5.13 Visual Resources

Visual resources are natural and cultural features of the environment that contribute to the public's enjoyment of the environment. Visual, or aesthetic, impacts are generally defined in terms of a project's physical characteristics, potential visibility, and the extent to which the project would change the visual character and quality of the environment in which it would be located.

This section was prepared following California Energy Commission (CEC) guidelines for preparing visual impact assessments for Applications for Certification (AFCs). Section 5.13.1 documents the visual conditions that exist in the area of the Rice Solar Energy Project (RSEP). Section 5.13.2 presents an environmental analysis of the potential aesthetic effects in the project area. Section 5.13.3 discusses the potential cumulative effects of this and other projects in the area. Section 5.13.4 summarizes the mitigation measures proposed to reduce project impacts on visual resources. Section 5.13.5 describes the laws, ordinances, regulations, and standards (LORS) related to visual resources. Section 5.13.6 presents the agencies involved and agency contacts. Section 5.13.7 lists required permits. Section 5.13.8 cites the references used in preparation of this section.

5.13.1 Affected Environment

5.13.1.1 Regional and Local Setting

The RSEP site is located within Rice Valley in the Sonoran Desert biogeographic[1] province. The project site is in eastern Riverside County approximately 20 miles west of the California-Arizona state line (Figure 5.13-1). The project area consists of isolated mountain ranges separated by expanses of desert plains, dry lake basins, and broad alluvial fans, or bajadas.[2] The project site is immediately south of the San Bernardino-Riverside County line in Riverside County, south of State Route (SR) 62 and between SR 177 and Interstate 95 (I-95) (Figure 1.1-1).

Rice Valley is a generally flat to gently sloping valley, approximately 14 by 17 miles, and bounded by mountain ranges (Figure 5.13-2 and Figures 5.13-3a through 5.13-3d). East of the project site are the West Riverside Mountains and the Riverside Mountains, approximately 7 and 10 miles from the project site, respectively (Figure 5.13-4a). Relative to the RSEP site, the Big Maria Mountains are approximately 10 miles south (Figure 5.13-5b); the Arica Mountains are approximately 7 miles west (Figure 5.13-4b); and the Turtle Mountains are approximately 3 miles north (Figure 5.13-5a). These mountain ranges are characteristic of the mountain ranges seen in the Sonoran Desert; the project site itself is located on the alluvial bajada that skirts the southern margins of the Turtle Mountains.

The RSEP site is in unincorporated Riverside County. As discussed in Section 5.6, Land Use, the Riverside County General Plan designates the RSEP site and the surrounding area's land use as Open Space-Rural. The Open Space-Rural land use designation applies to remote, privately owned open space areas with limited access and a lack of public services (Riverside County, 2003). The 1,410-acre project site is located on private land of 3,324 acres

[1] Biogeographic refers to the geographical distribution of living things.

[2] An alluvial bajada is a broad, sloping deposit caused by the joining together of alluvial fans.

(Figure 5.13-2) near the abandoned town of Rice and 32 miles west of Parker, Arizona. Needles, California, is approximately 65 miles northeast; Blythe, California, is 40 miles south; and Twentynine Palms, California, is 75 miles west. The nearest residences to the site are located at Vidal Junction, approximately 15 miles east, and at the Metropolitan Water District of Southern California's Iron Mountain Pumping Plant, 17 miles west (Figure 1.1-1).

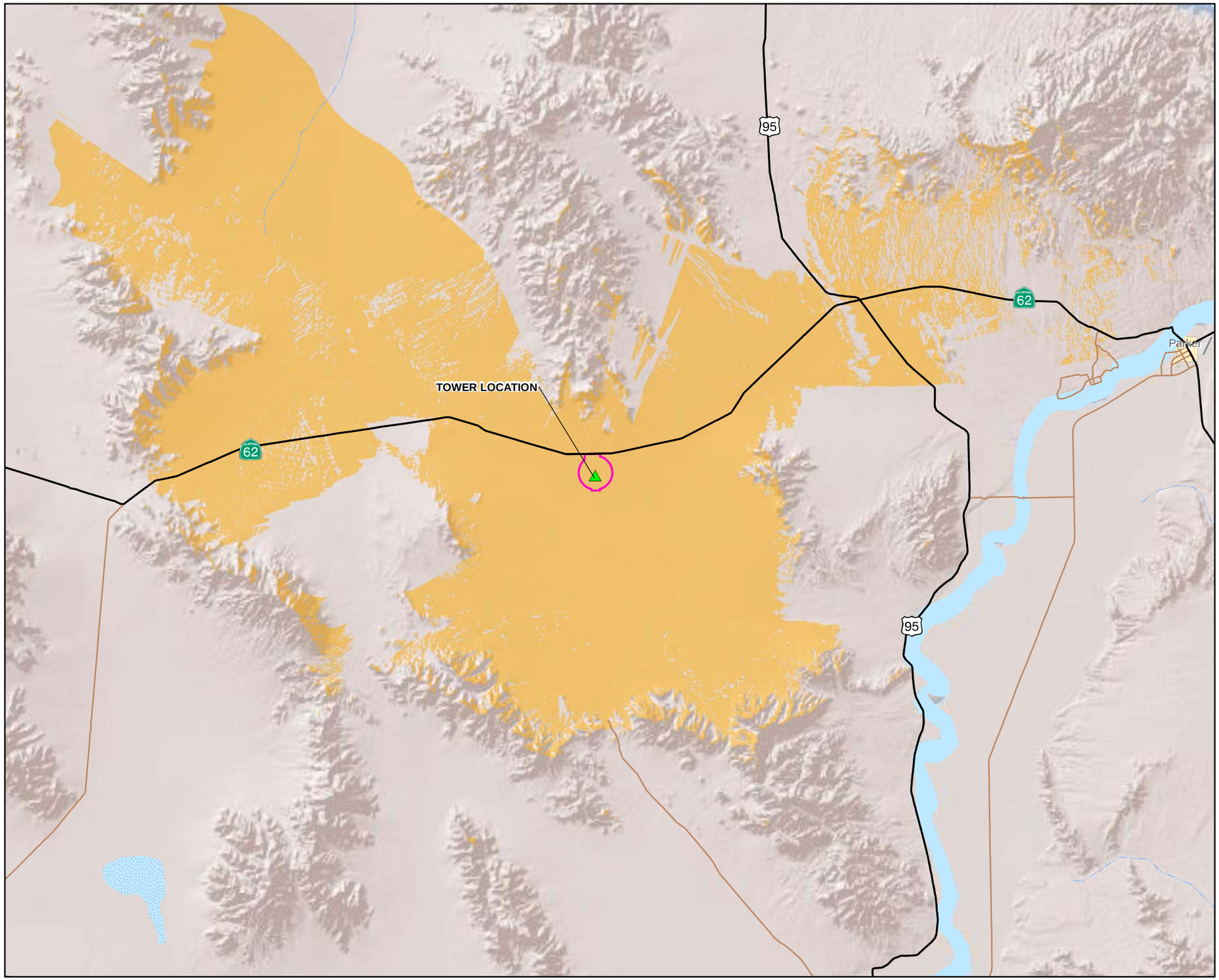
The RSEP site is relatively flat, with an elevation of approximately 832 feet, sloping gently to the south and southeast (California Division of Mines and Geology, 1963 and 1967). The site includes the former Rice Army Airfield, constructed as part of the World War II-era Desert Training Center/California-Arizona Maneuver Area, and was used as a military training airfield from 1942 to 1944. The airfield consisted of two paved 5,000-foot runways and numerous aircraft hardstands extending beyond the runways to the southeast and southwest. The airfield served as a private airfield after 1944 and was abandoned between 1954 and 1958. The site is now comprised primarily of creosote bush-bursage desert scrub with few areas of disturbance where foundations or concrete from the runways and hardstands remain. Burrowbush and some creosote bush have recolonized the runways, and no standing structures remain.

Visually prominent manmade features in the vicinity of the RSEP site include the Atchison, Topeka and Santa Fe Railroad, which runs east-west north of the site and north-south west of the site and two communication towers located to the east of the RSEP site. The east-west trending portion of the railroad runs adjacent to SR 62 and is located on top of a berm. Approximately 17 miles of the railroad berm has been decorated with rock graffiti.

Character Photo 1 was taken looking southeast toward the RSEP site and the former Rice Army Airfield from SR 62 at a distance of approximately 4 miles. The view from Character Photo 1 is shown in Figure 5.13-4a. This view includes SR 62 and the nearly flat Rice Valley in the foreground. Low desert shrubs are sparsely distributed in the foreground and middle ground, mixed with low mounded grasses and randomly located short trees. Rice Valley, the West Riverside Mountains, and the Riverside Mountains provide the background of this view.

Character Photo 2 was taken looking southwest toward the RSEP site and the former Rice Army Airfield from SR 62 at a distance of approximately 2 miles. The view from Character Photo 2 is shown in Figure 5.13-4b. This view includes SR 62, wood distribution poles, a communication tower, and Rice Valley in the foreground and middle ground. Low desert shrubs are sparsely distributed in the foreground, mixed with low mounded grasses and randomly located short trees. Rice Valley and the Arica Mountains are visible in the background of this view.

Character Photo 3 (Figure 5.13-5a) is located approximately 4 miles southwest of the RSEP site, at the northern border of the Rice Valley Wilderness Area. The photograph was taken looking northeast toward the RSEP site. This view includes Rice Valley and the Arizona and California Railroad in the foreground; Rice Valley is visible in the middle ground and background. Low desert shrubs are sparsely distributed in the foreground, mixed with low mounded grasses. Rice Valley and the Turtle Mountains form the background of this view.



LEGEND

- TOWER LOCATION
- PROJECT FENCELINE BOUNDARY
- VISIBLE

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.

