west and from McCain Valley Road development on Rough Acres Ranch is visible. At this point, McCain Valley Road becomes unpaved.

Environmental Setting: This area is characterized by some ranch development and represents the beginning of the area of primitive, recreational land (e.g., unpaved roadway, large open vistas), low-lying desert scrub vegetation, and rocky outcroppings and ridgelines also begin to define the landscape. This KOP is located outside of BLM land.

Overall Scenic Quality Rating: Class C – Common.

5. McCain Valley Road at Lark Canyon OHV Area

Location: The Lark Canyon OHV area is located approximately 4 miles north of the intersection of McCain Valley Road with I-8.

Environmental Setting: This area is characterized by exposed soil trails, rolling hills, and open views from atop the ridgelines in the area. Vegetation is sparse in this area due to a high volume of OHV use. This KOP is located on BLM land.

Overall Scenic Quality Rating: Class C – Common.

6. McCain Valley Road at Carrizo Gorge Scenic Lookout

Location: Located approximately 3 miles from Lark Canyon OHV area at the entrance to Carrizo Gorge.

Environmental Setting: From this vantage point, views are obstructed by hills and ridgelines, and exposed soil roadways and trails are present. Vegetation is sporadic in this area. From the Carrizo Gorge lookout located less than one-half mile east of McCain Valley Road. A panoramic view of the ravine is visible. This KOP is located on BLM land.

Overall Scenic Quality Rating: Class B – Above Average.

7. Cottonwood Campground

Location: Cottonwood campground is located off of McCain Valley Road in the McCain Valley Resource Conservation Area.

Environmental Setting: The Cottonwood Campground has 25 campsites and is accessible by passenger vehicle and horse. Several trailheads, which provide access to overlooks and scenic views, are located near the campground. The Cottonwood Campground is characterized by large oak trees and undulating topography typical of the region. This KOP is located on BLM land.

Overall Scenic Quality Rating: Class B – Above Average.

8. McCain Valley Road at Northern Terminus

Location: The drivable portion of McCain Valley Road ends at a point about 6 miles north of Carrizo Gorge.

Environmental Setting: This area is characterized by a southerly view of McCain Valley Road. The exposed soil road meanders through the landscape flanked by ridgelines to the east and west and varying densities of desert scrub vegetation. Views to the north reveal bajadas with rocky foothills and smooth, green ridgelines. This KOP is located on BLM land.

Overall Scenic Quality Rating: Class B – Above Average.

9. Old Highway 80 and Existing Boulevard Substation

Location: This area is located along the Old Highway 80, a well-traveled arterial road south of I-8 near Jewel Valley Road.

Environmental Setting: This area is characterized largely by residential development with some retail development. Additionally, SDG&E operates the Boulevard Substation and several corridors of monopole wood transmission lines run parallel to Old Highway 80, leading to the Boulevard Substation. Views in this area are of common desert landscape with some human-made development evident. Direct views of the project site are largely obstructed by topography, vegetation, distance, and development. KOP is located outside BLM land.

Overall Scenic Quality Rating: Class C – Common.

Of the nine KOPs analyzed, four KOPs had an overall scenic quality rating of Above Average, Class B; Ribbonwood Road north of I-8, McCain Valley at the Carrizo Gorge Lookout, Cottonwood Campground, and McCain Valley Road at the northern terminus, with the remaining listed as common.

Viewer Sensitivity

A sensitivity analysis was used as a baseline to evaluate sensitive viewing for the study area. Given the public concern for visual quality and preservation of aesthetic resources, views from highly visible and prominent locations are considered highly sensitive.
Viewer sensitivity levels range from:

High Sensitivity

- Landforms that form community backdrops or are prominent at a regional scale;
- Areas with congressional or state designations or areas that could be perceived by the public as having the same type of designations and protections (e.g., scenic roads); and
- Areas that serve as recreational destinations for a variety of user groups and are used by out of area visitors on a regular basis.

Moderate Sensitivity

- Areas that receive moderate to low levels of recreational use, or high levels of use that are primarily higher speed, motorized vehicles, or are used nearly exclusively by local residents. These would include well-used campgrounds and hiking trails.

Low Sensitivity

- Areas that receive little if any recreational use and are mostly used by local residents;
- Lands that are isolated, small parcels that have no legal public access, or are not recognizable by the majority of the public as being public land; and
- Areas of public land that are so fragmented by in-holdings or convoluted ownership boundaries that public land is not recognizable.

Distance Zones

To study the impacts of the proposed project on the visual environment, distance zones were delineated and factored into the visual analysis. Distance zones were developed by the BLM based on perception thresholds, the scale and nature of objects being viewed, and the viewing environment. Both natural and human-made elements become less obvious and less detailed at greater distances and perception of texture and color also becomes less noticeable with increased distance.

The BLM Manual 8410-1, Visual Resource Inventory, defines distance zones as:

- Foreground/Middleground – 0 to 5 miles
- Background – 6 to 15 miles
- Seldom Seen – Beyond 15 miles

Bureau of Land Management Visual Resource Management Visual Contrast Ratings

Visual contrasts are produced through a range of direct and indirect actions or activities. The BLM administers lands that have valuable aesthetic or scenic qualities; these landscapes are also used for multiple activities that have potential to disturb the surface of the landscape and impact scenic values. Activities, such as recreation, mining, timber harvest, livestock grazing, road development, wind power, and others, may also interact or synergize in complex ways, these interactions among other impacting activities may be minimal or they may represent more incremental and cumulative changes occurring over longer, possibly historic periods of time.

The basic design elements of form, line, color, and texture were used to determine visual contrast created by the project. Visual contrast rating worksheets were proven during field reconnaissance and provided a measure of the degree of contrast that would potentially occur from the introduction of the proposed project facilities into the existing landscape. BLM's visual contrast rating system and the identification of key observation points as discussed previously within the study area was used to analyze the potential visual impacts of the proposed facilities. Visual contrast ranges are defined in **Table 3.2-2**.

Table 3.2-2. Definitions of Visual Contrast Ranges

Degree of Visual Contrast Defined	
Rating	Definition
None	The element contrast is not visible or perceived
Weak	The element contrast can be seen but does not attract attention
Moderate	The element contrast begins to attract attention and begins to dominate the characteristic landscape
Strong	The element contras demands attention, will not be overlooked, and is dominant in the landscape

Source: BLM Manual 8431: Visual Contrast Rating (BLM 1986b)

A visual impact analysis was used to determine the potential degree of impact to existing views. This analysis was performed during field reconnaissance and was documented using visual contrast rating worksheets to provide a consistent evaluation of visual impacts to sensitive viewers (from the Critical Viewpoints). **Table 3.2-3** presents the definitions of visual impacts.

3.2.2 Regulatory Setting

Federal

Bureau of Land Management

The Federal Land Policy and Management Act of 1976 (FLPMA) requires the BLM to protect the quality of scenic values on public lands (43 U.S.C. 1701). The BLM has developed an analytical process that identifies, sets, and meets objectives for maintaining scenic values and visual quality. The VRM system functions in two ways.

First, BLM conducts an inventory that evaluates visual resources on all lands under its jurisdiction (inventory/evaluation). Once inventoried and analyzed, lands are given relative visual ratings (visual resource management classifications). Class designations are derived from an analysis of scenic quality (rated by landform, vegetation, water, color, influence of adjacent scenery, scarcity, and cultural modification), a determination of viewer sensitivity levels (sensitivity to changes in the landscape), and distance zones (relative proximity of views of the proposed project; visual quality of a landscape, as well as user reaction, may be magnified or diminished by the visibility of the landscape in terms of distance). Management classes describe the different degrees of modification allowed to the basic elements of the landscape (form, line, color, texture). Classes range from I to IV and are defined under goals and objectives.

Table 3.2-3. Definitions of Visual Impacts

Degree of Visual Impact Defined			
Rating	General Definition	Definition Specific to Visual Resources	Examples
Major	Impacts that potentially would cause significant change or stress to an environmental resource or use, or severe adverse or exceptional beneficial effects.	Impacts resulting from construction disturbances and the long-term presence of new facilities that would substantially alter the scenic value of the landscape and would dominate views from sensitive viewpoints.	Structures that significantly impeded and obstruct scenic views Construction that would irrevocably damage scenic quality Facilities that would be seen in the foreground and middleground distance zones in previously undisturbed, highly scenic landscapes.
Moderate	Impacts that potentially would cause some change or stress (ranging between major change and minor change) to an environmental resource or use, or readily apparent effects to scenic quality.	Impacts that would diminish the scenic quality of the landscape and would easily be noticeable from sensitive viewpoints.	Vertical utility structures that may detract from existing scenic quality Facilities would be visible in the foreground to middleground distance zones from sensitive viewpoints Facilities parallel to highly scenic landscapes that have not been previously disturbed
Minor	Impacts that potentially are detectable but slight.	Impacts that diminish the scenic quality of the landscape to a minimal degree and are potentially noticeable when viewed from moderately sensitive viewpoints	Facilities would be visible in middleground or background distance zones from moderate sensitivity viewpoints, or parallel to existing facilities in previously disturbed landscape, or landscapes of common scenic quality.
Negligible	Impacts that potentially cause an insignificant or indiscernible change or stress to an environmental resource or use, impacts range from immeasurable and undetectable to low levels of detection.	Impacts that would not diminish the scenic quality of the landscape.	Temporarily displacing vegetation while maintenance and/or construction occurs Facilities would be visible in the background distance zone, where new facilities parallel existing facilities or traverse previously disturbed landscape in landscapes of common to minimal scenic quality.
None	No discernable or measureable impacts would result.	No discernable or measureable visual contrast.	No project activity would take place.

