

5.10 VISUAL RESOURCES

Visual resources are the natural and manmade features of a landscape that can be seen and contribute to the public's appreciation and enjoyment of the outdoor environment. Visual resource impacts, or aesthetic impacts, are generally defined in terms of the extent of visual contrasts between the visual characteristics of the existing landscape character and the physical characteristics of the Genesis Solar Energy Project's (the Project's) modifications, considering the landscape's potential visibility and the public's concern for scenery. Aesthetics, as addressed in the California Environmental Quality Act (CEQA), refers to visual considerations in the physical environment (CERES, 2009).

In accordance with the California Energy Commission (CEC) guidelines, this section was prepared following the requirements of Appendix G of State CEQA guidelines for preparing visual impact assessments and CEC Data Adequacy Requirements. Aesthetics analysis, or visual resource analysis, is a systematic process to logically assess visible change in the physical environment and the anticipated viewer response to that change. This section describes the existing landscape character of the Project area, existing views of the Project area, the visual characteristics of the Project, and the landscape changes that would be associated with the construction and operation of the Project, as seen from various on-the-ground vantage points.

Because the Project site and transmission line route would be located on Federal lands managed by Bureau of Land Management (BLM), this visual resources analysis is consistent with the BLM's Visual Resource Management (VRM) System. The BLM-VRM System uses a Contrast Rating System to analyze any project, determine elements that are inconsistent with the VRM objective, and recommend appropriate mitigation measures to improve visual quality of any project (BLM, 1986a and BLM, 1986b).

5.10.1 Affected Environment

5.10.1.1 Regional Setting

The Project would be located in eastern Riverside County, California, approximately 30 miles west of the Colorado River and the California-Arizona border. Expansive, primarily undeveloped desert valleys and mountain ranges characterize eastern Riverside County east of the Coachella Valley. This vast sub-region of the Sonoran Desert, most of which is administered by the BLM, consists of a variety of geographic features, including flat desert valleys, widely scattered dry lakes, rolling sand dunes, stark hillsides, and barren mountain ranges.

The Palen/McCoy Wilderness Area is immediately adjacent to the north of the Project site and the Palen Dry Lake Area of Critical Environmental Concern (ACEC) is immediately to the west. The Ford Dry Lake Off-Highway Vehicle (OHV) Limited Use Area is immediately adjacent to the south of the Project site. The southeastern boundary of the Joshua Tree Wilderness follows State Route 177 (SR-177) and it is located approximately 17 air-miles northwest of the Project site (Joshua Tree National Park website, 2009). The Desert Lily Sanctuary ACEC is also located in this vicinity along SR-177. Most views in the area are of broad, sweeping expanses of Sonoran Desert defined and constrained by distant mountain ranges that create a backdrop for these large, open desert plains. There are no state parks in the vicinity or the viewshed of the Project (California State Parks and Recreation, 2009).

Some of the more prominent visual resource features located in the area of the modifications include:

- Several prominent mountain ranges to the north, west, south and east of the Project site, including the McCoy, Palen, Chuckwalla, Little Chuckwalla, and Mule Mountains
- Ford Dry Lake, immediately south of the site
- Palen Dry Lake, immediately west of the site
- Several inconspicuous existing and abandoned mining operations
- Chuckwalla Valley State Prison and Ironwood State Prison, south of I-10 at the Wiley's Well Road Interchange, and approximately nine miles to the south of the Project

There are no rural residences in the Project vicinity because of the Federal land ownership. The closest residential areas are located at Lake Tamarisk and Desert Center, approximately 18 miles west; Nicholls Warm Springs, approximately 15 miles east; and Blythe, approximately 25 miles east of the Project site. Because of topographic screening, vegetative screening, and the distances involved, the Project site is not visible from Lake Tamarisk, Desert Center, Nicholls Warm Springs, or the City of Blythe.