N

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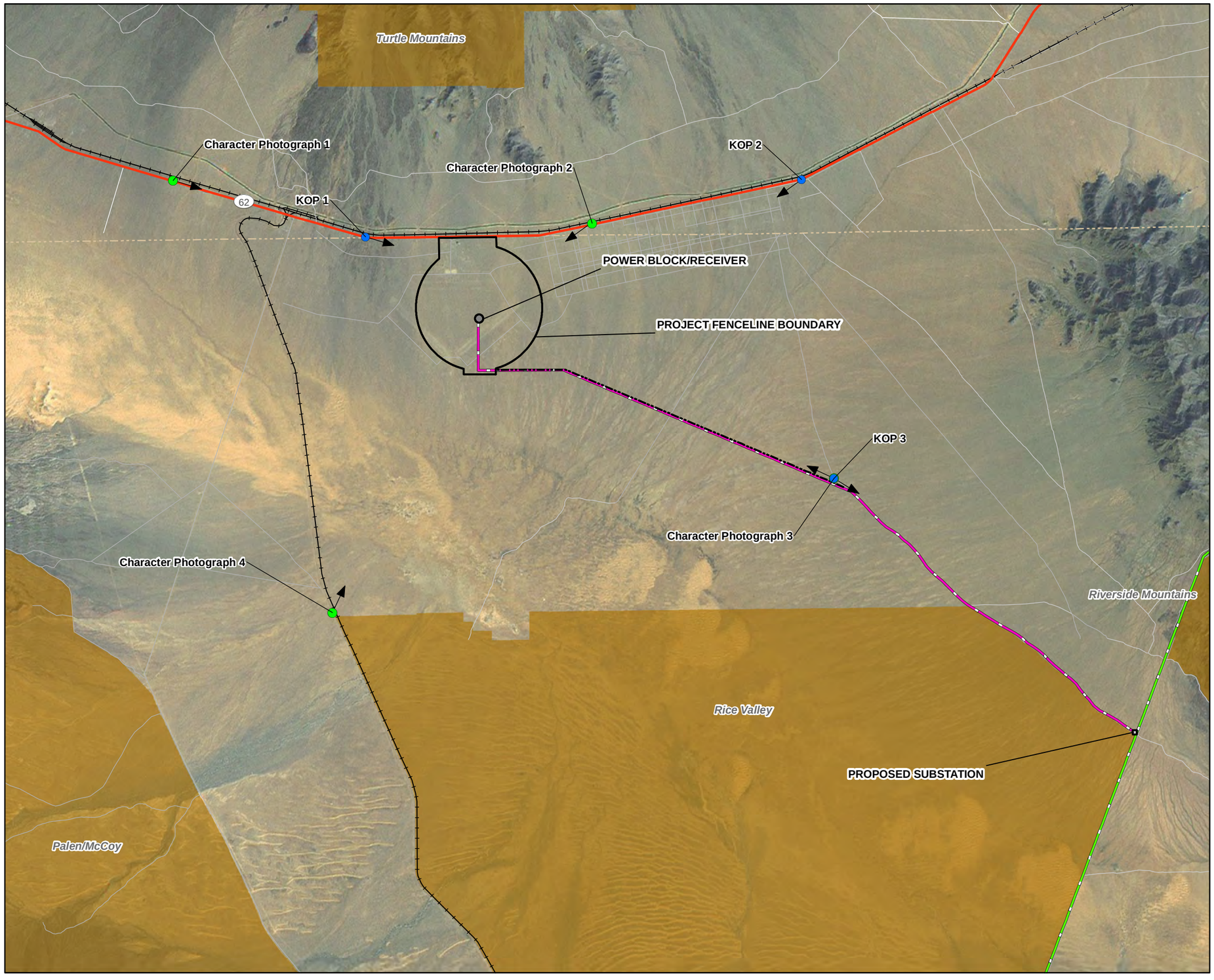
Miles

FIGURE 5.13-1
VIEWSHED MAP
RICE SOLAR ENERGY PROJECT
RIVERSIDE COUNTY, CALIFORNIA



LEGEND

- CHARACTER PHOTOGRAPH
- KEY OBSERVATION POINT
- PHOTO DIRECTION
- TRANSMISSION LINE ACCESS ROAD
- GENERATOR TIE-LINE
- PARKER-BLYTHE TRANSMISSION LINE
- PROJECT FENCELINE BOUNDARY
- PROPOSED SUBSTATION
- POWER BLOCK/RECEIVER
- BLM WILDERNESS AREA

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.

N

0 3,500 7,000
Feet

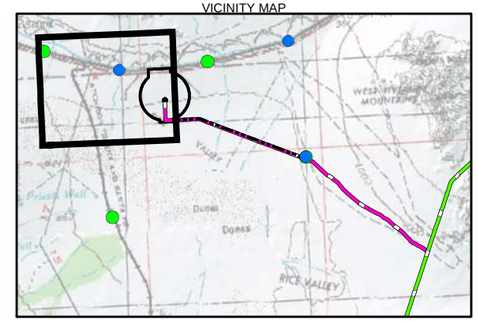
FIGURE 5.13-2
OVERVIEW MAP
RICE SOLAR ENERGY PROJECT
RIVERSIDE COUNTY, CALIFORNIA

Character Photograph 1

KOP 1

SAN BERNARDINO CO
RIVERSIDE CO

VICINITY MAP



LEGEND

- CHARACTER PHOTOGRAPH
- KEY OBSERVATION POINT
- PHOTO/OBSERVATION DIRECTION
- TRANSMISSION LINE ACCESS ROAD
- GENERATOR TIE-LINE
- PARKER-BLYTHE TRANSMISSION LINE
- PROJECT FENCELINE BOUNDARY
- PROPOSED SUBSTATION
- POWER BLOCK/RECEIVER

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.

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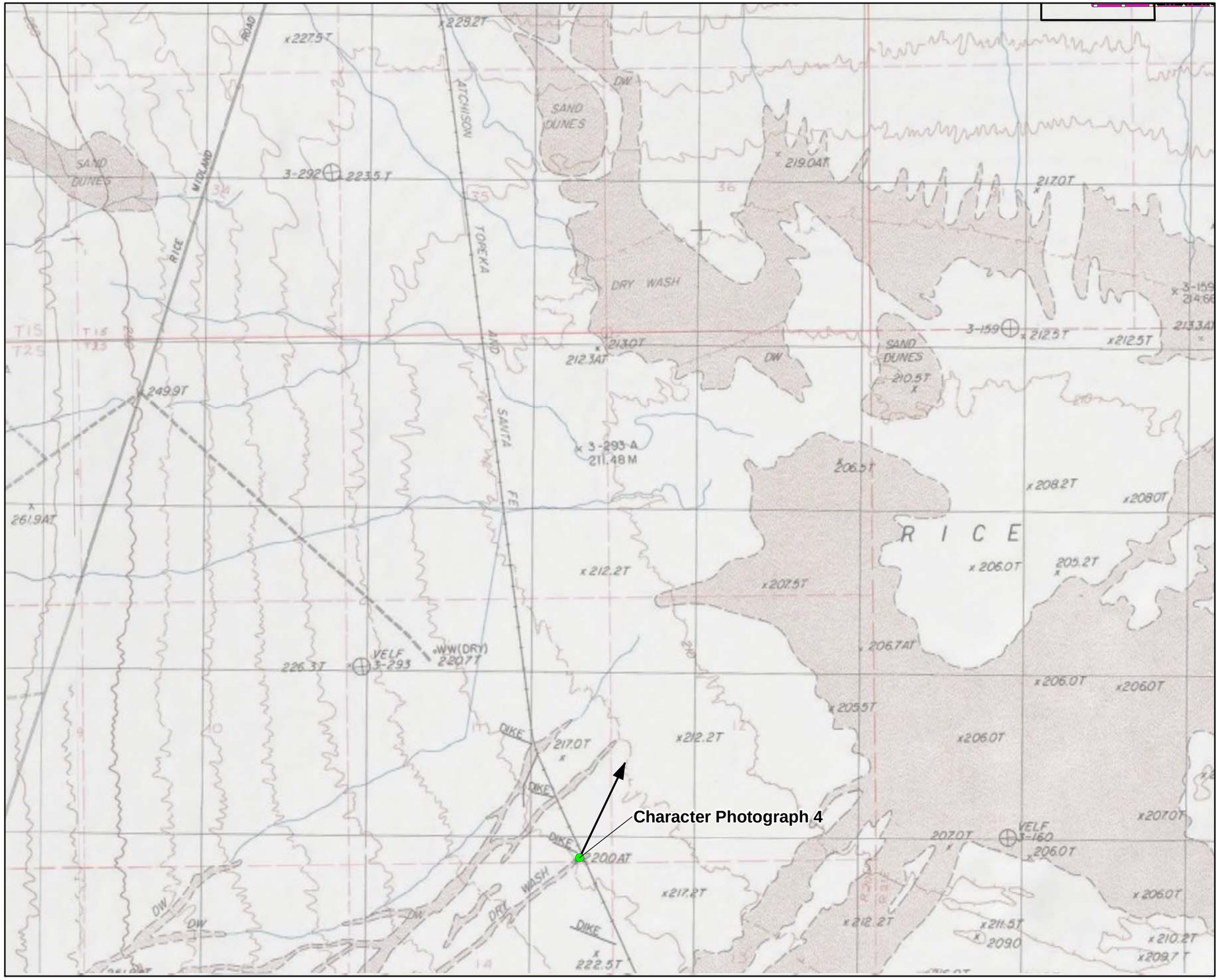
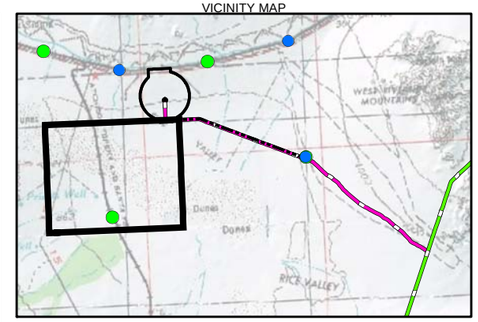
Feet

FIGURE 5.13-3A
PHOTO/OBSERVATION DIRECTION MAP

RICE SOLAR ENERGY PROJECT
RIVERSIDE COUNTY, CALIFORNIA



VICINITY MAP



LEGEND

- CHARACTER PHOTOGRAPH
- KEY OBSERVATION POINT
- PHOTO/OBSERVATION DIRECTION
- TRANSMISSION LINE ACCESS ROAD
- GENERATOR TIE-LINE
- PARKER-BLYTHE TRANSMISSION LINE
- PROJECT FENCELINE BOUNDARY
- PROPOSED SUBSTATION
- POWER BLOCK/RECEIVER

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.