Source: BLM Manual 8431: Visual Contrast Rating (BLM 1986b); HDR Engineering, Inc.

As mentioned previously, it is not BLM policy to determine at the RMP level which land uses or activities to restrict based on VRM Class. Rather, BLM must consider at the site-specific activity level all uses proposed for an area with a given VRM Class and determine if those uses would be consistent with the objectives for that Class. The project area is classified as VRM Class IV.

The RMP/ROD assigns VRM Classes ranging from Class I to IV to all BLM lands in the planning area. All future projects and actions must adhere to the objectives of the applicable VRM Classes:

- *Class I.* To preserve the existing character of the landscape. The level of change to the characteristic landscape should be very low and must not attract attention.

- *Class II.* To retain the existing character of the landscape. The level of change to the characteristic landscape should be low.
- *Class III.* To partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate.
- *Class IV.* To provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. The study area for the proposed Tule Wind project is located on Class IV land.

Local

Polices, regulations, and ordinances that have been developed by the County of San Diego and Town of Boulevard are referenced below.

County of San Diego General Plan (Existing)

Conservation Element (Part X), Chapter 7 Astronomical Dark Sky. The San Diego County General Plan Conservation Element's chapter on astronomical dark skies discusses the importance of maintaining dark skies in the county. This chapter makes several findings pertaining to suitable observatory site criteria. It also sets out several policy and action programs designed to limit light pollution and ensure the protection of dark skies, including minimizing the impacts of development on the useful life of the observatories, assisting in the regulation of dark sky conservation, amending ordinances to control potentially significant adverse effects to Palomar and Mount Laguna Observatories, and designing future roadways and development in a way suitable for the protection of dark skies near the observatories.

Conservation Element Policy 1 (X-86) – Astronomical Dark Skies. The County of San Diego will act to minimize the impact of development on the useful life of the observatories.

Mountain Empire Subregional Plan: Adopted January 3, 1979, Amended July 1, 2009

Conservation Element Policy 1 – All development shall demonstrate a diligent effort to retain as many native oak trees as possible.

County of San Diego Ordinances

San Diego County Dark Skies Ordinance

The Light Pollution Code (LPC), also known as the Dark Sky Ordinance, was adopted "to minimize light pollution for the enjoyment and use of property and the night environment by the citizens of San Diego County and to protect the Palomar and Mount Laguna observatories from the effects of light pollution that have a detrimental effect on astronomical research by restricting the permitted use of outdoor light fixtures on private property" (Sec. 59.101). Parties involved in the development of the LPC included representatives from the San Diego County Department of Planning and Land Use, the Department of Public Works, as well as members of the lighting industry, community planning, and sponsor groups, representatives from both of San Diego County's observatories, and San Diego Gas and Electric Company (SDG&E). The LPC regulates applicants for any permit required by the County for work involving outdoor light fixtures, unless exempt. Exempt fixtures include certain ones existing prior to January 18, 1985, those producing light via fossil fuels, those on or connected with facilities and land owned or operated by the federal government or the State of California, holiday decorations, and U.S. or California illumination. Special provisions are made for airports in keeping with the Federal Aviation

Administration's (FAA) lighting requirements and nearby correctional institution (Sec. 59.108). The code was established to limit harmful effects of outdoor lighting on the Palomar and Mount Laguna Observatories. The LPC designates all areas within a 15-mile radius of each observatory as Zone A, with all other areas of the county designated as Zone B. Zone A has more stringent lighting restrictions, including limits on decorative lighting, so that night skies are dark enough for clear viewing through the telescopes at the observatories.

Table 3.2-4 presents the Class II Lamp Source and Shielding Requirements for the San Diego County Division 9 Light Pollution Code.

Table 3.2-4. Class II Lamp Source and Shielding Requirements

Lamp Type	Zone A	Zone B
Low Pressure Sodium	Fully Shielded	Fully Shielded
Others above 4050[1] Lumens	Prohibited	Prohibited
Others 4050[1] Lumens & Below	Prohibited	Allowed[2]

Source: http://www.co.san-diego.ca.us/dplu/docs/LightPollutionCode.pdf

[1] Examples of lamp types of 4550 Lumens & Below (The acceptability of a particular light is decided by its lumen output, not wattage; check manufacturer's specifications):
200 watt standard Incandescent and less
150 watt tungsten-halogen (quartz) and less
75 watt mercury vapor and less
50 watt high pressure sodium and less
40 watt fluorescent and less

[2] Lights shall be shielded where feasible and focused to minimize spill light into the night sky or adjacent properties
Maximum of 8100 total lumens per acre or per parcel if under 1 acre.
Zone A means the circular area, fifteen (15) miles in radius centered on the Palomar Observatory and the circular area 15 miles in radius centered on the center of the Mount Laguna Observatory.
Zone B means all areas within the territorial limits of the unincorporated portion of the County of San Diego and not included in the area defined as Zone A.
Fully shielded means outdoor light fixtures shielded or constructed so that light rays emitted by the fixture are projected below the horizontal plane passing through the lowest point on the fixture from which light is emitted.
Luminous tube lighting means gas-filled glass tubing, which when subjected to high voltage, become luminescent in a color characteristic of the particular gas used, e.g. neon, argon, etc. (Amended by Ord. No. 8553 (N.S.).

San Diego County Resource Protection Ordinance No. 9716

The Resource Protection Ordinance (RPO) protects sensitive lands and prevents their degradation and loss. This ordinance also preserves the ability of property owners to make reasonable use of their land subject to the conditions of the RPO to increase the preservation and protection of the County's unique topography, natural beauty, diversity, and natural resources.

Although the project area does contain slopes of 25 percent and greater, the county portion of the site is relatively flat and contains no steep slope lands. *CEQA Guidelines* for visual resources do not directly address "steep slope lands" as a visual resource. The RPO compliance is further discussed in the Land Use Section 3.12, as compliance with local ordinances and regulations.

San Diego County Zoning Ordinance, Performance Standards (Section 6320, 6322 and 6324)

Section 6320 of the Zoning Ordinance has performance standards for glare for all commercial and industrial uses in residential, commercial and identified industrial zones. All commercial and industrial uses subject to these standards shall be operated in a manner that does not produce glare, which is readily detectable without instruments by the average person beyond the stated zones in this section.

Section 6322 controls excessive or unnecessary outdoor light emissions which produce unwanted illumination of adjacent properties by restricting outdoor lighting usage. Section 6324 establishes limitations upon lighting permitted in required yards by Section 4835; of particular importance is the limitation upon light trespass (not to exceed a value of 0.2 footcandles measured 5 feet onto the adjacent property).

County of San Diego General Plan Update Goals and Policies (not yet adopted)

The following are applicable goals and polices as set forth in the Draft County of San Diego General Plan Update (2009, not yet adopted). The County of San Diego General Plan Update is currently in circulation and the approval and adoption date are not yet known. Upon adoption of this update, the proposed project would be subject to the following policies.

I-8 from the El Cajon city limits to the Imperial County line is identified as a San Diego County Scenic Highway in the Draft San Diego County General Plan Update, yet to be adopted. Additionally, the California Assembly and Senate passed a resolution designating a portion of Old Highway 80 through San Diego County as "Historic U.S. Highway 80" in 2006. It is also listed in the Draft San Diego County General Plan Update as a County Scenic Highway. I-8 and Old Highway 80 run parallel to each other in an east/west direction. I-8 is positioned at a higher elevation and has unobstructed views to the north and the large majority of the project area. Additionally, portions of SR-94 are part of the County Scenic Highway System and qualify for designation as State Scenic Highways.

Conservation and Open Space Element Goals and Policies

Goal COS-11 – Preservation of Scenic Resources, pertains to the preservation of scenic resources, including vistas of important natural and unique features, where visual impacts of development are minimized.