Interstate 10 (I-10) is the major transportation route in the region, connecting Los Angeles to the west and Phoenix to the east. The southernmost portion of the Project site is approximately two miles north of, and parallel to, I-10. Primary highways providing north-south access and scenic viewing opportunities in this region are SR-177 north of Desert Center and also known as Desert Center-Rice Road, and the Midland-Rice Road north of Blythe. Riverside County has requested that I-10 be designated a State Scenic Highway from SR-62 near Palm Springs to the California-Arizona border, but Caltrans has not designated I-10 as either an Eligible or Officially Designated Scenic Highway (California Scenic Highway Mapping System, 2009). Therefore, Riverside County has designated I-10 to be a County Scenic Highway from SR-62 near Palm Springs to the California-Arizona border (Riverside County Scenic Highways, 2009). Tourist services are available along I-10 at Desert Center, Wiley's Well Rest Area, and Blythe. Wiley's Well Rest Area is located approximately four miles southeast of the Project site, and is a heavily used tourist facility in this remote desert region.

Electric power infrastructures are well-established components of the landscape in the area. Blythe Energy, Western Area Power Administration (WAPA), and Southern California Edison (SoCal Edison or SCE) own and operate substations and transmission lines in the area. The Project would interconnect to existing transmission lines south of the Project site and south of I-10. These existing transmission lines are located mostly within BLM Utility Corridor K, which runs parallel to and approximately 1 to 2½ miles south of I-10 (see Land Use Section 5.7.1 for a discussion of BLM's utility corridor). Additionally, other transmission and distribution lines run parallel to I-10 on the north side of the freeway, closer to the Project site. Existing transmission lines are supported by a variety of tower/pole configurations, including single wooden poles, H-frame wooden poles, tubular steel poles (TSPs), and lattice steel towers (LSTs). These towers and poles range from 50 to 140 feet tall and constitute virtually the only vertical visual elements in a landscape that is predominantly horizontal in nature.

Dispersed recreation use occurs predominantly at the Ford Dry Lake OHV Limited Use Area, which is located between I-10 and the Project area. The BLM administers the Ford Dry Lake OHV Area. The National Park Service administers the Joshua Tree Wilderness, located northwest of the Project. The only other developed recreational area in the vicinity is the Corn Springs Campground, located approximately 18 miles southwest of the Project, and administered by the BLM. Corns Springs

Campground is located at the end of the road into Chuckwalla Mountains Wilderness (Google Maps, 2009). North of the Project area is the Palen-McCoy Wilderness, and though it is physically accessible, it is not used for recreation and features neither trails nor trailheads (BLM Greg Hill, 2009).

5.10.1.2 Project Site and Linear Corridors

The geographic extent of the visual resources analysis was established in accordance with BLM standards. The visibility analysis and viewshed analysis was limited to a radius of 15 miles from the Project site because the BLM considers anything beyond 15 miles to be “seldom seen.”

The Project site is situated at the eastern side of a very large, flat desert plain referred to as the Chuckwalla Valley. The Project would be situated on the relatively flat desert plain between Ford Dry Lake, a desert basin immediately south of the site, and the mountainous Palen/McCoy Wilderness, immediately north of the site. The site is visually flat, with elevations ranging from approximately 400 feet above mean sea level (amsl) at the northwest corner to 370 feet amsl in the southeastern portion, in a distance of 10.1 miles (87 foot drop in 10.1 miles).

The transmission line corridor would also be situated on the flat desert plain of Chuckwalla Valley. The aboveground electric transmission lines would connect the Project’s Unit 1 to Unit 2 and Unit 2 to a new interconnection switchyard. This transmission line would tie into the 230-kV Blythe Energy Project Transmission Line (BEPTL) currently under construction south of, and parallel to, I-10. Using the existing pole structure of the BEPTL, the transmission line would go east and interconnect with the Colorado River substation.