N

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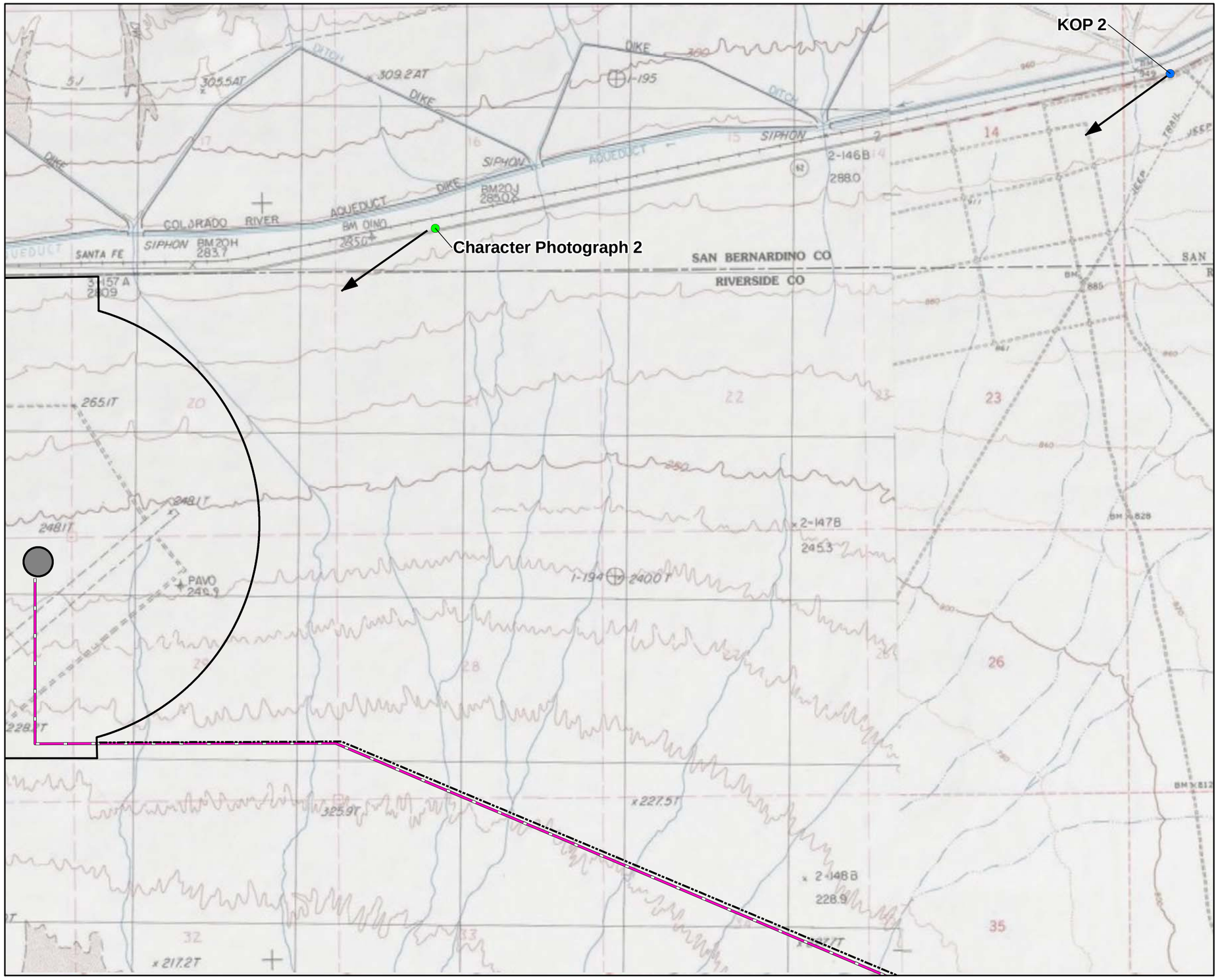
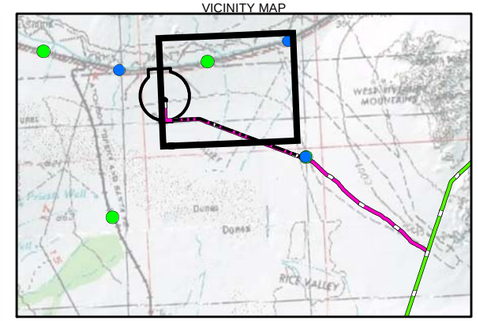
Feet

FIGURE 5.13-3B
PHOTO/OBSERVATION DIRECTION MAP
RICE SOLAR ENERGY PROJECT
RIVERSIDE COUNTY, CALIFORNIA

CH2MHILL



VICINITY MAP



LEGEND

- CHARACTER PHOTOGRAPH
- KEY OBSERVATION POINT
- PHOTO/OBSERVATION DIRECTION
- TRANSMISSION LINE ACCESS ROAD
- GENERATOR TIE-LINE
- PARKER-BLYTHE TRANSMISSION LINE
- PROJECT FENCELINE BOUNDARY
- PROPOSED SUBSTATION
- POWER BLOCK/RECEIVER

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.

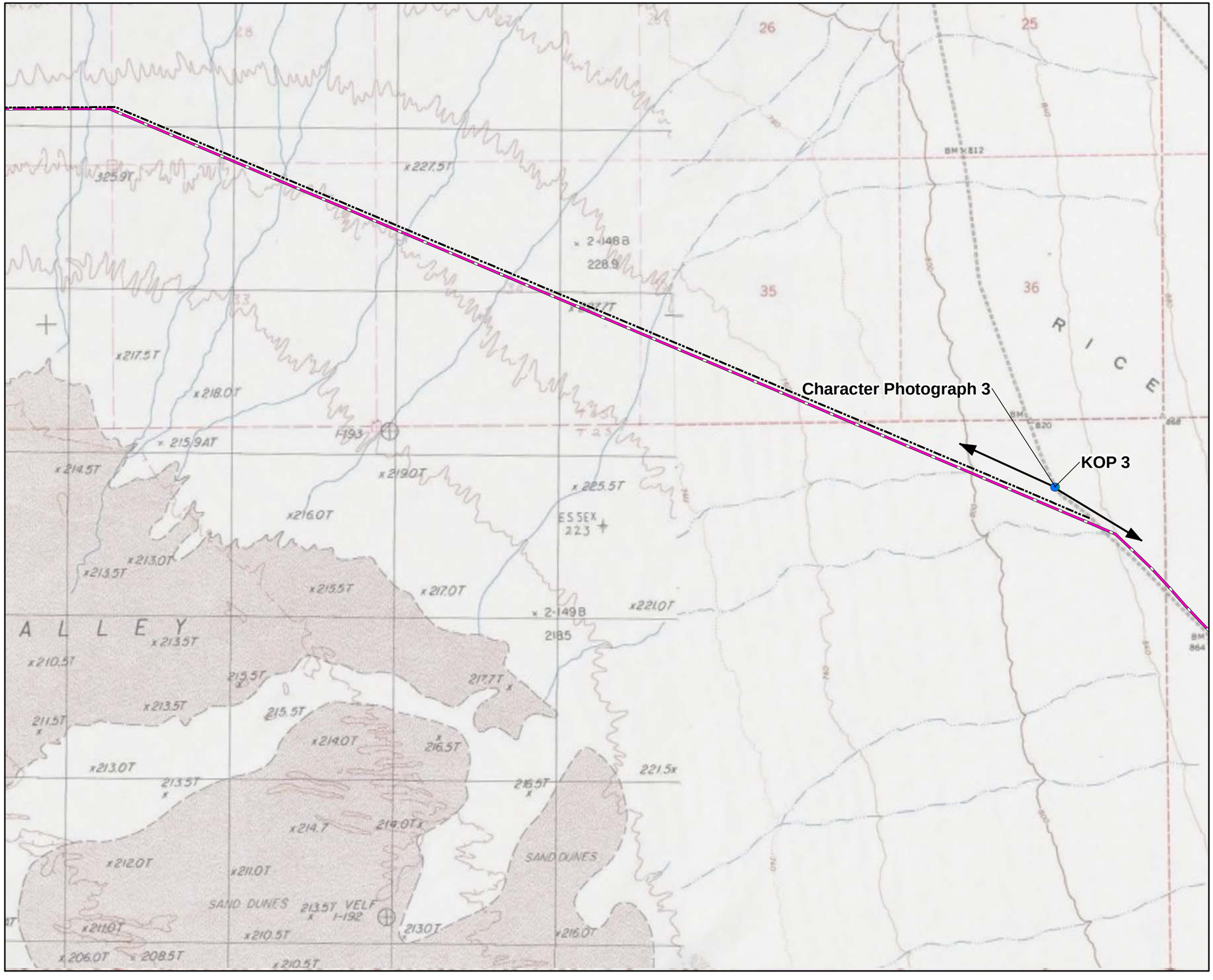
N

0 1,000 2,000

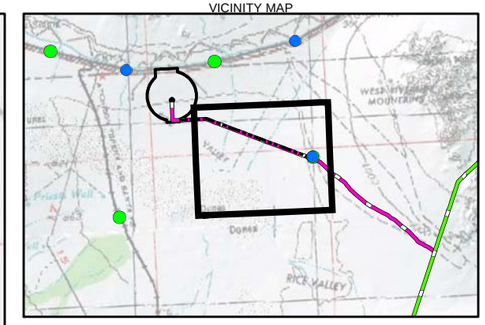
Feet

FIGURE 5.13-3C
PHOTO/OBSERVATION DIRECTION MAP
RICE SOLAR ENERGY PROJECT
RIVERSIDE COUNTY, CALIFORNIA

CH2MHILL



VICINITY MAP



LEGEND

- CHARACTER PHOTOGRAPH
- KEY OBSERVATION POINT
- PHOTO/OBSERVATION DIRECTION
- TRANSMISSION LINE ACCESS ROAD
- GENERATOR TIE-LINE
- PARKER-BLYTHE TRANSMISSION LINE
- PROJECT FENCELINE BOUNDARY
- PROPOSED SUBSTATION
- POWER BLOCK/RECEIVER

This map was compiled from various scale source data and maps and is intended for use as only an approximate representation of actual locations.

N

0 1,000 2,000

Feet

FIGURE 5.13-3D
PHOTO/OBSERVATION DIRECTION MAP
RICE SOLAR ENERGY PROJECT
RIVERSIDE COUNTY, CALIFORNIA

a. Character Photo 1 - View from State Route 62, looking southeast toward the Rice Solar Energy Project. Rice Valley, the West Riverside Mountains, and the Riverside Mountains are visible in this view.

b. Character Photo 2 - View from State Route 62, looking southwest toward the Rice Solar Energy Project. Rice Valley and the Arica Mountains are visible in this view.