Policies

COS-11.1 – Protection of Scenic Resources, requires the protection of scenic highways, corridors, regionally significant scenic vistas, and natural features, including prominent ridgelines, dominant landforms, reservoirs, and scenic landscapes.

COS-11.2 – Resource Connections, promotes the connection of regionally significant natural features, designated historic landmarks, and points of regional historic, visual, and cultural interest via designated scenic corridors, such as scenic highways and regional trails.

COS-11.3 – Development Siting and Design, requires development within visually sensitive areas to minimize visual impacts and to preserve unique or special visual features, particularly in rural areas, through the following:

- Creative site planning
- Integration of natural features into the project
- Appropriate scale, materials, and design to complement the surrounding natural landscape
- Minimal disturbance of topography
- Clustering of development so as to preserve a balance of open space vistas, natural features, and community character
- Creation of contiguous open space networks

COS-11.4 – Collaboration with Agencies and Jurisdictions, requires coordination with adjacent federal and state agencies and local jurisdictions to protect scenic resources and corridors that extend beyond the County's land use authority, but are important to the welfare of county residents.

COS-11.5 – Collaboration with Private and Public Agencies, requires coordination with the California Public Utilities Commission, power companies, and other public agencies to avoid siting energy generation, transmission facilities, and other public improvements in locations that impact visually sensitive areas, whenever feasible. Require the design of public improvements within visually sensitive areas to blend into the landscape.

COS-11.7 – Underground Utilities, requires new development to place utilities underground and encourage "undergrounding" in existing development to maintain viewsheds, reduce hazards associated with hanging lines and utility poles, and to keep pace with current and future technologies.

The concept of "undergrounding" in the initial phases of a project not only increases the aesthetic value of the surrounding viewshed, but can also reduce costs in the long run since less infrastructure is exposed to the elements.

Goal COS-12 – Preservation of Ridgelines and Hillsides, requires that ridgelines and steep hillsides that are preserved for their character and scenic value.

Policies

COS-12.1 – Hillside and Ridgeline Development Density, protects undeveloped ridgelines and steep hillsides by maintaining semi-rural or rural designations on these areas.

COS-12.2 – Development Location on Ridges, requires development to preserve the physical features by being located down and away from ridgelines so that structures are not silhouetted against the sky.

Goal COS-13 – Dark Skies, requires preserved dark skies that contribute to rural character and are necessary for the local observatories.

Policies

COS-13.1 – Restrict Light and Glare, restricts outdoor light and glare from development projects in Semi-Rural and Rural Lands and designated rural communities to retain the quality of night skies by minimizing light pollution.

COS-13.2 – Palomar and Mount Laguna, minimizes, to the maximum extent feasible, the impact of development on the dark skies surrounding Palomar and Mount Laguna observatories to maintain dark skies which are vital to these two world-class observatories by restricting exterior light sources within the impact areas of the observatories.

Mountain Empire Subregional Plan Boulevard (Draft)

Goal LU3.1 – Requires the protection as a Dark Sky Community through preservation of the dark skies in Boulevard to support the continued operation of the San Diego Astronomy Association and Tierra Del Sol observatories and to continue to attract stargazer, photographers, scientists, and researchers from around the world.

Policies

Policy LU 3.1.1 – Encourages development to preserve dark skies with reduced lighting and increased shielding requirements.

Policy LU 3.1.2 – Encourages increased resources or methods for enforcement for the preservation of dark skies.

Goal LU 3.2 - Preservation of the native and riparian habitat to retain the distinctive character of the Boulevard community.

Policy LU 3.2.1 - Requires development to minimize impacts to the native and riparian habitat.

San Diego County Zoning Ordinance, Scenic Area Regulations [Section 5200-5299],

The Scenic Area Regulations of the County Zoning Ordinance serve to regulate development in areas of high scenic value in order to exclude incompatible uses and to preserve and enhance the scenic resources in adjacent areas. The regulations apply to areas of unique scenic value including but not limited to: scenic highway corridors designated by the County General Plan; critical viewshed and prime viewshed areas as designated on the Local Coastal Program Land Use Plan; and areas adjacent to significant recreational, historic or scenic resources, including but not limited to Federal and State parks. The designation for scenic areas is identified on a parcel-by- parcel basis by the special area designator "S".

e. *Above Ground Utilities*. Utilities shall be constructed and routed underground except in those situations where natural features prevent undergrounding or where safety considerations necessitate above ground construction and routing. Above ground utilities shall be constructed and routed to minimize detrimental effects on the visual setting of the designated area. Where it is practical, above ground utilities shall be screened from view from either the scenic highway or the adjacent scenic, historic, or recreational resource by existing topography, by the placement of buildings and structures, or by landscaping and plantings which harmonize with the natural landscape of the designated area.

f. *Grading*. The alteration of the natural topography of the site shall be minimized and shall avoid detrimental effects to the visual setting of the designated area and the existing natural drainage system. Alterations of the natural topography shall be screened from view from either the scenic highway or the adjacent scenic, historic, or recreational resource by landscaping and plantings which harmonize with the natural landscape of the designated area, except when such alterations add variety to or otherwise enhance the visual setting of the designated area.

3.2.3 Environmental Consequences/Impact Analysis

Visual resource impacts are expected to result where the proposed project facilities would be visible from sensitive viewpoints, and where visual contrasts of the construction activities and/or proposed facilities would affect the aesthetic value of the landscape. The following section describes the impacts to aesthetics and visual resources that may occur as a result of the proposed project during the construction, operation and maintenance, and decommissioning of the project.

The following analysis was made using the BLM VRM System to determine if substantial effects on visual resources would occur as a result of the project. In the context of CEQA, aesthetics addresses scenic vistas, scenic resources, and visual character and quality. The County of San Diego Guidelines for

Determining Significance on Visual Resources were utilized in the analysis to determine if the project would have adverse environmental effects on visual resources in accordance with CEQA. The concepts between the BLM VRM System and the County Guidelines are very similar and have analogous approaches to determining the significance of impacts to visual resources.

The following analysis has been broken up into two parts to address the potential impacts in accordance with NEPA and CEQA.

National Environmental Policy Act Significance Criteria

The portion of the project that would be subject to NEPA Guidelines would include all portions of the project located on land under federal jurisdiction including wind turbines, O&M/Substation facility, laydown areas, 138 kV transmission line (until County lands), 34.5 kV collector lines, and roadways.

According to the BLM Resource Management Plan, the Tule Wind Project area is classified as a Class IV area. As defined in the BLM Resource Management Plan, a Class IV designation is "to provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high."

The Class IV designation permits the development of wind turbines within the McCain Valley area. The BLM has determined that the high-quality wind resources in McCain Valley and its proximity to the existing utility corridor make it a logical area to focus wind energy development, and therefore warranted a change in the VRM Class in McCain Valley. The BLM potential areas for wind energy development is shown in **Figure 3.2-1**. This classification makes the project consistent with current BLM land use management practices and regulations. There would be no visual resource impacts due to the development of the wind turbines, transmission lines, or collector lines in the McCain Valley area.

California Environmental Quality Act Significance Criteria

In accordance with Appendix G of *CEQA Guidelines*, visual quality and aesthetics impacts are considered potentially significant if the project would:

- Have a substantial adverse impact on a scenic vista;
- Substantially degrade the existing visual character or quality of the site and its surroundings;
- Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway; and/or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The CEQA analysis pertains to those portions of the project located on lands under jurisdiction of the state or the County of San Diego. An evaluation of existing visual conditions was conducted using the BLM methodology, as accepted by the County, and considered viewer sensitivity and visual contrast. The proposed project would have substantial effects on the visual environment in the areas surrounding the proposed project. The following discussion provides an analysis of the potential effects that would impact the visual contrast from each of the critical viewpoints. A visual impact rating was determined from the potential significant effects on the visual resources as a result of the project, as described below.

KOP 1 - I-8 at Ribbonwood Road

Visual Contrast: From the interchange at I-8 and Ribbonwood Road, the proposed transmission line corridor would run parallel to the roadway to the north and south and head east about 2 miles north of this point. I-8 is currently designated as a scenic route in the Draft General Plan Update; however, there is currently a wood monopole 12 kV powerline to the west of the roadway; therefore, the addition of larger, steel monopole power line poles in the linear corridor would create a pattern or sequential effect which becomes more readily discernable in the landscape. The proposed transmission line corridor would present the most visual impact from this vantage point. Approximately 100 to 118 of the proposed wind turbines would be visible from this vantage point within the middleground distance zone (1 to 5 miles). At this distance, visual contrast created by the introduction of wind turbines and ancillary facilities into the environment would be minimal given distance, topography, and atmospheric conditions.

Overall Visual Impact Rating: Minor.