5.10.1.3 Potential Project Site Visibility and Existing Landscape Character

5.10.1.3.1 On-the-Ground Vantage Points

Existing vegetation on the Project site and surrounding environs is primarily creosote brush scrub that has a mature height of approximately 6 to 8 feet. There are no trees in the area, except a few widely scattered Palo Verde trees in the median of I-10 and a few Palo Verde trees that were planted at Wiley’s Well Rest Area. Because of the flat desert terrain of the Chuckwalla Valley and the low growing vegetation, the Project site is visible from great distances. The Project site is potentially visible from 15 to 20 miles away and from such locations as I-10, SR-177, Corn Springs Road, and Wiley’s Well Rest Area. Figure 5.10-1 shows the Project site as seen from representative on-the-ground viewpoints and typical sensitive receptor locations. Figures 5.10-2 through 5.10-9 display typical views toward the Project site as seen from the west, south, and east. These photographs also exhibit the typical existing landscape character of the Project site and its environs. There are no sensitive receptors north of the Project site.

5.10.1.3.2 Aerial Vantage Points

Additionally, the Project site is visible from private aircraft that fly over the area. There are three landing strips in the vicinity of the Project: Blythe Airport, a landing strip northeast of Desert Center, and an airport at Chiriaco Summit. The Blythe Airport is located at 11710 W. Hobsonway approximately 15 miles east of the site, and it is open to the public and averages 69 flights per day. The Blythe Airport has two runways, but does not have a traffic control tower, so no formal air traffic control services are available. The airstrips at Desert Center and Chiriaco Summit are not manned.

The Quail Military Operations Area is located north of Blythe Airport. The Abel Military Operations Area is located southwest of Blythe Airport. The Project is not located within any restricted military areas.

5.10.1.4 Sensitive Viewing Areas

I-10 is the predominant vantage point from which the majority of sensitive receptors would view the Project. The solar array and power blocks would be continuously visible from I-10 for several miles to the west and several miles to the east of the Project area because of the flat terrain and lack of vegetative screening. The Project site is visible from I-10 for approximately 15 miles as eastbound travelers approach the Ford Dry Lake Exit from the west, and for approximately eight miles as westbound travelers approach the Ford Dry Lake Exit from the east. Therefore, when traveling at 70 miles per hour, views to the Project site would be extended over long distances and view duration would be long. I-10 currently accommodates an annual average daily traffic (AADT) of approximately 24,600 vehicles west of Wiley's Well Road and 27,000 vehicles east of Wiley's Well Road (AADT on I-10, 2009). Vehicle usage by type includes interstate trucking, recreation vehicles, vans, sport utility vehicles, passenger vehicles, and motorcycles.

Another vantage point to the Project site is the bridge over I-10 at the Wiley's Well Road Exit and Wiley's Well Rest Area. The bridge over I-10 provides elevated views of the desert, while views from the rest area to the Project site are partially screened by an earthen dike north of the rest area and trees that have been planted for shade at the rest area.

Other vantage points that would provide viewing opportunities to the Project site include the BLM road from Corn Springs Campground as motorists drive downhill toward I-10. Because of topographic screening caused by the natural desert terrain and the elevated portions of I-10, the Project site is not visible from the Chuckwalla State Prison or Ironwood State Prison, both of which are located south of I-10 at the Wiley's Well Road Exit and are not considered sensitive receptor locations (Figure 5.10-10).

A single lane four-wheel-drive road runs north-south through the westernmost portion of the Project area and extends like a "cherry stem" into the Palen-McCoy Wilderness. Aerial photographs and BLM mining claim records indicate an iron mine was once in operation at the northern end of this road, but the claim has since been closed and the BLM is not aware of any current activity of any type at that location. This is not a recreational road and it does not lead to any recreation trails or trailheads (BLM, 2009).

The transmission line would also be visible from I-10 and Wiley's Well Rest Area, but because of the distances involved, the transmission line would not be visible from Corn Springs Road. The transmission line and switching station would be visible from the Chuckwalla and Ironwood State Prisons, but these prisons are not considered sensitive receptor locations.