FIGURE 5.13-4
CHARACTER PHOTOS 1 AND 2
RICE SOLAR ENERGY PROJECT
RIVERSIDE COUNTY, CALIFORNIA

a. Character Photo 3 - View from the border of the Rice Valley Wilderness Area looking northeast toward the Rice Solar Energy Project. Rice Valley and the Atchison Topeka Sante Fe Railroad are visible in the foreground. The Turtle Mountains are visible in the background.

b. Character Photo 4 - View from the intersection of the transmission line and Rice Valley Road, looking southeast across the Rice Valley in the area south of the project site.

FIGURE 5.13-5
CHARACTER PHOTOS 3 AND 4
RICE SOLAR ENERGY PROJECT
RIVERSIDE COUNTY, CALIFORNIA

CH2MHILL

The project includes a 10.0-mile-long, 161/230-kilovolt (kV) tubular steel pole generator tie-line connecting the plant facility to the Western Area Power Administration (Western) 161/230-kV Parker-Blythe transmission line. The generator tie-line would run from the southern boundary of the heliostat field east to the corner of the site and from there across lands managed by the Bureau of Land Management (BLM) and a small portion of private property. The new interconnection substation would be located at the interconnection point of the proposed generator tie-line and Western's Parker-Blythe transmission line on federal land managed by the BLM (Figure 5.13-2).

Character Photo 4 was taken looking northeast toward the RSEP site from the western border of the Rice Valley Wilderness Area, along the generator tie-line. The view from Character Photo 4 is shown in Figure 5.13-5b. This view includes the Arizona and California Railroad in the foreground, Rice Valley floor in the middle ground, and the Turtle Mountains the background.

5.13.1.1.1 Wilderness Areas

There are four wilderness areas within 10 miles of the RSEP site, as described below. Recreation activities within the wilderness areas include hiking, horseback riding, and hunting. Accessibility to the wilderness areas is quite limited in the vicinity of the RSEP project, none of the nearby wilderness areas have established parking areas or trailheads, and there is not an established network of trails or known areas where visitors concentrate. The wilderness areas are accessible by four-wheel drive vehicles that can be parked outside the wilderness areas where the unmaintained dirt roads end. The wilderness boundaries are set back 30 feet from dirt roads and 300 feet from paved roads; motorized vehicles are not permitted within the wilderness areas (BLM, 2009a, 2009b, 2009c, and 2009d).

Turtle Mountains Wilderness Area. The closest wilderness area to the RSEP is the 177,209-acre Turtle Mountains Wilderness Area, approximately 2 miles north. The BLM describes the location of the wilderness area as an ecological transition zone between the Mojave and Sonoran Deserts that contains a high diversity of plant and animal species (BLM, 2009d). Access to the southern portion of the wilderness area is limited and careful driving is required; unmaintained dirt trails must be used to reach the wilderness area boundary and off-highway vehicles (OHVs) or high-clearance vehicles are recommended (BLM, 2009d).

Palen/McCoy Wilderness Area. Approximately 6 miles southwest of the RSEP site is the 236,486-acre Palen/McCoy Wilderness Area, accessible from the north using Rice-Midland Road. It diverse vegetation and major geological features, including the Granite, McCoy, Palen, Little Maria and Arica Mountains, which are five distinct mountain ranges separated by broad sloping bajadas (BLM, 2009a).

Rice Valley Wilderness Area. The 41,776-acre Rice Valley Wilderness Area is approximately 3 miles south of the RSEP site. It is accessible from the north using Rice-Midland Road and unnamed dirt trails. The broad, flat plains of the Rice Valley and the northwestern tip of the steep and rugged Big Maria Mountains lie in the borders of this wilderness (BLM, 2009b). The Rice Valley Dunes are in the northern portion of this wilderness area; the dunes area was permanently closed in December 2002 because of under-utilization as part of the Northern and Eastern Colorado Desert Coordinated Management Plan (NECO) amendment (DuneGuide, 2009). BLM officials, in explaining this

closure, indicated that this area "…has high value habitat for species and low use on recreation—basically no use in 20 years." (DuneGuide, 2009)

Riverside Mountains Wilderness Area. The Riverside Mountains Wilderness Area is located approximately 9.5 miles southeast of the RSEP site; it is accessible from the north using Rice Valley Road. The wilderness area is 24,004 acres and is bordered on the east by the Colorado River. The landscape varies from gently sloping bajadas to steep, rugged interiors (BLM, 2009c).

5.13.1.1.2 Scenic Highways

SR 62 is eligible for designation as a State Scenic Highway in Riverside County from SR 10 north to the San Bernardino County line; similarly, SR 62 is also eligible for State Scenic Highway designation along its entire length in San Bernardino County. Although SR 62 has been nominated as eligible for inclusion in the California Scenic Highway Program, it has not been adopted and thus does not have State Scenic Highway status. The portion of SR 62 that is north of the RSEP site is within the portion of SR 62 that is eligible for State Scenic Highway designation.

5.13.1.2 Project Site

The RSEP site is in Rice Valley, immediately south of SR 62 on four privately owned, unincorporated parcels; the private land holding totals 3,324 acres (Figure 5.13-1). The RSEP site would occupy 1,410 acres of this private land holding, and is zoned Controlled Development under the Riverside County zoning ordinance and General Plan. Project components to be built on the 1,410 acres include a heliostat field, solar tower/receiver, power block area, evaporation ponds, temporary construction laydown areas, worker parking, and worker trailer parking. The temporary facilities laydown and parking areas will be just north of the RSEP heliostat field. Additional parking and laydown areas will be in the heliostat field and power block area.

5.13.1.3 Generator Tie-line and Interconnection Substation

The RSEP includes a new 10.0-mile-long, 161/230-kV tubular steel pole generator tie-line that would be built primarily on lands managed by BLM. The new generator tie-line would connect the solar energy facility to Western's 161/230 kV Parker-Blythe transmission line so that electricity generated by the RSEP can be delivered to the southern California electrical grid. The route for the new generator tie-line would originate at the RSEP site and extend southeast through Rice Valley, intersecting Rice Valley Road approximately 1.7 miles north of the Rice Valley Wilderness Area (Figure 5.13-2). The line would then run parallel to Rice Valley Road along the northeast border of the Rice Valley Wilderness Area, between the Rice Valley Wilderness Area and the west side of the West Riverside Mountains. A new interconnection substation would be built at the point where the new generator tie-lines interconnect with the existing Western Parker-Blythe 161/230-kV transmission line (Figure 5.13-2). The interconnection substation would be located solely on land managed by the BLM and is zoned Natural Assets by Riverside County (Riverside County Land Information System, 2009).

5.13.1.4 Potential Project Visibility

As the first step in analyzing the RSEP's effects on visual resources, a determination was made of the project's viewshed, the area from which the project may be visible. Because the

topography in the project vicinity is largely flat, the project site is theoretically visible from a significant distance (Figure 5.13-1). It is important to note that the visibility of the RSEP as shown is based solely on topography, specifically elevation. The model used to create the viewshed map does not take into account the attenuating effect of distance. Typically, points between 3.5 and 5 miles from a project feature are considered the furthest extent the feature is visible and/or prominent in the landscape. Because the RSEP includes a very tall solar receiver tower (see Section 5.13.2.3) that would be seen in a primarily flat landscape, the viewshed analysis in this AFC included areas up to 10 miles from the project site.

5.13.1.5 Viewing Populations and Views

Within the 10-mile project viewshed, there are no residential viewers, and the only potential viewers of the project are travelers on SR 62 and the small numbers of recreationalists who use the surrounding desert lands. In 2008, the average daily traffic on SR 62 was 2,200 vehicles per day, and 7 to 21 percent of the vehicles using this highway were trucks (California Department of Transportation [Caltrans], 2009 and 2008). The visual sensitivity of the travelers on this segment of SR 62 is low to moderate because vehicles would be passing the site at speeds between approximately 55 and 70 miles per hour, providing travelers with only short-term views toward the project. Recreational users in the project area include OHV users on the dirt trails that crisscross Rice Valley, as well as visitors to the surrounding wilderness areas. Recreationalists in the viewshed are considered transient visual sensitive receptors[3]; they were determined to have medium-term views. Visitor numbers for the surrounding wilderness areas were unavailable. The only available information in this regard is that the Rice Valley Dunes recreation area was permanently closed in December 2002 partly because of lack of use. In public meetings regarding the NECO (BLM, 2002), BLM officials noted that this area had seen "…virtually no use in 20 years."

Three representative locations were selected for detailed analysis in terms of potential impacts to visual resources as a result of construction and operation of the proposed project. Viewpoints from these representative locations are referred to as Key Observation Points (KOPs). The locations of KOPs 1, 2, and 3 are indicated on Figures 5.13-1 and 5.13-2. The KOP locations and the directions in which the photographs were taken are also indicated on Figures 5.13-3a through 5.13.3d. The KOPs were chosen to represent distinct viewing populations that would have a view of the project site during their normal traveling or recreational activities in the project vicinity.

Because the greatest number of viewers who see the site would be motorists traveling on SR 62, two KOPs were selected from SR 62 looking toward the RSEP site, KOP 1 and KOP 2, representing forward views from eastbound and westbound vehicles, respectively, toward the RSEP site. These KOPs each include a field of view from a moving vehicle that would include the solar receiver tower. To represent the views of people using the area for recreation, KOP 3 was selected. This KOP is located on Rice Valley Road looking toward the generator tie-line and the RSEP site and represents the nearest safely accessible point to the generator tie-line, the RSEP site, and the wilderness areas.

[3] Typically, residents and recreationalists are considered to be sensitive receptors to changes in the landscape. This is because of the potential for effects to their long-term views or their enjoyment of a particular landscape or activity.

5.13.1.6 Existing Conditions Evaluation

The existing visual conditions as seen from the KOPs were documented and evaluated, based on a site visit conducted in August 2009. An assessment of the existing level of scenic quality was made based on professional judgment that took a broad spectrum of factors into consideration, including the following:

- Natural features, including topography, water courses, rock outcrops, and natural vegetation
- The positive and negative effects of man-made alterations and built structures on visual quality
- Visual composition, including an assessment of the vividness, intactness, and unity of patterns in the landscape[4]

The final scenic quality ratings assigned to each view fit within the rating scale summarized in Table 5.13-1. Development of this scale builds on a scale developed for use with an artificial intelligence system for evaluation of landscape visual quality (Buhyoff et al., 1994), and incorporates landscape assessment concepts applied by the U.S. Forest Service and the Federal Highway Administration.