KOP 2 - Ribbonwood Road North of I-8

Visual Contrast: Approximately 100 to 118 wind turbines visible from this vantage point would be predominantly from views oriented to the east and north. Distance and topography would slightly obstruct dominant views of the wind turbines; however, typical viewers within this area are considered highly sensitive because they experience views from their residences, thus increasing the visual impact of the wind facilities from this vantage point. Proposed new access roadways will include the widening of existing roads and creation of new roadway. This road alignment may serve as the main access for construction equipment and would increase traffic on Ribbonwood Road during daytime construction efforts. Though this access road would largely not be used after the completion of construction, the road would be restored to a 16 to 20-foot width for the duration of the project.

Overall Visual Impact Rating: Moderate.

KOP 3 - Interstate 8 at McCain Valley Road

Visual Contrast: In this area, McCain Valley Road is paved and lined on the east side with an existing wood monopole transmission line. The placement of the proposed wind turbines becomes more dominant in the landscape within this area as approximately 51 to 75 wind turbines would be present in the foreground, middleground, and background. However, the landscape in this area is considered typical of the region and has been designated as VRM Class IV by the BLM where major modification of the existing landscape may occur. Additionally, the majority of viewers would be traveling (by vehicle) on the I-8 where direct views of the proposed wind turbines would be temporary. The majority of viewers from this KIP would be considered low sensitivity. The addition of the proposed 138 kV steel monopole will likely run less than two miles parallel to the existing transmission line and will not be significantly higher than the existing structures. The introduction of the proposed transmission line will not impede present viewing conditions.

Overall Visual Impact Rating: Minor.

KOP 4 - McCain Valley Road at Rough Acres Ranch

Visual Contrast: The visibility of approximately 51 to 75 the proposed wind turbines in this area would be apparent; however, the landscape is considered typical of the region and viewers from this area are considered low sensitivity (e.g., travelers en route, employees of the ranch), thus lessening the likelihood that the wind turbines would impede the viewing experience from this vantage point. The ancillary wind

energy production facilities would be located (e.g., the parking area, batch plant, and laydown area) in this area. Given that this area currently supports ranch operation and there is an existing transmission line corridor present, additional wind turbine facilities will likely not dominate the landscape, nor will they impede present viewing conditions.

Overall Visual Impact Rating: Minor.

KOP 5 - McCain Valley Road at Lark Canyon OHV Area and Campground

Visual Contrast: Views of approximately 51 to 75 of the proposed wind turbines would be evident from higher vantage points in this area; however, the predominant viewer would likely be traveling by motorized vehicle at speeds that would prohibit longer than momentary views of the proposed wind turbines. Views from the Lark Canyon campground would reveal some of the proposed wind turbines, however, the campground is located within stands of large oak trees and topographic obstruction would somewhat impede views of the proposed wind turbines.

Overall Visual Impact Rating: Minor.

KOP 6 - McCain Valley Road at Carrizo Gorge Lookout

Visual Contrast: Views of Carrizo Gorge are oriented away from the proposed wind turbines; thus, the introduction of structures in the landscape will not impede scenic views of the gorge. However, views to the south and west will reveal several strings of wind turbines creating a dominant visual feature in the landscape. Approximately 76 to 100 wind turbines would be visible from this vantage point. Additionally, from this vantage the existing Campo Wind turbines are evident in the background. A visual simulation was rendered at this point to show the visual effects of the wind turbines from McCain Valley Road and Carrizo Gorge. Viewers in this area are considered moderate sensitivity because they are likely interested in scenic views to the north and east.

Overall Visual Impact Rating: Moderate.

KOP 7 - Cottonwood Campground

Visual Contrast: The Cottonwood campground is accessible only by passenger vehicle and does not allow OHV use. This campground is also located within a stand of large oak trees. Views of the proposed turbines would be evident in the middleground and background. Approximately 51 to 75 wind turbines could be visible fro this area. Viewer sensitivity is considered moderate to high given that the primary viewers would be people accessing and using the campgrounds.

Overall Visual Impact Rating: Moderate

KOP 8 - McCain Valley Road at Northern Terminus

Visual Contrast: The only human-made modification currently in this area is McCain Valley Road and when views are oriented to the southwest, the existing string of Campo wind turbines is evident. Also, given the natural conditions of the landscape, the introduction of the proposed project wind turbine strings will be noticeable, bordering on dominant in the landscape. Approximately 76 to 100 wind turbines would be visible from this area. Viewers in this area would be considered moderate to high sensitivity because they would be accessing the area to experience the natural environment.

Overall Visual Impact Rating: Moderate.

KOP 9 - Old Highway 80 and Existing Boulevard Substation

Visual Contrast: Existing views in this area reveal monopole transmission lines feeding into the Existing Boulevard Substation; thus, the introduction of additional transmission lines will not likely impede views significantly more than present conditions. Old Highway 80 has been designated by San Diego County as an historic route requiring repairs and improvements to be in keeping with the original concrete slab construction of the road. The proposed transmission lines would not conflict with the historic route designation requirements. Approximately 10 to 20 wind turbines would be visible from this point. Old Highway 80 provides access to the town of Boulevard and viewers would be considered low sensitivity because they would be en route with views obstructed by development and vegetation.

Overall Visual Impact Rating: Minor

Have a substantial adverse impact on a scenic vista

Construction and Decommissioning

During the construction phase, impacts to scenic vistas and resources will vary depending on the timing of construction and the delivery of construction equipment. Impacts to scenic vistas and scenic resources are considered temporary and limited to a period of 18 to 24 months.

The roadways will either be widened as part of an existing road or new construction of a roadway. The proposed access roadways will run east-west from the Rough Acres Ranch area located off of McCain Valley Road over private property and connect with Ribbonwood Road. Ribbonwood Road is anticipated to serve as the main access for construction equipment and would increase traffic on Ribbonwood Road during daytime construction efforts. This access road would be restored to a 16- to 20-foot width. The new roadways from Ribbonwood Road are located on private property and will not be available for general public use. Access to the western portion of the project area will be from the Crestwood Road exit off I-8, through the Campo and Manzanita Indian Reservation. The laydown areas, batch plant area, and parking area will be removed upon completion of the project. Impacts due to decommissioning would be consistent with the construction of the project. Impacts to scenic vistas due to the construction and decommissioning of the project are temporary and less than significant.

Operation and Maintenance

The proposed turbines would be a maximum height of 492 feet, as measured from the ground to the turbine blade tip. The turbines would be grouped in strings, and be connected by an underground and overhead electrical cable system. To reduce visual impacts, turbine components (towers, nacelles, and rotors) will be painted or finished using low-reflectivity, neutral white finish in compliance with Federal Aviation Administration (FAA) rules (AC 70/7460-1K).

The visual simulations show turbines visible in the distance from higher elevations north of I-8. The wind turbines visible from this vantage point would be predominantly from views oriented to the east and north. The community of Boulevard located south of I-8 will not have views of the turbines due to the area topography and elevation. The freeway blocks the view to the north and the community is located at a lower elevation.

Of the nine KOPs analyzed, five KOPs were classified to have a minor visual impact rating and four were classified to have a moderate visual impact rating. The four viewpoints have an overall visual impact rating of moderate identified are; Ribbonwood Road north of I-8, McCain Valley at the Carrizo Gorge, Cottonwood Campground, and McCain Valley Road at the northern terminus. Of these four KOPs, only one is located on county lands, Ribbonwood Road north of I-8, and the remaining are located on BLM lands. A moderate rating is described as impacts that would diminish the scenic quality of the landscape and would easily be noticeable from sensitive viewpoints.

From the Ribbonwood Road and north of the I-8 intersection, approximately 100 to 118 turbines would be visible from this vantage point with the middleground and background distance zone (1 to 5 miles). As described in Section 3.2.1, the varied topography would obstruct some of the wind turbines; however, typical viewers within this area are considered highly sensitive. Additionally, the orientation of the wind turbine strings are planned to be placed on natural forms in a complementary pattern as opposed to the existing Campo Wind turbines that are placed in distinct straight lines. Considering the distance zone, high viewer sensitivity, and the overall visual impact rating of moderate, the portions of project area of Ribbonwood Road north of I-8 would have significant impacts to scenic vistas.

The turbines would be visible from the McCain Valley area (including Lark Canyon OHV Area, Lark Canyon Campground, and the Cottonwood Campground) including the Campo Indian Reservation turbines located in the distance. The proposed O&M building will be a one-story building located adjacent to McCain Valley Road on BLM lands. The building will be painted in low-reflectivity neutral color finish to match the surrounding area. Additionally, small cabinets containing pad-mounted equipment located at the base of each turbine will be painted a neutral gray, white, off-white, or earth tone finish. The location of the O&M/Substation facility on BLM lands would make it subject to NEPA guidelines and would not be subject to CEQA Guidelines. These areas are located on the BLM land and under the BLM visual resource guidelines and regulations, therefore, no impacts to scenic vistas are identified for this area of the project.