5.10.1.5 Bureau of Land Management Methodology

To meet its responsibility to maintain the scenic value of public lands, the BLM has developed the VRM system. The BLM-VRM System has four visual resource management classes, numbered I through IV (BLM, 1980). Visual resource management classes (VRM classes) are established by the BLM through the Resource Management Planning (RMP) process for all BLM-administered lands. These classes describe the different degrees of modification, or contrast, allowed to the basic visual elements of the landscape. BLM-VRM classes can be arrived at from adopting the inventoried VRM classes or by correlating VRM classes to BLM Resource Management Plan (RMP) classes.

Table 5.10-1. BLM Visual Resource Management Classes and Definitions

VRM Class	Definition of Visual Resource Management Class
Class I Preserve	The objective of this class is to preserve the existing character of the landscape. This class provides for natural ecological changes; however, it does not preclude very limited management activity. The level of change to the characteristic landscape should be very low and must not attract attention. (This classification is usually applied to wilderness areas, wild and scenic rivers, and other similar situations.)
Class II Retain	The objective of this class is to retain the existing character of the landscape. The level of change to the characteristic landscape should be low. Management activities may be seen, but should not attract the attention of the casual observer. Any changes must repeat the basic elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape.
Class III Partially Retain	The objective of this class is to partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate. Management activities may attract attention but should not dominate the view of the casual observer. Changes should repeat the basic elements found in the predominant natural features of the characteristic landscape.
Class IV Major Modification	The objective of this class is to provide for management activities which require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high. These management activities may dominate the view and be the major focus of viewer attention. However, every attempt should be made to minimize the impact of these activities through careful location, minimal disturbance, and repeating the basic elements.

5.10.1.6 Assignment of Interim VRM Classes

VRM classes are typically assigned by the BLM through its RMPs. But in the case of the Project, the California Desert Conservation Area Plan does not assign VRM classes in the area of the Project, but rather directs BLM land managers to establish “Interim VRM Classes” for each project on a case-by-case basis (BLM CDCA Plan, 1980). The interim classes are to be developed following guidelines in the BLM Manual Handbook (BLM, 1986a) and must conform to the land-use allocations set forth in the RMP that covers the area. The establishment of interim VRM classes does not require an amendment to the RMP.

Based on a large-scale environmental study that was prepared for the Devers-Palo Verde 2 500-kV Transmission Line EIR/EIS (DPV2 EIR/EIS) in October 2006, Interim VRM Classes were mapped by the consultants and approved by the California Public Utilities Commission (CPUC) and BLM (Devers-Palo Verde 2 EIR/EIS, 2009). Therefore, those Interim VRM Classes will apply and be used for the Project. Figure 5.10-11 shows the Interim VRM Classes from the DPV2 EIR/EIS. The entire site of the Project, including the solar troughs, power blocks, and transmission line corridor, is classified as Interim VRM Class III (Interim VRM Class Map, 2009). Please refer to Figures 5.10-12 and 5.10-13 for photographs of a typical solar trough array and a power block.

5.10.1.7 BLM Scenic Quality and Distance Zones

Regarding the scenic quality of existing landscapes, the Project site does not contain any notable scenic features. Because of the existing landscape character of a flat desert plain without water features, unique topographic features, or unique vegetative patterns or species, the entire Project site would be considered an area of low scenic quality.

The BLM-VRM System defines three distance zones – foreground/middleground, background, and seldom seen. Foreground/middleground (FG/MG) is the area that can be seen for a distance of 3 to 5 miles from the viewer. This is the distance where modifications might be viewed in detail and where colors and textures can be discerned. Beyond 3 to 5 miles, and extending to 15 miles, landscapes are classified by the BLM as background (BG). Background views tend to have blurred textures, show few details, and have muted colors of blue and gray. The BLM classifies areas that are visually blocked or screened by topography and/or are more than 15 miles away as seldom seen (SS). These physical and visual phenomena are described and illustrated in the BLM Manual Handbook, Visual Resource Inventory (BLM, 1981).

5.10.1.8 Key Observation Points (KOPs)

Vantage points from which sensitive receptors can view the Project site were studied and analyzed by the visual analyst team in the summer of 2009. At each of these vantage points, photographs were taken of existing site conditions and GPS coordinates were recorded, so the site could be re-occupied, if needed.