TABLE 5.13-1
Landscape Scenic Quality Scale

Rating	Explanation
Outstanding Visual Quality	A rating reserved for landscapes with exceptionally high visual quality. These landscapes are significant nationally or regionally. They usually contain exceptional natural or cultural features that contribute to this rating. They are what we think of as “picture postcard” landscapes. People are attracted to these landscapes to view them.
High Visual Quality	Landscapes that have high-quality scenic value. This may be due to cultural or natural features contained in the landscape or to the arrangement of spaces contained in the landscape that causes the landscape to be visually interesting or a particularly comfortable place for people. These landscapes have high levels of vividness, unity, and intactness.
Moderately High Visual Quality	Landscapes that have above average scenic value but are not of high scenic value. The scenic value of these landscapes may be due to man-made or natural features contained within the landscape, to the arrangement of spaces, in the landscape or to the two-dimensional attributes of the landscape. Levels of vividness, unity, and intactness are moderate to high.
Moderate Visual Quality	Landscapes that are common or typical landscapes that have average scenic value. They usually lack significant man-made or natural features. Their scenic value is primarily a result of the arrangement of spaces contained in the landscape, and the two-dimensional visual attributes of the landscape. Levels of vividness, unity, and intactness are average.
Moderately Low Visual Quality	Landscapes that have below-average scenic value but not low scenic value. They may contain visually discordant man-made alterations, but these features do not dominate the landscape. They often lack spaces that people will perceive as inviting and provide little interest in terms of two-dimensional visual attributes of the landscape.

[4] Vividness is the memorability of the visual impression received from contrasting landscape elements as they combine to form a striking and distinctive visual pattern. Intactness is the integrity of visual order in the natural and man-built landscape, and the extent to which the landscape is free from visual encroachment. Unity is the degree to which the visual resources of the landscape join together to form a coherent, harmonious visual pattern. Unity refers to the compositional harmony of intercompatibility between landscape elements. (Federal Highway Administration, 1988)

TABLE 5.13-1
Landscape Scenic Quality Scale

Rating	Explanation
Low Visual Quality	Landscapes that have below average scenic value. They may contain visually discordant man-made alterations, and often provide little interest in terms of two-dimensional visual attributes of the landscape. Levels of vividness, unity, and intactness are below average.

Note: Rating scale based on Buhyoff et al., 1994; Federal Highway Administration, 1988; and U.S. Forest Service, 1995.

The term "sensitivity" is used to describe the sensitivity of the viewers who may experience a particular view to potential alteration of that view. The degree of sensitivity assumed is related to the activity a viewer is engaged in, the importance of the view to that activity, and the degree of community or cultural significance of the visual resource. Higher sensitivity views include those seen from designated scenic areas or viewpoints, from parks that are intended for appreciation of the landscape, and from residential areas. Views from areas devoted to active recreation and from commercial areas are assumed to have a lower level of sensitivity. The lowest levels of visual sensitivity are assumed to be found in areas devoted to warehouses, industry, and other utilitarian activities.

5.13.1.7 Key Observation Points

5.13.1.7.1 KOP 1

KOP 1 is approximately 2 miles northwest of the RSEP site and provides a view from a vehicle traveling eastbound along SR 62, looking southeast toward the site. The existing view from KOP 1 is shown in Figure 5.13-6a. This view includes SR 62, roadside reflectors running adjacent to the highway, a real estate sign, and the relatively flat Rice Valley in the foreground. Low desert shrubs are sparsely distributed in the foreground. The broad, flat Rice Valley is visible in the middle ground as a horizontal line. The West Riverside Mountains, the Riverside Mountains, the Big Maria Mountains, and more distant portions of Rice Valley are visible in the background of this view.

The overall character of this view is primarily undeveloped with the exception of SR 62, the roadside reflectors that run adjacent to the highway, and the real estate sign in the foreground of this view. Applying the Buhyoff landscape visual quality scale, the view seen in this photograph would have a moderate level of overall visual quality. KOP 1 exhibits a moderate to moderately low level of vividness, with the mountains in the background as the primary memorable element. Because the human-made elements, including SR 62 and the roadside reflectors reduce the level of visual intactness and visual unity to some degree, the visual intactness of this view is moderately high and the visual unity is moderate.

The view from KOP 1 represents existing views for eastbound motorists on SR 62 toward the RSEP site; approximately 2,200 vehicles per day use this segment of the highway (Caltrans, 2009). Because speeds on this segment of highway tend to range from 55 to 70 miles per hour, motorists' experience of this view is of short duration; as a result, view sensitivity is assumed to be low.

5.13.1.7.2 KOP 2

KOP 2 is approximately 5 miles northeast of the RSEP site and provides a view from a westbound vehicle on SR 62 looking southwest toward the RSEP site. The existing view

from KOP 2 is shown in Figure 5.13-7a. This view includes SR 62; wood distribution poles; roadside reflectors running adjacent to the highway; and the broad, flat Rice Valley in the foreground and middle ground. Low desert shrubs are sparsely distributed in the foreground and middle ground, mixed with low mounded grasses and randomly located short trees; vegetation is not visible in the background. The Arica Mountains frame the background of the view.

The overall character of this view is primarily undeveloped, with the exception of SR 62, the wood distribution poles, and roadside reflectors that run adjacent to the highway. Applying the Buhyoff landscape visual quality scale, the view seen in this photograph would have a moderate to moderately low overall visual quality. KOP 2 exhibits a moderately low level of vividness. SR 62 and the paralleling distribution pole draw the eye of the viewer in the foreground and middle ground, and intrude in the view, resulting in moderate levels of visual unity and intactness.

The view from KOP 2 represents existing views for westbound motorists on SR 62 toward the RSEP site. This view would be seen by the occupants of the approximately 2,200 vehicles per day that travel this segment of the highway (Caltrans, 2009). Because speeds on this segment of highway tend to range from 55 to 70 miles per hour, motorists' experience of this view is of short duration. Because of the short duration of the view, sensitivity is assumed to be low.

5.13.1.7.3 KOP 3

KOP 3 is approximately 5 miles southeast of the RSEP site, at the intersection of the proposed RSEP generator tie-line and Rice Valley Road. The photograph was taken looking northwest toward the RSEP site, along the proposed generator tie-line route. The existing view from KOP 3 is shown in Figure 5.13-8a. This view includes the broad, flat Rice Valley and an OHV road in the foreground; Rice Valley is visible in the middle ground. Low desert shrubs are sparsely distributed in the foreground and middle ground, mixed with low mounded grasses. In the background, the individual plants merge together to create what appears to be a textured brown carpet on the valley floor. Rice Valley and the Turtle Mountains are visible in the background; SR 62 and the Iron Mountains are present but barely visible in the background.

The overall character of this view is undeveloped. Applying the Buhyoff landscape visual quality scale, the view seen in this photograph would have a moderately high overall visual quality. KOP 3 exhibits a moderate level of vividness, with the vastness of the broad, flat Rice Valley accentuated by the mountain ranges visible in the background. The dirt road bisecting Rice Valley in the view does little to distract from the expansive feel of the view, and the resulting levels of visual unity and intactness are moderate.

The view from KOP 3 represents existing views for area recreationalists, in that Rice Valley Road is used by OHV users and those traveling to and from nearby wilderness areas. Because the view of the RSEP from KOP 3 would be seen by recreationalists for a medium duration, the sensitivity of the view is assumed to be moderate.

a. KOP 1 - Existing view from eastbound State Route 62, looking southeast toward Rice Valley and the Rice Solar Energy Project.

b. KOP 1 - Simulated view from eastbound State Route 62, looking southeast with Rice Valley and the Rice Solar Energy Project in the view.

FIGURE 5.13-6
KOP 1
RICE SOLAR ENERGY PROJECT
RIVERSIDE COUNTY, CALIFORNIA

a. KOP 2 - Existing view from westbound State Route 62, looking southwest toward Rice Valley and the Rice Solar Energy Project.

b. KOP 2 - Simulated view from westbound State Route 62, looking southwest with Rice Valley and the Rice Solar Energy Project in the view.

FIGURE 5.13-7
KOP 2
RICE SOLAR ENERGY PROJECT
RIVERSIDE COUNTY, CALIFORNIA

a. KOP 3 - Existing view from the intersection of the transmission line and an off-highway vehicle road, looking northwest toward the Rice Solar Energy Project.

b. KOP 3 - Simulated view from the intersection of the transmission line and an off-highway vehicle road, looking northwest with the transmission line and the Rice Solar Energy Project in the view.

FIGURE 5.13-8
KOP 3
RICE SOLAR ENERGY PROJECT
RIVERSIDE COUNTY, CALIFORNIA

5.13.2 Environmental Analysis

5.13.2.1 Analysis Procedure

This analysis of the visual effects that might be brought about by the RSEP is based on field observations and review of the following information: local planning documents, project maps and drawings, photographs of the project area, computer-generated visual simulations from the KOPs, and research on design measures for integrating electric facilities into their environmental settings.

Site reconnaissance was conducted to view the site and surrounding area, to identify potential KOPs, and to take representative photographs of existing visual conditions. A single-lens reflex 35-millimeter (mm) camera with a 50-mm lens (view angle 40 degrees) was used to shoot site photographs.

Page-size photographs are presented to represent the "before" conditions from the KOPs. A visual simulation was produced to illustrate the "after" visual conditions from this point, which provides the viewer with a clear image of the location, scale, and visual appearance of the project. For each KOP, an "after" image was prepared. This simulation image represents the project's appearance in the period immediately after completion of construction and installation of the landscaping. The computer-generated simulations are the result of an objective analytical and computer modeling process described briefly below. The images are accurate within the constraints of the available site and project data.

Computer modeling and rendering techniques were used to produce the simulated images of the views of the site as they would appear after development of the project. Existing topographic and site data provided the basis for developing an initial digital model. The project engineers provided site plans and digital data for the generation facility, and site plans and elevations for the components of the transmission system. These were used to create three-dimensional (3-D) digital models of these facilities. These models were combined with the digital site model to produce a complete computer model of the generating facility.

For each viewpoint, viewer location was digitized from topographic maps and scaled aerial photos, using 5 feet as the assumed eye level. Computer "wire frame" perspective plots were then overlaid on the photographs of the views from the KOP to verify scale and viewpoint location. Digital visual simulation images were produced as a next step based on computer renderings of the 3-D model combined with high-resolution digital versions of base photographs. The final "hardcopy" visual simulation images that appear in this AFC were produced from the digital image files using a color printer.