The 138 kV transmission line will be visible from the county lands, along McCain Valley Road and Old Highway 80 terminating at the proposed SDG&E Rebuilt Boulevard Substation. In this area, McCain Valley Road is paved and lined on the east side with an existing wood monopole transmission line. Although transmission lines could be up to 75 feet in height, they would not obstruct scenic views and vistas in the area. Additionally, the use of dull gray porcelain insulators will be used to reduce insulator visibility. No impacts to scenic vistas from the proposed transmission line are identified.

Substantially degrade the existing visual character or quality of the site and its surroundings

Construction

During construction, the presence of large trucks, cranes, mount towers, wind turbine components (i.e., nacelle, rotor, tower, and blades), and other large-scale construction equipment will be present on the project site. Construction of the turbine foundation, ancillary structures, trenching to bury electrical distribution lines, grading, surfacing, clearing, leveling, stock piling, and staging/parking areas are considered short-term, construction-related, and would impact visual resources for a limited time. Visual impacts resulting from the construction of the proposed project facilities are considered short-term and less than significant.

Access roads connecting each turbine and collector cable may need to be constructed (in areas where no roads presently exist) or improved upon (in areas where existing roads are present). The roads between turbines will be constructed at 36-foot widths to allow large cranes to move between turbines. These

roads will be restored to the standard 16-to-20-foot width once the turbines have been installed. Any new access roads will follow natural contours and minimize side hill cuts to the extent possible. New roads will create exposed soil routes that follow the surface contour of the landscape. Active construction including site preparation, excavation, turbine installation, and other visible activities are considered short-term in duration and will only occur during the construction phase of project. Therefore, impacts to the existing visual character and quality of the site and the surroundings during construction are less than significant.

Operation and Maintenance

The topography within the area ranges from 3,600 to 5,600 feet in elevation which reduces views from certain vantage points. The project area spans 9 miles north from the I-8 freeway and Ribbonwood Road intersection. These factors contribute to the reduced visibility of the wind turbines. Additionally, distance from potential viewers, the angle of observation, and atmospheric appearance limit the views of the turbines.

Daily and seasonal lighting conditions resulting from changes in seasons can affect the prominence of the wind turbines, and atmospheric conditions (e.g., light blue to overcast skies) combined with the turbine color (i.e., white, non-reflective surface) and their location along ridgelines reduces visibility of the structures with distance. The most evident views will be at similar or lower elevations as the turbines. Further discussion of lighting conditions and "light flicker" are discussed in the Public Safety, Section 3.15.

Perception of the wind turbines ranges from visually incongruent or "industrial" in nature, to visually interesting or intriguing given their appearance and relative scarcity within the region. The portion of county parcels which are located adjacent to Ribbonwood Road north of I-8 has been identified as an area where visual resources will be impacted by the wind turbines. As discussed in the previous significance criteria, according to the BLM visual methodology of distance zone, viewer sensitivity and impacted KOPs of the project would substantially degrade the existing character or quality of the site and its surroundings; therefore, a significant impact is identified.

Decommissioning

After a period of 30 years, the Tule Wind Project is anticipated to be decommissioned. Visual impacts associated with the decommissioning of the wind energy facilities will be similar to the short-term impacts created by construction. Decommissioning will likely be phased and restoration of the landscape to pre-project conditions will include re-contouring the land, grading, stabilizing slopes, and re-seeding and re-vegetation. As described in the construction phase of the project visual impacts would be temporary and less than significant.

Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway

Trees

Construction and Decommissioning

The County of San Diego and the Boulevard Community Plan do not have specific tree preservation ordinances, although the Community of Boulevard Community Plan Conservation Element Policy 1, states that, "All development shall demonstrate a diligent effort to retain as many native oak trees as

possible," and the County does have mitigation measures of Open and Closed Coast Live Oak Woodland of a 3 to 1 ratio.

The project area has limited trees with the majority located in seasonal drainage areas. A biological survey was conducted for the project area and Open and Closed Coast Live Oak Woodland vegetation type is located in valley bottoms, along drainage courses, and at the bases of steep slopes and large rock outcrops. There is approximately 50 acres of open coast live oak woodland and 0.92 acres identified of temporary and 0.84 acres identified as permanent impacts due to the construction of the project for a total of 1.76 acres, and 12.8 acres of closed coast live oak woodland, with 0.39 acres temporary impacts and no permanent impacts. There is 1.22 acres of Southern Riparian Woodland identified within the project construction footprint, but none identified to be impacted. Additional biological impacts associated with the proposed project are discussed further in Section 3.4, Biological Resources. The proposed new and upgraded roadways and the construction of the overhead collector lines and transmission lines may impact areas containing trees, although these areas will be avoided to the greatest extent possible.

Operation and Maintenance

The operation and maintenance of the project would have no impacts on trees located within the project area upon completion of construction.

Rock Outcroppings

Construction and Decommissioning

The project area is dominated by a substantial amount of metamorphic rocks with a large amount of rock outcroppings. Rocks may be required to be removed or moved to a nearby location for the placement of the turbines, O&M/Substation facility, and the other project components, which could damage the visual quality of rock outcroppings in the area. The applicant proposes to implement BMPs associated with grading, design, placement, and construction of the proposed project that would limit, to the greatest extent possible, the removal of or damage to scenic rock outcroppings. Impacts associated with potential historic or Native American resources associated with rock features are discussed in Section 3.5, Cultural Resources. Due to the over abundance of rocks located within the area, the percentage of rocks which will be needed to be removed or blasted for the construction of the proposed project is expected to be minimal. Impacts due to the decommissioning of the project would be consistent with the construction phase of the project. Impacts to rock outcroppings as a scenic resource are less than significant.

Operation and Maintenance

The operation and maintenance of the project would have no impacts on rock outcroppings located within the project area upon completion of construction.

Historic Buildings within a State Scenic Highway

Construction, and Operation and Maintenance

As mentioned previously, Old Highway 80, SR-94, and I-8 are part of the County Scenic Highway System and qualify for designation as State Scenic Highways. I-8 is designated as a second priority scenic route from the El Cajon city limits to SR-79, located west of the project area. Portions of SR-94 that are designated as part of the County system are not located in the project vicinity. Old Highway 80 is designated as a Historic Highway by the California Assembly and Senate in 2006. I-8 from the El Cajon

city limits to the Imperial County line is identified as a San Diego County Scenic Highway in the San Diego County General Plan Update. Upon adoption of the General Plan Update, the portion of I-8 that runs adjacent to the project area would be designated as a scenic highway. This General Plan Update is not yet approved and is not expected to be ratified prior to the competition of the proposed project. According to the current highway designations, there are no impacts identified to State or County Scenic Highways.

Also, the project does not propose to modify, demolish or impact any buildings within the project area, including historic buildings within a state scenic highway. Thus there are no impacts.

Decommissioning

Prior to the termination of the ROW authorization, a decommissioning plan will be developed and approved by the BLM. The plan will include a site reclamation plan and monitoring program. It is anticipated that requirements in effect at that time will require that all turbines and ancillary structures be removed from the site. All management plans, BMPs, and stipulations developed for the construction phase will be applied to similar activities during the decommissioning phase. The project would be restored to pre-construction conditions. It is anticipated that the I-8 will be designated as a County Scenic Highway at that time (upon adoption of the General Plan Update), and the project would be subject to this designation. The decommissioning would be similar to the construction and considered a temporary impact. Therefore, impacts to scenic highways would be less than significant.

Also, the project does not propose to modify, demolish or impact any buildings within the project area, including historic buildings within a state scenic highway. Thus there are no impacts.

Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

Construction and Decommissioning

Construction is anticipated to be conducted during day-light hours. If the project will require temporary lighting to be used at the project site, lighting will be positioned to prevent glare and light into BLM campground areas and private properties. The project will comply with the County of San Diego Light Ordinance Class II Lamp Source and Shielding. The project is within 15 miles of the Palomar Observatory and is identified as Zone A, which requires fully shielded lights with no lights over 4.50 lumes. Impacts due to light and glare are less than significant.

Operation and Maintenance

The project will follow the U.S. Department of Transportation Federal Aviation Administration Obstruction Marking and Lighting (2007) requirements regarding safety lighting for the proposed turbines. White paint is found to be the most effective daytime warning device, and does not require daytime lighting. The proposed turbine configuration would require each turbine positioned at each end of the line or string of turbines to have a standard flashing red (L864) or white (L-865) light visible from 360 degrees. Additionally, lights visible from the air should be spaced no more than one-half mile, or 2,640 feet from the last lit turbine.