From among dozens of these vantage points and in consultation with the local BLM visual resource management expert in Palm Springs, three were selected to represent typical views of the Project site (BLM Greg Hill, 2009). These three vantage points have been designated as Key Observation Points (KOPs). The basis of selecting these three KOPs was that each one displays a different location from which sensitive receptors can view the Project, and accurately represents how the Project would appear when seen from different distance zones (foreground/middleground, or background). The location of each KOP is listed here and described in detail below. For each KOP, photographs of existing visual conditions and visual simulations of expected future visual conditions are provided at the end of Section 5.10.

- KOP-1 – Located on the Ford Dry Lake Bridge Over I-10, looking north.
- KOP-2 – Located on the Wiley’s Well Bridge Over I-10, looking northwest.
- KOP-3 – Located on the Corn Springs BLM Road, looking east.

Figure 5.10-14 shows the location and direction of view of the three KOPs that were selected as representative of typical views to the Project site.

5.10.1.8.1 KOP-1 – Ford Dry Lake Bridge Over I-10

KOP-1 is located on the bridge over I-10 at the Ford Dry Lake Exit, directly south of the Project area (see Figure 5.10-15a). The Project site is approximately 3.2 to 4.9 miles north of this camera position, making this a foreground/middleground viewing distance. The elevated camera position on the bridge provides a panoramic view of the flat desert plain that is constrained by the Palen Mountains, McCoy Mountains, and Big Maria Mountains in the background.

5.10.1.8.2 KOP-2 – Wiley’s Well Bridge Over I-10

KOP-2 is located on the bridge over I-10 at the Wiley’s Well Road Exit leading to the Wiley’s Well Rest Area, southeast of the Project area (see Figure 5.10-16a). The Project site is approximately 8.4 to 12.5 miles northwest of this camera position, making this a background viewing distance. The elevated camera position on the bridge provides a panoramic view of the flat desert plain that is constrained by the Palen and McCoy Mountains in the background. The Big Maria Mountains are out of view on the right side of this photograph.

5.10.1.8.3 KOP-3 – Corn Springs BLM Road

KOP-3 is located on the BLM Corn Springs Road that connects Corn Springs Campground and trailhead to I-10 at the Corn Springs Exit, looking east toward the Project area (see Figure 5.10-17a). The Project site is approximately 9.0 to 14.25 miles east of this camera position, making this a background viewing distance. The elevated camera position on the fluvial plain at the lower slopes of the Chuckwalla Mountains provides a panoramic view of the flat desert plain that is constrained by the Palen and McCoy Mountains in the background. The Big Maria Mountains are not visible because of atmospheric haze.

5.10.1.8.4 Existing Light and Glare

Analysis of potential light and glare impacts with regard to visual resources considers the following:

- Artificial sky glow: The brightening of the night sky attributable to human-created sources of light.
- Glare: Light that causes visual discomfort or disability or a loss of visual performance.
- Spill light: Light from a lighting installation that falls outside of the boundaries of the property on which the installation is sited.
- Light trespass: Spill light that because of quantitative, directional, or type of light causes annoyance, discomfort, or loss in visual performance and visibility.
- Glint: Light that is reflected at an angle from a surface or light that gives off a reflection in brilliant flashes.

In the Project vicinity, the only existing fixed light sources are found at the California State Prisons south of I-10 at the Wiley's Well Road Exit and at the Wiley's Well Rest Area. Lighting levels are high at the two state prisons and nighttime sky glow from the prisons can be seen for several miles along I-10.

Lighting levels at the Wiley's Well Rest Area are low and constrained to the immediate area of the comfort station building and parking area (see light fixture in front of comfort station in Figure 5.10-7). There are no interchange lights at any of these I-10 interchanges in the Project vicinity: Corn Springs, Ford Dry Lake, or Wiley's Well. Other than these two fixed sources of nighttime light, California State Prisons and Wiley's Well Rest Area, there are no existing street lights or yard lights within the Project vicinity that produce any nighttime light. Transitory nighttime light and glare is produced by headlights from moving vehicles on I-10. Otherwise, the area is generally very dark after sunset. The current nighttime views of the sky are of high quality.