5.13.2.2 Impact Evaluation Criteria

5.13.2.2.1 Significance Criteria

Analysis of the project's impacts was based on evaluation of the changes to the existing visual resources that would result from construction and operation of the RSEP. An important aspect of this analysis was evaluation of the "after" views provided by the computer-generated visual simulations, and their comparison to the existing visual environment. In making a determination of the extent and implications of the visual changes, consideration was given to the following:

- The specific changes in the affected visual environment's composition, character, and any specially valued qualities
- The affected visual environment's context
- The extent to which the affected environment contains places or features that have been designated in plans and policies for protection or special consideration
- The numbers of viewers, their activities, and the extent to which these activities are related to the aesthetic qualities affected by the likely changes

Significance criteria for impacts to aesthetic resources were developed from the California Environmental Quality Act (CEQA) guidelines and the CEQA Checklist to evaluate the potential environmental impacts to the project, the following criteria were applied:

- Would the project have a substantial adverse effect on a scenic vista?
- Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?
- Would the project substantially degrade the existing visual character or quality of the site and its surroundings?
- Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?

5.13.2.3 Project Appearance

5.13.2.3.1 Project Structures and Dimensions

The RSEP facilities are described in detail in Section 2.0, Project Description. Figure 1.1-2 shows the general arrangement and layout of the project features on the site. Tables 5.13-2 and 5.13-3 summarize the dimensions of the major features of the generating facility.

TABLE 5.13-2
Approximate Dimensions of the Major Project Buildings

	Length (feet)	Width (feet)	Eave Height (feet)	Square Footage
Permanent Buildings				
Administration	153	63	13	9,639
Warehouse	102	63	24	6,426
Control/operations	93	64	13	5,952
Steam generation	195	152	150	29,640
Electrical	94	34	13	3,196
Water treatment	120	60	30	6,000
Heliostat assembly building	400	200	30	80,000
Temporary Buildings				
Guard house	12	30	10	360
Construction trailers	various	various	various	various

TABLE 5.13-3
Approximate Dimensions of the Major Project Structures

Major Structures	Dimensions
Solar receiver tower	115-foot base diameter Maximum tower height is 653 feet: • 538-foot concrete tower, plus • 100-foot solar receiver, plus • 15-foot crane
Heliostat structure	24 feet long 28 feet wide 12-foot pedestal height
Cold salt tank	159 feet in diameter 42-foot wall height Domed top height of 63.5 feet
Hot salt tank	167 feet in diameter 42-foot wall height Domed top height of 64.5 feet
Air cooled condenser	228 feet long 169 feet wide 112 feet to top of steam duct
Raw water tank	80 feet in diameter 25 feet tall
Demineralized water tank	54 feet in diameter 25 feet tall

The solar receiver tower will be an untreated, "poured in place" concrete structure with steel reinforcement built using a construction technique known as the slip form method. The permanent RSEP site would be surrounded by an 8-foot-high chain-link security fence. Additional information regarding project equipment color and finish is discussed below.

5.13.2.3.2 Power Plant

The RSEP is described in detail in Chapter 2.0, Project Description. Figures 1.1-1 and 1.1-2 show the general location of the project and main project components.

The RSEP would consist of up to 17,500 heliostats occupying approximately 1,370 acres. Each heliostat would be 24 feet long by 28 feet wide (approximately 672 square feet) and would have a post- or pier-type foundation to support and anchor the unit. The heliostats would be arranged in arcs encircling the receiver tower extending in concentric rings from the central tower. The solar receiver tower would be offset to the south of the true center of the heliostat field, to optimize the various sun angles between the heliostats and receiver. The heliostat field would be approximately 8,620 feet in diameter (1.63 miles), and the solar receiver would be roughly 0.96 mile from the northern end of the heliostat field and 1.07 miles south of SR 62.

The solar receiver tower would consist of a combination of a 538-foot-tall concrete tower, a 100-foot-tall cylindrical solar receiver, and a 15-foot-tall crane mounted on top of the receiver. The combined height of the solar receiver tower would be 653 feet. The receiver

tower would be constructed of concrete and its exterior surface would be untreated/ unpolished concrete to reduce glare.

A variety of buildings and areas would surround the solar receiver tower. These buildings and areas would include, but not be limited to, the steam generation building, the hot and cold salt storage tank areas, the pump support and maintenance area, the steam turbine/generator area, the water treatment area/building, and the air cooled condenser area. These buildings and areas would be shades of beige, tan, and gray to optimize the project facility's visual integration with the surrounding desert environment.

5.13.2.3.3 Generator Tie-line

The RSEP-proposed generator tie-line would be a 10.0-mile-long, single-circuit, 230-kV line, originating at the power block site within the RSEP fenceline. From the RSEP fenceline, the generator tie-line would extend east, then southeast before connecting to a new interconnection substation adjacent to the Western Parker-Blythe 161/230-kV transmission line. The generator tie-line would be carried by steel monopole structures between 85 and 115 feet in height. The insulators would be made of a non-reflective and non-refractive material, and the conductors would be non-specular.

5.13.2.3.4 Evaporation Ponds

Three evaporation ponds, approximately 5 acres each, would be built south of the heliostat field, within the RSEP fenceline. The RSEP's primary wastewater collection system would collect process wastewater from all the plant systems, including the boiler and steam system drains and water treatment process equipment. The aggregate discharge from this waste stream would be sent to double-lined evaporation ponds where the water would be retained on site to evaporate, leaving solid waste constituents behind.

5.13.2.3.5 Construction Laydown Area

Project construction would take place from the first quarter of 2011 to the third quarter of 2013. During the construction period, equipment laydown would occur inside and outside the edges of the heliostat field. Construction access would be from SR 62 to the plant entrance road. During this time, construction materials, construction equipment, trucks, and parked vehicles and campers/trailers in the construction camp area would be visible on the site. After construction is complete, all construction debris would be removed from the laydown area.

5.13.2.3.6 Landscaping and Signage

Because the RSEP site is located in an isolated desert area where there are no local residents or other long-term sensitive viewers, no landscaping is proposed as a part of the project. Entrance signs would be as minimal as possible and would be designed to be compatible with the surrounding environment. Any required entrance lighting would meet Caltrans requirements.

5.13.2.3.7 Lighting

Project construction activities are planned to occur between 5:00 a.m. and 7:00 p.m., Monday through Saturday. During some construction periods and the startup phase of the project, some activities may continue 24 hours a day, 7 days a week. During periods when nighttime construction activities take place, illumination that meets state and federal worker safety regulations would be required.

Operation of the RSEP will require nighttime and daytime lighting of the receiver tower for operational safety and security. Because of the height of the receiver tower, the tower will require aircraft warning lights; Federal Aviation Administration (FAA) obstruction lighting will be determined in conjunction with the FAA, but may include five nighttime FAA L-810 steady-burn red obstruction lights, three positioned 170 feet high and two positioned 538 feet high. There may also be three FAA L-864 flashing red obstruction lights (20 to 40 flashes per minute [fpm]), two positioned 326.6 feet high and one positioned 653.2 feet high. Daytime warning lights would include two FAA L-856 high-intensity flashing white obstruction lights (40 fpm) positioned 326.6 feet high. Alternatively, obstruction lighting may be all white lights, rather than a combination of white and red.

5.13.2.3.8 Water Vapor Plumes

The RSEP will not use gas turbine or wet-cell cooling tower technology that could otherwise generate visible vapor plumes under low temperature and high humidity conditions. Instead, the RSEP will use dry cooling, air-cooled condenser technology that does not involve vapor plumes. The project will use a small wet surface air cooler to cool the steam turbine lubricating oil. Plumes from this device would be infrequent and small.

5.13.2.4 Assessment of Visual Effects

5.13.2.4.1 KOP 1

Figure 5.13-6b is a simulated view of the RSEP as it would appear from KOP 1 after construction. As shown, the RSEP, including the solar receiver tower and the hot and cold salt storage tanks, would be visible in the middle ground of the view from KOP 1; the heliostat field is present but not visible in the middle ground. The proposed generator tie-line is present but not visible in the middle ground and background of the view.

After construction of the project is completed, the presence of the RSEP structures in the view would alter the view's character to some extent by introducing a tall concrete stack-like structure in a portion of the view across what is now open desert landscape. With the project, the overall visual quality of this view would change from moderate to moderate-to-moderately low, primarily because of a reduction in the level of visual intactness brought about by introduction of the solar receiver tower into the view, which would constitute a contrasting vertical element.

5.13.2.4.2 KOP 2

Figure 5.13-7b is a simulated view of the RSEP as it would appear from KOP 2 after construction. As shown, the RSEP, including the solar receiver tower and the hot and cold salt storage tanks, would be visible as relatively small elements in the middle ground and background of the view from KOP 2. The heliostat field and generator tie-line are present but not visible in the middle ground and background of the view.

After construction is completed, the presence of the RSEP structures in the view would alter the view's character to a small degree, by creating a small cluster of industrial-appearing structures in a small portion of the view across what is now open desert landscape. Because of the distance of the project from this viewpoint and the relatively minor role they would play in a view in which developed features are already visually prominent, the overall visual quality of this view would remain moderate.

5.13.2.4.3 KOP 3

Figure 5.13-8b is a simulated view of the RSEP as it would appear from KOP 3 after construction. As shown, the generator tie-line is visible in the foreground and middle ground of the view from KOP 3. The RSEP, including the solar receiver tower, hot and cold salt storage tanks and heliostat field, would be visible in the view's background zone.

After construction, the presence of the prominently visible generator tie-line in the foreground, the prominently visible array of heliostats, and the somewhat less prominently visible solar receiver tower, tanks, and other structures in the view's background would alter this now open-appearing view, giving it a more developed character. In addition, the modifications created by the addition of the project components to the view would reduce the visual intactness and unity of this view, changing its overall level of visual quality from moderately high to moderate.

5.13.2.4.4 Light and Glare

At present, the project site and immediately surrounding area are generally dark at night, and the primary source of nighttime lighting comes from the headlights of vehicles traveling on SR 62.

Because there would be times when construction activities occur at nighttime, there would be periods when lighting related to construction activities would be visible from the surrounding area. All lighting that will be installed to facilitate nighttime construction activities will, to the extent feasible and consistent with worker safety codes, be directed toward the center of the construction site and shielded to prevent light from straying offsite. To the extent that is practical, task-specific construction lighting will be used to minimize the overall amount of lighting of the construction site.