The project area is located 5 miles south of Laguna Observatory and 8 miles north of San Diego Astronomers Association Observatory. Lighting for the project would comply with the County of San Diego requirements for lamp source and shielding. The O&M/Substation facility would be classified under the Class II, Parking Lots and Security classification, Zone A (within 15 miles of Laguna or

Palomar Observatory) to utilize fully shielded low pressure sodium lamp types not to exceed 4050 lumens output. The operation of the project would not affect the nighttime views (dark skies) in the Boulevard area. The project does not propose lighting which would cause substantial lighting to affect day or nighttime views (dark skies), thus impacts from lighting and glare are less than significant.

1.17.4 Cumulative Impacts

DPLU discretionary permits for area projects presented in Section 2.0, Proposed Action and Alternatives. **Table 2.0-8**, Cumulative Projects List, identifies two projects within a 10-mile radius that have impacts to visual resources. The following open project has been identified as containing aesthetic impacts, although the project has been put on inactive status due to lack of funds:

- Reclamation Plan 04-004 and MUP, 04-053. Miller Creek Notice of Preparation submitted February 2005. Major Use Permit and Reclamation Plan for the extraction of sand resources in Campo. Operation would encompass 136 acres on 763 acres. A MUP would allow for extraction of sand on 58.2 acres. 16.4 acres are would be used for the creation of wetlands. General operation for processing would consist of 61.9 acres. Project to be completed over 25 years in four phases. Draft EIR currently in the process. Impacts to aesthetics state scenic highway located viewshed of state scenic highway of I-8 and visual impacts to the area. Impacts to wildland fires. Funds unavailable for EIR submittal.
- The Energia Sierra Juarez (ESJ) project has submitted an application for a Major Use Permit for Major Impact Services and Utilities pursuant to Zoning Ordinance Section 13590 with the County of San Diego. This project proposes two alternatives a single circuit 500 kV Route Alternative (A1) and a 230 kV Double Circuit Route Alternative (A2). The project also proposes anywhere from three to five lattice towers ranging from 150 to 170 feet in height. The project consist of the construction and continued operation of the lattice towers and the associated generation-tie lines that would connect a proposed Wind Energy Facility located in Northern Baja Mexico to a proposed SDG&E ECOS.
- An existing wind farm owned by Babcock & Brown is located west of the proposed project on the Campo Indian Reservation. The wind farm comprises twenty-five turbines atop of the Tecate Divide. The turbines produce and add 50 megawatts (MW) to SDG&E. Additionally, The Campo Band, SDG&E, and Invenergy are currently in negotiations to add to the existing wind farm for a 160 MW, 80 wind turbine project. Although this project is considered not connected to the SDG&E Sunrise Powerlink project, there is conjecture that without the SDG&E Sunrise project there is a lack of ability to transfer the energy. If the proposed project and the Campo project is approved the area would have 232 wind turbines in the general vicinity. Visual resource impacts would be considered significant.

Cumulative visual impacts to the scenic vistas and visual character of the area due to the proposed project, and existing and proposed Campo wind turbines would be considered a significant visual impact.

2.5.1 CEQA Levels Of Significance Before Mitigation

Have a substantial adverse impact on a scenic vista

Construction and Decommissioning

Impacts to scenic vistas due to the construction and decommission of the project is temporary and less than significant.

Operation and Maintenance

Considering the distance zone, high viewer sensitivity, and the overall visual impact rating of moderate, the portions of project area of Ribbonwood Road north of I-8 would have significant impacts to scenic vistas.

Areas located on the BLM land are subject to BLM visual resource guidelines and regulations, and are not subject to CEQA. Therefore, no impacts to scenic vistas are identified for this area of the project.

The project transmission lines will be up to 75 feet in height; however, they would not obstruct scenic views and vistas in the area. No impacts to scenic vistas are identified associated with the transmission lines.

Substantially degrade the existing visual character or quality of the site and its surroundings

Construction and Decommissioning

Visual impacts resulting from the construction and decommissioning of the proposed project facilities are considered short-term. Therefore, impacts to the existing visual character and quality of the site and the surroundings during construction are less than significant.

Operation and Maintenance

The portion of county parcels which are located adjacent to Ribbonwood Road north of I-8 has been identified as an area that visual resources will be impacted by the construction of the wind turbines. According to the BLM visual methodology of distance zone, viewer sensitivity and impacted KOPs the project would substantially degrade the existing character and quality of the site and its surroundings; therefore, a significant impact is identified.

Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway

Trees

Construction and Decommissioning

Impacts to trees as visual resources, including Open and Closed Live Oak Woodland are significant without mitigation.
Operation and Maintenance

The operation and maintenance of the project would have no impacts on trees located within the project area upon completion of construction.

Rock Outcroppings

Construction and Decommissioning

Due to the over abundance of rocks located within the area, the percentage of rocks which will be needed to be removed or blasted for the construction of the proposed project is expected to be minimal. Impacts to rock outcroppings as a scenic resource are less than significant.

Operation and Maintenance

The operation and maintenance of the project would have no impacts on rock outcroppings located within the project area upon completion of construction.

Historic Buildings within a State Scenic Highway

Construction, and Operation and Maintenance

In accordance with the current highway designations there are no impacts identified to the State or County Scenic Highways or to any historic buildings within a state scenic highway.

Decommissioning

It is anticipated that the I-8 will be designated as a County Scenic Highway at the time of decommissioning. The decommissioning phase would be similar to the construction phase and is a temporary impact. Impacts are less than significant.

Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

Construction and Decommissioning

If the project requires temporary lighting to be used at the project site, lighting will be positioned to prevent glare and light into BLM campground areas and private properties. Impacts are less than significant.

Operation and Maintenance

The project does not propose lighting which would cause substantial affects to day or nighttime views (dark skies). Impacts to lighting and glare from the operation and maintenance of the proposed project are less than significant.

3.2.6 Mitigation Measures

AES-1 Upon completion of the grading plan to identify any trees which may be impacted by the project, a determination can be made as to the amount of acreage that will require mitigation in accordance to the San Diego County vegetation community mitigation guidelines. The biology assessment has identified open and closed live woodland oak vegetation types located within the project area, which would be mitigated to a 3:1 ratio.

3.2.7 CEQA Levels of Significance After Mitigation

Have a substantial adverse impact on a scenic vista

Impacts to county lands in the area of Ribbonwood Road north of I-8 have been identified to have impacts to scenic vistas due to the operation of the wind turbines. No appropriate mitigation is identified for this impact; therefore a significant impact still exists.

Substantially degrade the existing visual character or quality of the site and its surrounding

According to the BLM visual methodology of distance zone, viewer sensitivity and impacted KOPs , the project would substantially degrade the existing character or quality of the site and it's surroundings. The project would have a significant impact on visual character or quality of the site and its surrounding. No appropriate mitigation is identified for this impact; therefore a significant impacts still exists.

Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway

The avoidance of tree removal to the greatest extent possible and implementation of mitigation measure AES-1 will restore the landscape to a visually pleasing appearance post-construction and after decommissioning. Impacts to trees as a visual resource are less than significant.

3.2.8 Comparison of Alternatives

In developing the alternatives to be addressed in this environmental document, the potential alternatives were evaluated in terms of their ability to meet the basic objectives of the project, while avoiding or reducing environmental impacts. The alternatives will contain all the same components and construction corridor as the proposed project, except they may vary in number and location.

The critical viewsheds for all alternatives would remain the same as the proposed project. The project features that are located on BLM lands would be subject to NEPA guidelines and are subject to the visual guidelines and land use management plan set forth by BLM. The project components located on BLM land would not be subject to CEQA significance criteria. However, all portions of the project that are located on state land and private parcels under County jurisdiction are subject to CEQA.

No Project/No Action Alternative

Under the No Project/No Action alternative, the proposed project would not be implemented and the impacts associated with the construction, operation and maintenance, and decommissioning as described in Section 3.2.4 would not occur. Although there would be no impacts to visual resources by the Tule Wind Project, the BLM's determination that the area is conducive to wind and renewable energy development will remain valid, thus leaving the area available for another project. Although this alternative would not build additional wind turbines in the area, the existing Campo Indian Reservation wind farm would continue to operate and potentially increase causing visual impacts to the vicinity. Impacts related to aesthetics and visual resources due to the proposed project would not occur. Therefore, this alternative would have less impact than the proposed project for visual resources.

Alternate Transmission Line Alternative #1

The Alternate Transmission Line Alternative #1 (T-line Alternative #1) would include all of the same components as the proposed project except for an alternate overhead 138 kV transmission line (T-line Alternative #1), as shown in **Figure 2.0-12**. The T-line Alternative #1 would be located parallel to, but in-lieu of, the proposed transmission line. T-line Alternative #1 would be located further west and run from either the proposed or deviant collector substation approximately 5.5 miles south to the Rough Acres Ranch (south of turbine G-19). From Rough Acres Ranch, the line would continue west to Ribbonwood Road. The line would continue south on Ribbonwood Road to Old Highway 80, and east along Old Highway 80 to the SDG&E proposed Rebuilt Boulevard Substation.