The Buck to Julian Hinds 161-kV transmission line is currently under construction south of and parallel to I-10. Following a meeting with BLM staff in Palm Springs in July 2009, while driving east on I-10 between Chiriaco Summit and Desert Center, glint from the newly constructed transmission line was experienced by the visual analysts. The new transmission line arms appeared to glow like light fixtures for several miles in the desert sun. The monopoles did not reflect sunlight from any angle, but the arms reflected a substantial amount of sunlight from several different vantage points. (Perhaps the arms were galvanized with a different treatment than the monopoles, Figure 5.10-18.)

5.10.2 Environmental Impacts

This section discusses the potential impacts of the Project on visual resources.

5.10.2.1 Analysis Procedure

Analysis of potential visual impacts was based on an evaluation of the changes to the existing visual environment that would result from construction and operation of the Project. This was accomplished by analysis of potential visual impacts as they would be viewed from KOPs, creation of accurate computerized visual simulations of the Project, analysis of existing (and similar) Solar Electric Generating Systems (SEGS) facilities at Harper Lake, California, and application of BLM's Contrast Rating System as explained below. Potential sources of light and glare that could be introduced by the Project were also considered. The analysis concluded the Project would be compatible with the BLM's Interim VRM Class III designation and would not have a significant impact on visual resources.

The BLM has a process called the "contrast rating system" to analyze potential visual impacts of projects and activities (BLM, 1986b). The contrast rating system is a systematic way of evaluating proposals and determining whether these proposals conform to assigned VRM classes. The contrast rating system can also be used to identify mitigating measures that can be taken to minimize adverse visual impacts. Application of this system can also help determine if a visual impact is "substantial" as that term is used in the CEQA significance questions presented earlier.

The contrast rating system compares the view after the proposed action has been completed with existing conditions considering the "elements" of form, line, color, and texture, according to four degrees of contrast: 0 = none, 1 = weak, 2 = moderate, and 3 = strong. The element value multiplied by the degree of contrast indicates the magnitude of visual impact.

In determining whether the proposed action would conform to the assigned VRM class, the four levels of contrast roughly correspond with the four VRM classes. This means that a "strong" contrast rating may be acceptable in an area with VRM Class IV, but probably would not meet the objectives of a VRM Class I, II, or III area. Similarly, a "weak" contrast rating may be acceptable in an area with VRM Class II, but probably would not meet the objectives of a VRM Class I area. Table 5.10-2 shows the correlation between contrast rating and determining whether VRM objectives are met.

Table 5.10-2 Determining Whether VRM Objectives Are Met

Contrast Rating	Objectives of VRM Class Are Met
None	In VRM Class I, natural ecological changes and very limited management activities are allowed. Any contrast created within the characteristic landscape must not attract attention.
Weak	In VRM Class II, changes in any of the basic elements (form, line, color, texture) caused by a management activity should not be evident in the characteristic landscape. Contrasts are seen, but must not attract attention.
Moderate	In VRM Class III, contrasts to the basic elements caused by a management activity are evident, but should remain subordinate to the existing landscape.
Strong	In VRM Class IV, any contrast attracts attention and is a dominant feature of the landscape in terms of scale, but it should repeat the form, line, color and texture of the characteristic landscape.

5.10.2.2 Evaluation Methodology and Significance Criteria

Baseline visual resources data were collected using an approach that incorporated a combination of information review, agency consultation, analysis of aerial photographs and satellite imagery, map review, field reconnaissance, and on-site photography. Existing information from recently completed CEQA and NEPA documents for projects in the vicinity of the Project area was used to the extent possible and appropriate. Baseline data were collected for the environmental setting using the following methods:

- A general overview and site reconnaissance was conducted with Tetra Tech EC, Inc. staff in July 2009, followed by independent analysis by the visual analysts.
- Locations of sensitive receptors were identified on BLM Surface Management Status maps showing freeways, highways, roads, trails, and cities/towns.
- Viewpoints were identified from which the project would be seen and landscape photographs were taken from these viewpoints, including panorama views. Latitude, longitude, and elevation were recorded for each photographic viewpoint using hand-held Global Positioning System (GPS) equipment.
- From all these viewpoints, the three most critical were selected as KOPs for detailed visual analysis, based on their ability to exemplify visual resource impacts at a particular location. KOPs that were analyzed are representative of project-induced visual resource impacts to this particular landscape. (See Figure 5.10-14).
- Computerized visual simulations were developed based on existing landscape photography, three dimensional computer models of Project features, and GIS figures showing project facilities. Before and after landscape photographs/simulations are presented in Figures 5.10-19a and 5.10-19b.
- The visual environment and visual characteristics of a similar SEGS facility at Harper Lake, California were studied and analyzed in conjunction with the Project.

Photographs were taken at each viewpoint and each KOP with a Canon-50D digital camera equipped with a zoom lens with the focal length set so that it provides a “normal view,” thereby eliminating distortion. For comparison to this “normal lens,” a wide angle lens makes background features appear unrealistically small and farther away, while a telephoto lens makes background features unrealistically larger and closer in the photograph. The normal lens makes all landscape features appear in their proper perspective and size, relative to each other. When on 8½x11-inch paper and held approximately 10 inches from the eye, each photograph appears “life-size” as viewed from on the ground at the exact camera location.

Computerized visual simulations were prepared using AutoCAD and 3DStudio software to create accurate, computerized depictions showing the visual effects of the Project. The existing visual conditions are described in detail for each KOP in Section 5.10.1.8, Key Observation Points. Using the computerized visual simulations, predicted future visual effects of the Project for each KOP are described in the section below, and contrast rating forms were completed based on the visual simulations.

5.10.2.3 Significance Criteria

Appendix G of the California Code of Regulations has guidelines for assessing visual impacts. These guidelines state that a project would normally be considered to have a significant impact on the visual environment if it would:

- Have a substantial adverse effect on a scenic vista
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway
- Substantially degrade the existing visual character or quality of a site and its surroundings
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area (CERES, 2009).

Because the Project would be situated entirely on Federal lands administered by the BLM, the BLM Contrast Rating System also provides criteria for evaluating the degree to which the Project would affect existing landscape characteristics. If implementation of the Project would cause non-conformity with the Interim VRM Class III standards, the resulting visual impact would be considered adverse and significant.

5.10.2.4 Project Appearance

The Project will consist of two independent concentrated solar electric generating facilities with a nominal net electrical output of 125 megawatts (MW). The plants will use well-established parabolic trough solar thermal technology to produce electrical power using steam turbine generators (STG) fed from solar steam generators (SSG). The SSG receives heated heat transfer fluid (HTF) from solar thermal equipment comprised of arrays of parabolic mirrors that collect energy from the sun.

The Project proposes to use a wet cooling tower for power plant cooling. Water for cooling tower makeup, process water makeup, and other industrial uses such as mirror washing will be supplied from onsite groundwater wells, which also will be used to supply water for employee use (*e.g.*, drinking, showers, sinks, and toilets). A package water treatment system will be used to treat the water to meet potable standards. A sanitary septic system and on-site leach field will be used to dispose sanitary wastewater.

Project cooling water blowdown will be piped to lined, on-site evaporation ponds. The ponds will be sized to retain all solids generated during the life of the plant. However, if required for maintenance, dewatered residues from the ponds will be sent to an appropriate offsite landfill as non-hazardous waste.

The Project consists of two independent 125-MW solar facilities, each with identical power blocks. The two separate units, consisting of a total of 1,760 solar collector assemblies (SCAs) arrayed in rows, will be relatively flat in appearance and situated on a flat portion of the desert.

Section 3 provides a detailed description of the Power Plant Civil/Structural Features. Table 5.10-3 displays the visual attributes of each structure of the Project. Figure 5.10-19b provides a simulated view of the Project, as it would appear from the air.