During the project's operational period, lighting of the power plant and substation facility would be required for operational and safety purposes. To reduce offsite lighting impacts during operation of the RSEP, areas not occupied on a regular basis would be provided with switches or motion detectors to light these areas only when occupied. Non-glare fixtures would be used, exterior lights would be shielded, and lights would be directed onsite so that offsite light or glare would be minimized. For areas where lighting is not required for normal operation, safety, or security, switched lighting circuits would be provided, thus allowing these areas to remain unilluminated (dark) at most times, minimizing the amount of lighting potentially visible offsite.

The flashing red and/or white lights that the FAA requires to operate at nighttime would introduce a new element into the project area's nighttime environment. Because the nighttime aircraft safety lights would be limited in number, and highly directional, their potential to create skyglow or backscatter would be minimal. The small points of flashing red light would be detectable to viewers who might be present in the surrounding area during nighttime hours, but they would not dominate the views.

To reduce daytime reflectivity from the tower structure, the receiver tower be would constructed of concrete and would be unpainted. The glint source for traffic on SR 62 is the solar receiver installed on the top of the tower. In everyday terms, looking at the receiver from the nearest site boundary along SR 62 would be similar to viewing a 120-watt light bulb from a distance of 1 meter (3.28 feet). For motorists on SR 62, the radiance from the

receiver would not be significant, because the closest point along SR 62 is approximately 1 mile from the tower and because at the nearest approach of SR 62 to the RSEP, drivers are looking forward, either east or west along the highway, rather than south to the receiver tower.

In addition, sunlight on moisture particles in the air could result in a "halo" or "tenting" effect. The halo effect is the appearance of light streaming down from the solar receiver tower, and results from the sunlight reflected from the heliostats illuminating moisture particles in the air. This effect typically takes place just after first sunlight in the morning during certain operating modes such as receiver standby. The halo effect is also self limiting; if there is too much moisture in the air, no halo effect would be created. The halo effect is relatively rare. It occurs only during conditions of higher humidity and in the early morning, and it disappears as the air warms and dries.

5.13.2.4.5 Water Vapor Plumes

The project would use a small wet surface air cooler to cool the steam turbine lubricating oil. Although this device has the capability to generate visible vapor plumes, these would be small because of the small scale of the device and would only rarely occur, given the low humidity levels in the Sonoran Desert.

5.13.2.4.6 Construction Period Impacts

Construction would take place from the first quarter of 2011 to the third quarter of 2013. Construction hours would primarily be between 5:00 a.m. and 7:00 p.m., Monday through Saturday. During some construction periods and during the startup phase of the project, some activities may continue 24 hours a day, 7 days a week.

Construction of the RSEP includes the heliostat field, solar receiver tower, and associated buildings. The construction of the generator tie-line and the interconnection substation would also occur at this time. During this period, construction materials, construction equipment, trucks, and parked vehicles would be visible on the site. After construction is complete, all construction debris would be removed from the laydown area.

5.13.2.5 Project Effects Evaluation

A discussion regarding whether the visual effects of the project would be significant pursuant to CEQA is provided below. The assessment of these impacts has been structured by applying the criteria set forth in Appendix G of the CEQA Guidelines. The CEQA Guidelines define a "significant effect" on the environment to mean a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including objects of historic or aesthetic significance (14 CCR 15382)." The four questions related to aesthetics that are posed for lead agencies and the answers to them are:

- **Would the project have a substantial adverse effect on a scenic vista?**

  No. This question does not apply to the RSEP because there are no scenic vistas located in the vicinity.

- **Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

  No. This question does not apply to the RSEP because none of the project features would fall within the boundaries of an adopted state scenic highway (California Scenic Highway Mapping System [CSHMS], 2007).

- **Would the project substantially degrade the existing visual character or quality of the site and its surroundings?**

  No. As discussed in Section 5.13.2.4, although the RSEP would create visible changes that would cause a degree of alteration to the character of some views toward the site from the surrounding area and would produce small to moderate levels of change to existing levels of visual quality, these changes would not constitute a substantial degradation of the existing visual character and quality of the site and its surroundings.

  The addition of the RSEP would change the visual character of the site by adding a solar generation installation and new generator tie-line and interconnection substation to a desert landscape that was formerly the site of a military airfield and now has an open, partially developed appearance. The overall level of change that the project would create in this previously disturbed landscape would not be substantial; the overall change to the visual quality of the views seen from all three KOPs would be low to moderate. An important consideration is that the level of viewer sensitivity at each of these KOPs is low to moderate. In this context, in particular, the changes in visual character and quality would not be substantial and would result in a level of impact that would be less than significant.

- **Would the project create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?**

  No. Any lighting that might be installed to facilitate nighttime construction activities would, to the extent feasible and consistent with worker safety codes, be directed toward the center of the construction site and shielded to prevent light from straying offsite. Task-specific construction lighting would be used to the extent practical while complying with worker safety regulations. Any light-related impacts associated with construction would be temporary in nature and would not be significant.

  With implementation of lighting design measures to minimize the amount of time that lighting at the RSEP is turned on and to assure that the lighting is shielded and directed only to the areas where it is required, this lighting would not create glare visible offsite, would not affect ambient lighting levels offsite, and would not create an area of skyglow above the site. In addition, although pools of light may be visible around some of the project facilities, their impacts on views from SR 62 (the primary viewpoint from which nighttime visitors would observe these illuminated areas) would be attenuated by distance and by the presence of vegetation that would partially screen these areas from view.

  Because the FAA-required nighttime aircraft safety lights would be limited in number and highly directional, their potential to create skyglow or backscatter would be minimal. The small points of flashing light would be detectable to the relatively small

numbers of viewers who might be present in the surrounding area during nighttime hours, but these small points of light would not dominate their views and would not constitute a source of substantial light or glare.

To reduce daytime glare, the receiver tower be would constructed of concrete and would be unpainted. The solar receiver installed on the top of the tower would, however, be a source of glint for vehicles traveling on SR 62. Because of the distance, however, the intensity of this glint would not be substantial.

In addition, sunlight on moisture particles in the air could result in a halo or tenting effect. However, the halo effect would occur only rarely, such as on mornings during conditions of higher humidity. It would not be considered an adverse effect, and might be considered aesthetically pleasing to some viewers.

The lighting associated with project construction and operation would not adversely affect day or nighttime views in the area because the closest residential viewers are located 15 and 18 miles away from the site and would not be affected by the project's lighting, the numbers of people who would be present in the vicinity of the project site at nighttime will consist primarily of a small number of travelers along SR 62, and the lighting design measures described above will be implemented. Therefore, the resulting level of impact would be less than significant.

5.13.3 Cumulative Effects

The CEQA Guidelines (Section 15355) define cumulative impacts as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."

The CEQA Guidelines further note that:

> The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor, but collectively significant, projects taking place over a period of time.

There are no active projects planned or in a permitting process leading to construction of a significant scale within 15 miles of the project site. Therefore, the RSEP would not cause significantly considerable cumulative impacts on visual resources.

5.13.4 Mitigation Measures

Because implementation of the RSEP would result in impacts on visual resources that would be less than significant, no mitigation would be required.

5.13.5 Laws Ordinances, Regulations, and Standards

This section describes the LORS relevant to the visual resource issues associated with the RSEP. The RSEP site, including all project components and linear features, is located in Riverside County. The RSEP and a portion of the generator tie-line are located on private land and are subject to all of the county's General Plan policies and objectives. A portion of

the generator tie-line and the interconnection substation are located on BLM land and are subject to its policies and objectives.

Table 5.13-4 lists the plans and ordinances that are pertinent to the project elements. The specific provisions of each plan or ordinance that have potential relevance to the project are identified in Sections 5.13.5.1, 5.13.5.2, and 5.13.5.3.

TABLE 5.13-4
Laws, Ordinances, Regulations, and Standards for Visual Resources

LORS	Requirements/Applicability	Administering Agency	AFC Section Explaining Conformance
Federal			
The California Desert Conservation Area (CDCA) Plan	The CDCA Plan is the BLM's land use guide for the management of public lands and resources within the CDCA.	Greg Hall, Realty Specialist BLM Palm Springs – South Coast Field Office 1201 Bird Center Drive Palm Springs, CA 92262 (760) 833-7140	Section 5.13.5.1
State			
California Scenic Highway Program and System	The purpose of the program is to preserve and protect scenic highway corridors from changes that would diminish the aesthetic value of lands adjacent to highways. The system includes a list of highways that are either eligible for designation as scenic highways or have been designated as such.	Landscape Architecture Program Caltrans 1120 N Street, MS 28 Sacramento, CA 95814	Section 5.13.5.2
Local			
Riverside County General Plan (2003)	Comprehensive, long-range plan to serve as the guide for the physical development of the county.	Riverside County Planning Department	Section 5.13.5.3
Riverside County Municipal Code (2009)	Establishes zoning districts governing land use and requirements for buildings and district improvements.	Riverside County Planning Department	Section 5.13.5.3

5.13.5.1 Federal

The National Environmental Policy Act (NEPA) requires the federal government to use all practicable means to ensure all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 United States Code [USC] 4331[b][2]). Additionally, under Federal Land Policy Management Act (FLPMA), Federal land management agencies are required to acknowledge local plans and participation. Title 43, U.S.C.A. §1712(c)(9) states the following:

> [The Secretary shall] to the extent consistent with the laws governing the administration of the public [Federal] lands, coordinate the land use

> inventory, planning, and management activities of or for such lands with the land use planning and management programs of other Federal departments and agencies and of the States and local governments within which the lands are located… In implementing this directive, the Secretary shall, to the extent he finds practical, keep apprised of State, local and tribal land use plans; assure that consideration is given to those State, local and tribal plans that are germane to the development of land use plans for public [Federal] lands, assist in resolving to the extent practical, inconsistencies between Federal and non-Federal Government plans, and shall provide for meaningful public involvement of State and local government officials…in the development of land use programs, land use regulations, and land use decisions for public [Federal] lands…Land use plans of the Secretary under this section shall be consistent with the State and local plans to the maximum extent he finds consistent with Federal law and the purposes of this Act.