This alternative would increase the land disturbance by approximately 7.6 acres, from 772.7 acres to 780.3 acres, utilizing the deviant collector substation. The 138 kV transmission line would increase in distance from 9.7 miles to 11.7 miles and would increase the amount of transmission line poles from 116 poles to 152 poles, utilizing the deviant collector substation. The 34.5 kV overhead collector lines would remain the same distance of 9.4 miles, and would require the same amount of collector line poles (250), and the underground collector lines would also remain the same distance of 29.3 miles, utilizing the deviant collector substation.

Have a substantial adverse impact on a scenic vista

Construction, Operation and Maintenance, and Decommissioning

This alternative would experience the same temporary impacts to scenic vistas as the proposed project during the construction and decommissioning phases.

This alternative would move the transmission line west of the proposed transmission line, but the O&M/Substation would still be located on BLM land. The alternate transmission line would be visible from Ribbonwood Road and would continue to Old Highway 80. As described in Section 3.2.3, the transmission lines would not be considered a visual impact to scenic vistas.

The same amount of turbines would be constructed; therefore, this alternative would have the same impacts due to the operation of the wind turbines as the proposed project. Impacts to scenic vistas are significant.

Substantially degrade the existing visual character or quality of the site and its surroundings

Construction, Operation and Maintenance, and Decommissioning

Impacts to existing visual character and quality of the site and surroundings due to the construction and decommission of the project is temporary and less than significant.

This alternative would move the transmission line west of the proposed transmission line. The change in location of the transmission line would not change the potential impacts to visual resources. The transmission line does not have an impact on the existing visual character or quality of the site or surroundings. The portion of county parcels adjacent to Ribbonwood Road north of I-8 would be impacted by the operation of the wind turbines; impacts are significant.

Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway

Construction, Operation and Maintenance, and Decommissioning

The project area is not located in the vicinity of a currently designated scenic highway. The amounts of rocks which will need to be removed for construction are minimal. Mitigation measure AES-1 for tree removal would be applied to this alternative, thus impacts to trees as a visual resource would be less than significant. There are no greater impacts identified for this alternative as those identified for the proposed project.

Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

Construction, Operation and Maintenance, and Decommissioning

This alternative would have similar impacts due to lighting and glare as the proposed project. Impacts are less than significant.

This alternative has the same level of impacts to aesthetics and visual resources as the proposed project.

Alternate Transmission Line #2 and Collector Substation Alternative

The Alternate Transmission Line #2 and Collector Substation Alternative would include the alternate O&M/Substation facility co-located on Rough Acres Ranch (T17S R7E Sec9), the Alternate Transmission Line #2 (138 kV), as well as an alternate overhead collector system, as shown in **Figure 2.0-13**. This alternative would consist of two 34.5 kV lines connecting the turbines to the alternate collector substation location. All other elements of the project including the turbine locations, parking and laydown areas, roadway upgrades, and batch plant would remain as described in the proposed project. The Alternate Transmission Line #2 would run from the alternate collector substation south along McCain Valley Road, and then west along Old Highway 80 until reaching the SDG&E proposed Rebuilt Boulevard Substation.

This alternative would increase the land disturbance by 1.9 acres, from 772.7 acres to 774.6 acres. The 138 kV transmission line would decrease in distance as a result of this alternative from 9.7 miles to 3.8 miles and would decrease the amount of transmission line poles from 116 poles to 44 poles. The 34.5 kV overhead collector lines would increase in distance from 9.4 miles to 17 miles, and would increase the amount of collector line poles from 250 to 452 poles. The underground collector lines would decrease in distance from 29.3 miles to 28.9 miles.

Have a substantial adverse impact on a scenic vista

Construction, Operation and Maintenance, and Decommissioning

This alternative would have the same temporary impacts from the construction and decommissioning to the visual character to the surrounding area, scenic vistas and resources as the proposed project.

Alternate Transmission Line #2 would reduce the number of transmission line poles from the proposed project of 116 to 44. Impacts due to the transmission lines are less than significant. The number of turbines and remaining project features would remain the same. The same amount of turbines would be constructed; therefore, this alternative would have the same impacts due to the operation of the wind turbines as the proposed project. Impacts to scenic vistas are significant.

Substantially degrade the existing visual character or quality of the site and its surroundings

Construction, Operation and Maintenance, and Decommissioning

Alternate Transmission Line #2 would reduce the number of transmission line poles from the proposed project of 116 to 44. The number of turbines and remaining project features would remain the same. The O&M/Substation facility would be relocated on the Rough Acres Ranch, and would not visually degrade the area. The building will be one story and painted to blend into the surrounding. Rough Acres Ranch currently has large buildings located on the property so the O&M/Substation facility would not be out of

scale to surrounding development. No impacts are identified for the construction of the O&M/Substation facility. This alternative would have the same temporary impacts from the construction and decommissioning to the visual character of the site and the surrounding area as the proposed project; less than significant impacts.

Operation of the wind turbines would impact the visual character of the area. A significant impact is identified.

Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway

Construction, Operation and Maintenance, and Decommissioning

This alternative is not located in the vicinity of a currently designated scenic highway nor does it propose to impact any historic buildings. The amount of rocks to be removed is minimal and the removal of trees and subsequent impacts will be less than significant with the incorporation of mitigation measure AES-1. This alternative has the same impacts to scenic resources as the proposed project.

Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

Construction, Operation and Maintenance, and Decommissioning

The same prevention measures and adherence to County light guidelines will be applied to this alternative as the proposed project, thus impacts are less than significant. This alternative has less impacts to aesthetics and visual resources than the proposed project.

Alternate Transmission Line #3 and Collector Substation Alternative

The Alternate Transmission Line #3 and Collector Substation Alternative would include the alternate O&M/Substation facility co-located on Rough Acres Ranch (T17S R7E Sec9), the Alternate Transmission Line #3 (138 kV), as well as an alternate overhead collector system as shown previously in **Figure 3.2-3a**. This alternative would consist of two 34.5 kV lines connecting the turbines to the alternate collector substation. All other elements including the turbine locations, parking and laydown areas, roadway upgrades, and batch plant would remain as described in the proposed project. The Alternate Transmission Line #3 would run from the alternate collector substation west to Ribbonwood Road, continue south along Ribbonwood Road, and then east along Old Highway 80 until reaching the SDG&E proposed Rebuilt Boulevard Substation.

This alternative would increase the land disturbance by 7.3 acres, from 772.7 acres to 780.0 acres. The 138 kV transmission line would decrease in distance as a result of this alternative from 9.7 miles to 5.4 miles and would decrease the amount of transmission line poles from 116 poles to 60 poles. The 34.5 kV overhead collector lines would increase in distance from 9.4 miles to 17 miles, and would increase the amount of collector line poles from 250 to 452 poles. The underground collector lines would decrease in distance from 29.3 miles to 28.9 miles.

The critical viewsheds would remain the same as the proposed project.

Have a substantial adverse impact on a scenic vista

Construction, Operation and Maintenance, and Decommissioning

This alternative would have the same temporary impacts from the construction and decommissioning to the scenic vistas and resources as the proposed project. Construction and decommissioning impacts are less than significant.

The 138 kV transmission line poles would be reduced from the proposed project of 116 to 60, thus having less poles visible in the landscape. Impacts from the transmission line are less than significant.

The same amount of turbines would be constructed; therefore, this alternative would have the same impacts of the wind turbines as the proposed project. Impacts to scenic vistas from the operation and maintenance of the turbines are significant.

Substantially degrade the existing visual character or quality of the site and its surroundings

Construction, Operation and Maintenance, and Decommissioning

The transmission line poles would be reduced from the proposed project of 116 to 60. The visual impacts due to this alternative would be the same as the Alternate Transmission Line #2 and Collector Substation Alternative. Transmission lines are not considered a visual impact to the site and the surrounding area.

The O&M/Substation facility would be relocated to the Rough Acres Ranch area and is not anticipated to visually degrade the area. The building will be one story and painted to blend into the surroundings. Rough Acres Ranch currently has large buildings located on the property, thus the addition of smaller structures will not be out of scale or degrade the quality of the site or surroundings. No impacts are identified for the construction of the O&M/Substation facility.

The same amount of wind turbines would be built and operated for this alternative as the proposed project. KOPs would remain the same; therefore, impacts to the existing visual character are significant with the operation and maintenance of the turbines.

Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway

Construction, Operation and Maintenance, and Decommissioning

The transmission line poles would be reduced from the proposed project of 116 to 60, thus reducing the amount of transmission line and poles visibly noticeable in the landscape and to the viewers. Also, by reducing the length of the transmission line, less disturbance would be required to trees and rock outcroppings. Additionally, this alternative is not located in the vicinity of a currently designated scenic highway nor does it propose to impact any historic buildings. However, the number, location, and impacts of the turbines remain the same as the proposed project and other alternatives, thus the incorporation of mitigation measure AES-1 will be necessary to reduce impacts to less than significant. Impacts to scenic resources from this alternative would be less than the proposed project.

Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

Construction, Operation and Maintenance, and Decommissioning

Impacts from lighting and glare for this alternative would be less than significant. This alternative has the same level of impacts to aesthetics and visual resources as the proposed project.

Operation and Maintenance Facility Location #1 Alternative

The O&M Facility Location #1 Alternative would be located on private property (T17S R7E Sec4), north of the alternate collector substation and located west of McCain Valley Road, as shown in **Figure 2.0-13**. This alternative would consist of separating the 5-acre O&M building site from the collector substation; however, both would remain on Rough Acres Ranch property. Alternate Transmission Line #2 would be utilized under this alternative, as well as the Alternate Overhead Collector System consisting of two 34.5 kV lines connecting the turbines to the alternate collector substation. All other elements of the project including the turbine locations, parking and laydown areas, and batch plant would remain as described in the proposed project.

This alternative is estimated to have the same land disturbance impacts as the Alternate Transmission Line #2 and Collector Substation Alternative. However, by relocating the O&M building site to the northern portion of Rough Acres Ranch, this alternative would require an approximate 650-foot new access road to be constructed on the west side of McCain Valley Road, thus necessitating an approximate 0.07 acres of permanently impacted area and a temporary impact of .55 acres. In comparison to the proposed project, this alternative would decrease the land disturbance by approximately 2.5 acres; from 772.7 acres to 775.2 acres. The 138 kV transmission line would decrease in distance as a result of this alternative from 9.7 miles to 3.8 miles and would decrease the amount of transmission line poles from 116 poles to 44 poles. The 34.5 kV overhead collector lines would increase in distance from 9.4 miles to 17 miles, and would increase the amount of collector line poles from 250 to 452 poles. The underground collector lines would decrease in distance from 29.3 miles to 28.9 miles.

Have a substantial adverse impact on a scenic vista

Construction, Operation and Maintenance, and Decommissioning

The alternate location of the O&M building would not impact scenic vistas. The O&M building may be visible from McCain Valley Road but the size and type of the building would remain the same. The building would be one story and painted a neutral color to blend into the surroundings. The construction and decommissioning of the O&M building would be temporary and the operation and maintenance would not be obtrusive to the site or surrounding area. The remaining alternative project features would be the same as Alternate Transmission Line Alternative #2. O&M Facility Location Alternative #1 would not have an impact on scenic vistas.

Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway

Construction, Operation and Maintenance, and Decommissioning

The alternate location of the O&M building would not damage the scenic resources of the area. Construction and decommissioning of the building would be temporary. The O&M building may be visible from McCain Valley Road but the size and type of the building would remain the same. The

building would be one story and painted a neutral color to blend into the surroundings. The location of this facility on private property would help avoid or reduce impacts to scenic resources as the property has already been disturbed, thus limiting the amount of trees and rock outcroppings that would need to be removed to construct the O&M building. Additionally, no historic buildings or state scenic highways will be impacted with this alternative as there are none present or visible from the location of this alternative. This O&M Facility Location Alternative #1 would not substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway. No impacts are identified.

Substantially degrade the existing visual character or quality of the site and its surroundings

Construction, Operation and Maintenance, and Decommissioning

The alternative location of the O&M building would not degrade the existing visual character or quality of the site and its surroundings. Construction and decommissioning of the building would be temporary. The O&M building may be visible from McCain Valley Road but the size and type of the building would remain the same. The building would be one story and painted a neutral color to blend into the surroundings. The location of this facility on private property would help avoid or reduce impacts to visual character as the property has already been disturbed. O&M Facility Location Alternative #1 would have no impacts to the existing visual character of quality of the site and its surroundings.

Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

Construction, Operation and Maintenance, and Decommissioning

The alternate location of the O&M building would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The O&M building will be constructed during normal business hours. Once operational, the building may be visible from McCain Valley Road but the building would be one story and painted a neutral color to blend into the surroundings, and a reflective façade will not be used. Nighttime lighting will be necessary for security purposes but all lighting will contain down shielding and be prohibited from extending beyond the O&M site perimeter. This alternative would not create a new source of substantial light or glare which would adversely affect day or nighttime (dark skies) views in the area. This alternative has less impacts to aesthetics and visual resources than the proposed project.

Operation and Maintenance Facility Location #2 Alternative

The O&M Facility Location #2 Alternative would be located on private property (T17S R7E Sec 16), south of the alternate collector substation and located west of McCain Valley Road, as illustrated in **Figure 2.0-13**. This alternative would consist of separating the 5-acre O&M building site from the collector substation; however, both would remain on Rough Acres Ranch property. Alternate Transmission Line #2 would be utilized under this alternative as well as the Alternate Overhead Collector System consisting of two 34.5 kV lines connecting the turbines to the alternate collector substation. All other elements of the project including the turbine locations, parking and laydown areas, and batch plant would remain as described in the proposed project.

This alternative is estimated to have the same land disturbance impacts as the Alternate Transmission Line #2 and Collector Substation Alternative. However, by relocating the O&M building site to the southern portion of Rough Acres Ranch, this alternative would result in a very slight difference of 1.0 acre in permanent impacts and 0.08 acre of temporary impacts resulting from the construction of new

access roads than those described in **Table 2.0-10**. In comparison to the proposed project, this alternative would increase the land disturbance by approximately 2.0 acres; from 772.7 acres to 774.7 acres. The 138 kV transmission line would decrease in distance as a result of this alternative from 9.7 miles to 3.8 miles and would decrease the amount of transmission line poles from 116 poles to 44 poles. The 34.5 kV overhead collector lines would increase in distance from 9.4 miles to 17 miles, and would increase the amount of collector line poles from 250 to 452 poles. The underground collector lines would decrease in distance from 29.3 miles to 28.9 miles.

Have a substantial adverse impact on a scenic vista

Construction, Operation and Maintenance, and Decommissioning

The alternate location of the O&M building would not impact scenic vistas. The O&M building may be visible from McCain Valley Road but the size and type of the building would remain the same. The building would be one story and painted a neutral color to blend into the surroundings. The construction and decommissioning of the O&M building would be temporary and the operation and maintenance would not be obtrusive to the site or surrounding area. The remaining alternative project features would be consistent with Alternate Transmission Line Alternative #2. O&M Facility Location Alternative #2 would not have an impact on scenic vistas.

Substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway

Construction, Operation and Maintenance, and Decommissioning

The alternate location of the O&M building would not damage the scenic resources of the area. Construction and decommissioning of the building would be temporary. The O&M building may be visible from McCain Valley Road but the size and type of the building would remain the same. The building would be one story and painted a neutral color to blend into the surroundings. The location of this facility on private property would help avoid or reduce impacts to scenic resources as the property has already been disturbed, thus limiting the amount of trees and rock outcroppings that would need to be removed to construct the O&M building. Additionally, no historic buildings or state scenic highways will be impacted with this alternative as there are none present or visible from the location of this alternative. This alternative would not substantially damage scenic resources, including but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway. No impacts are identified.

Substantially degrade the existing visual character or quality of the site and its surroundings

Construction, Operation and Maintenance, and Decommissioning

The alternate location of the O&M building would not degrade the existing visual character or quality of the site and its surroundings. Construction and decommissioning of the building would be temporary. The O&M building may be visible from McCain Valley Road but the size and type of the building would remain the same. The building would be one story and painted a neutral color to blend into the surroundings. The location of this facility on private property would help avoid or reduce impacts to visual character as the property has already been disturbed and developed. This alternative would have no impact to the existing visual character of quality of the site and its surroundings.

Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area

Construction, Operation and Maintenance, and Decommissioning

The alternate location of the O&M building would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The O&M building will be constructed during normal business hours. Once operational, the building may be visible from McCain Valley Road but the building would be one story and painted a neutral color to blend into the surroundings, and a reflective façade will not be used. Nighttime lighting will be necessary for security purposes but all lighting will contain down shielding and will be prohibited from extending beyond the O&M site perimeter. Additionally, the location of this facility on private property would help avoid or reduce impacts as the property has already been disturbed and developed, and contains similar types of structures and lighting. O&M Facility Location Alternative #2 would not create a new source of substantial light or glare which would adversely affect day or nighttime (dark skies) views in the area. This alternative has less impacts to aesthetics and visual resources than the proposed project.

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