NEPA requires the following:

> Federal agencies to include in their decision-making processes appropriate and careful consideration of all environmental effects of proposed actions, analyze potential environmental effects of proposed actions and their alternatives for public understanding and scrutiny, avoid or minimize adverse effects of proposed actions, and restore and enhance environmental quality as much as possible. (Code of Federal Regulations, Title 40 Part 6)

5.13.5.1.1 The California Desert Conservation Area Plan

In response to FLPMA, the California Desert Conservation Area (CDCA) Plan was developed. The CDCA Plan acts as the BLM's land use guide for the management of public lands and resources in the CDCA. The project crosses lands managed by the BLM under the CDCA Plan as Class M according to the CDCA Map 1 Land Use Plan 1999 (BLM, 1999).

TABLE 5.13-5
Conformity of the RSEP with the CDCA Plan

Provision	Conformance
Multiple-Use Class M: Is based upon a controlled balance between higher intensity use and protection of public lands. This class provides for a wide variety of present and future uses such as mining, livestock grazing, recreation, energy, and utility development. Class M management is also designed to conserve desert resources and to mitigate damage to those resources that permitted uses may cause.	Yes. The RSEP is designed to implement the BLM-designated Proposed Joint Use Energy Production & Utility Planning Corridor joint-use corridors and will provide an estimated 150-megawatt solar energy plant. The RSEP would partially tie into existing rights-of-way located within a joint use corridor. Table 1 Multiple-Use Class Guidelines, in the CDCA Plan, indicates that solar electric generation plants may be allowed after NEPA requirements are met. Table 1 also indicates that new transmission facilities may be allowed only within designated corridors, and that NEPA requirements must be met. RSE will comply with the BLM's requirements for setbacks and other design regulations. RSE chose the site, in part, because of its location and its lack of effect on visual resources.

Source: BLM, 1999.

5.13.5.2 State

5.13.5.2.1 California Energy Commission

The project will also require approval from the CEC. The CEC will evaluate the project's visual impacts in light of the requirements of the CEQA.

The CEQA Guidelines define a "significant effect" on the environment to mean a "substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including… objects of historic or aesthetic significance" (California Code of Regulations [CCR], Title 14 §15382). The CEQA Guidelines, Appendix G, identifies the criteria that must be considered when analyzing a project's potential to result in temporary and permanent impacts on aesthetics.

5.13.5.2.2 California Scenic Highway Program and System

The California Scenic Highway Program was created by the Legislature in 1963. Its purpose is to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. The California Scenic Highway System is a list of highways that are either eligible for designation as scenic highways or have been designated as such.

SR 62 is designated as an Eligible State Scenic Highway in Riverside County from SR 10 north to the San Bernardino County line; it is also designated as an Eligible State Scenic Highway in San Bernardino County. The portion of SR 62 that is near the RSEP site has been designated as eligible pursuant to the California Scenic Highway Program (CSHMS, 2007).

5.13.5.3 Local

5.13.5.3.1 Riverside County General Plan

The RSEP and generator tie-line are in Riverside County and subject to the provisions of the Riverside County General Plan. The RSEP site has a land use designation of Open Space-Rural according to the General Plan. The provisions of the Riverside County General Plan that are applicable to the project are summarized and evaluated for project conformity in Table 5.13-6.

TABLE 5.13-6
Conformity of the RSEP with the Riverside County General Plan

Provision	Conformity?
Land Use 6.4. Retain and enhance the integrity of existing residential, employment, agricultural, and open space areas by protecting them from encroachment of land uses that would result in impacts from noise, noxious fumes, glare, shadowing, and traffic.	Yes. The project is not located near any existing residential, employment, and agricultural areas. The project site and surrounding area are designated as Open Space-Rural. The project would not be a substantial source of glare. Although the solar collector tower would create a shadow, much of this shadow would be cast on the project site itself, minimizing any shadow effects on nearby non-project open space lands.
Land Use 8.1. Provide for permanent preservation of open space lands that contain important natural resources, hazards, water features, watercourses, and scenic and recreational values.	Yes. The General Plan has not designated the project site as an area containing important scenic and recreational values for which permanent preservation measures have been specified.

TABLE 5.13-6
Conformity of the RSEP with the Riverside County General Plan

Provision	Conformity?
Land Use 13.1 Preserve and protect outstanding scenic vistas and visual features for the enjoyment of the traveling public.	Yes. The project is not located in an area that the General Plan has identified as having outstanding scenic vistas and visual features requiring preservation and protection.
Land Use 13.3 Ensure that the design and appearance of new landscaping, structures, equipment, signs, or grading within Designated and Eligible State and County scenic highway corridors are compatible with the surrounding scenic setting or environment.	Yes. RSE will coordinate with Riverside County to ensure that facilities are appropriately designed to be compatible with the surrounding environment.
Land Use 13.4 Maintain at least a 50-foot setback from the edge of the right-of-way for new development adjacent to Designated and Eligible State and County Scenic Highways.	Yes. The project would be set back at least 50 feet from SR 62, an Eligible State Scenic Highway.
Land Use 13.5. Require new or relocated electric or communication distribution lines, which would be visible from Designated and Eligible State and County Scenic Highways, to be placed underground.	Yes. The project does not include new or relocated electric or communication distribution lines.
Land Use 13.7. Require that the size, height, and type of on-premise signs visible from Designated and Eligible State and County Scenic Highways be the minimum necessary for identification. The design, materials, color, and location of the signs shall blend with the environment, utilizing natural materials where possible.	Yes. Signage required for the RSEP would be the minimum size necessary and would be designed to blend with the natural environment.
Land Use 13.8. Avoid the blocking of public views by solid walls.	Yes. The RSEP does not include the construction of solid walls that would block public views.
Land Use 24.8. Require that industrial development be designed to consider their surroundings and visually enhance, not degrade, the character of the surrounding area.	Yes. Where possible, the RSEP would be designed to integrate into the landscape. In particular, project components, whenever possible, will be painted a dull beige, tan, or gray color to blend into the surrounding desert.
Circulation Element 19.1. Preserve scenic routes that have exceptional or unique visual features in accordance with Caltrans' Scenic Highways Plan.	Yes. SR 62 is not a state-adopted scenic route that is subject to the provisions of Caltrans' Scenic Highways Plan.
Open Space 21.1. Identify and conserve the skylines, view corridors, and outstanding scenic vistas within Riverside County.	Yes. The RSEP would not significantly obstruct skyline views or view corridors, and would not affect outstanding scenic vistas.

Source: Riverside County, 2003

5.13.5.3.2 Riverside County Development Code

The RSEP and generator tie-line are on lands subject to the provisions of the Riverside County Development Code. The RSEP site is zoned Controlled Development, and the generator tie-line route is on lands zoned Controlled Development and Natural Assets by the Riverside County Development Code. The provisions of the code that are applicable to the project are summarized in Table 5.13-7.

TABLE 5.13-7
Conformity of Rice Solar Energy Project with the Riverside County Development Code

Provision	Conformity?
Controlled Development Areas (W-2) **Development Standards**	
Section 15.2. Where a structure is erected or a use is made in the W-2 Zone that is first specifically permitted in another zone classification, such structure or use shall meet the development standards and regulations of the zone in which such structure or use is first specifically permitted, unless such requirements are hereafter modified.	Yes. The RSEP is a permitted use within the W-2 zone. RSE will seek a variance per Sections 15.29a and 18.27 for maximum structure height.
a. One-family residences shall not exceed 40 feet in height. No other building or structure shall exceed 50 feet in height, unless a greater height is approved pursuant to Section 18.34 of this ordinance. In no event, however, shall a building exceed 75 feet in height or any other structure exceed 105 feet in height, unless a variance is approved pursuant to Section 18.27 of this ordinance.	
b. Lot size shall not be less than 20,000 square feet, with a minimum average lot width of 100 feet and a minimum average lot depth of 150 feet, unless larger minimum lot area and dimensions are specified for a particular area or use.	
Controlled Development Areas (W-2) **Permitted Use**	
e. Public Utilities Uses	
(2) Structures and the pertinent facilities necessary and incidental to the development and transmission of electrical power and gas such as hydroelectric power plants, booster or conversion plants, transmission lines, pipe lines and the like.	
Natural Assets (N-A) **Development Standards**	
SECTION 15.201. The following shall be the standards of development in the N-A Zone, except for the above-listed uses that are specifically allowed a lesser standard:	Not applicable. Portions of the land crossed by the 161/230 kV generator tie-line are zoned N-A. The generator tie-line would involve a utility easement, which is compatible with the N-A zoning.
a. Minimum lot size. 20 acres with a minimum gross width of 400 feet.	
b. Minimum yard depths. Front 100 feet, sides 50 feet, rear 50 feet.	
c. No building shall exceed 20 feet in height.	
d. Automobile storage space shall be provided as required by Section 18.12 of this ordinance.	
Natural Assets (N-A) **Permitted Use**	
a. Uses Permitted	
(9) Onsite signs, affixed to building walls, stating the name of the structure, use, or institution, not to exceed five percent of the surface area of the exterior face of the wall upon which the sign is located.	
b. Uses Permitted Subject to Approval of a Plot Plan. The following uses are permitted, upon approval of a plot plan pursuant to Section 18.30, on parcels of land not less than 7200 square feet in size, with a minimum front yard depth of 20 feet and minimum side and rear yard depth of 10 feet:	
(1) Public utility substations.	

TABLE 5.13-7
Conformity of Rice Solar Energy Project with the Riverside County Development Code

Provision	Conformity?
General Provisions	
Section 18.49 Fences	
b. Prohibited Fences. Fences shall not be constructed of garage doors, tires, pallets or other materials not typically used for the construction of fences.	Yes. The RSEP will be surrounded by an 8-foot-high chain-link security fence.

Source: Riverside County Planning Department, 2009

5.13.6 Agencies and Agency Contacts

Agencies and agency contacts are listed in Table 5.13-8.

TABLE 5.13-8
Agency Contacts for Visual Resources

Issue	Agency	Contact
Visual resource issues on BLM land	BLM	Greg Hall, Realty Specialist BLM Palm Springs – South Coast Field Office 1201 Bird Center Drive Palm Springs, CA 92262 (760) 833-7140
Visual resource issues on privately owned lands	Riverside County Planning Department	Ron Goldman, Planning Director County of Riverside Planning Department County Administrative Center 4080 Lemon Street, 9th Fl. P.O. Box 1409 Riverside, CA 92502-1409 (951) 955-3265

5.13.7 Permits and Permit Schedule

No permits of direct relevance to visual resources issues are required for the project. The required approvals that are of the most direct relevance to visual resources issues are the approval of the Grading Plan and issuance of the construction, grading, and encroachment permits as discussed in Section 5.6, Land Use.

5.13.8 References

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