Table 5.10-3. Approximate Dimensions of Genesis Solar Energy Project Structures

Structure	Quantity	Height (ft)	Length (ft)	Width (ft)	Color ¹
Water Treatment Building	2	50	75	60	Tan
Electrical Building	2	20	60	40	Tan
Cooling Tower Electrical Buildings	2	12	30	20	Tan
Heat Transfer Fluid Pump Area	2	5	60	25	Gray
Demineralization Water Tank	2	17	N/A	20	Tan
Raw/Fire Water Tank	2	28	N/A	55	Tan
Treated Water Tank	2	38	N/A	75	Tan
Waste Water tank	2	27	N/A	40	Tan
Control Room/Warehouse in Power Block	2	50	60	60	Tan
HTF Expansion Tanks	8	25	50	14 (diameter)	Tan
Auxiliary Boiler	2	13	26	12	Gray
Emergency Diesel Generator	2	15	32	12	Gray
Fire Pump House	2	25	33	11	Tan
Generator Step-Up Transformer	2	25	40	30	Gray
Administration/Warehouse Building	1	50	225	60	Tan
Cooling Tower Chemical Feed	2	20	50	25	Gray
Steam Turbine Generator Building	2	30	100	15	Tan
Solar Collectors	1760	Varies	492	Varies	Gray bottom & mirror top
Transmission Line Monopoles and Arms	59	75	N/A	N/A	Dulled Galvanized Steel

Notes:

¹ Colors of exterior building surfaces will be selected in consultation with BLM.

5.10.2.5 Assessment of Visual Effects

This section describes and evaluates the landscape changes that would be associated with the construction and operation of the Project, as seen from various on-the-ground and aerial vantage points.

5.10.2.5.1 On-the-Ground Visual Effects

Assessment of the likely visual impacts that would occur as a result of the Project was accomplished by 1) analyzing the entire Project area, and 2) establishing representative KOPs from which to conduct a detailed analysis of the Project's physical impacts on the visual environment. Future visual effects of the Project were predicted for each KOP by using computerized visual simulations. Figures 5.10-19a and b show the reader "life-size" pairs of before and after photographs and simulations. The following section provides a discussion of the impacts identified for the Project, and an analysis of visual effects at each KOP.

5.10.2.5.1.1 Impact VR-1: Have a Substantial Adverse Effect on a Scenic Vista

NO IMPACT. There is no national, State, or county designated scenic vista in the Project area or the Project vicinity; therefore, the Project would not cause a significant impact under this criterion. (*Below, under Impact VR-3 [Substantially Alter or Degrade the Existing Visual Character or Quality of the Project Site and Its Surroundings] the visual impacts from three selected KOPs are described.*)

5.10.2.5.1.2 Impact VR-2: Substantially Damage Scenic Resources, Including, But Not Limited to, Trees, Rock Outcroppings, and Historic Buildings Within a State Scenic Highway

NO IMPACT. The Project would not damage any existing scenic resources of any designated or eligible State Scenic Highway. The Project site is not within the viewshed of any Eligible or Officially Designated State Scenic Highway.

5.10.2.5.1.3 Impact VR-3: Substantially Degrade the Existing Visual Character or Quality of a Site and Its Surroundings

LESS THAN SIGNIFICANT: ALTERED BUT NOT SUBSTANTIALLY DEGRADED. The existing visual character of the Project site is based primarily on its flat topography, which is an archetypal example of the California Desert, with typical flat desert landforms, desert creosote bush scrub vegetation, and dry lakes. The existing visual environment of the Project site would be altered to accommodate the construction and operation of the Project, but visual quality as seen from sensitive receptor locations would not be substantially degraded.

The existing open space landscape character of the desert at the Project site would be modified into a commercial-scale solar energy generating facility. This would alter the existing landscape character of the Project site as seen from the surrounding vicinity and sensitive receptor locations, but would not substantially degrade existing visual character or quality of the site and its surroundings.

Project elements that possess the potential to alter the existing visual character or quality of the Project site are described in Section 3.0, Facility Description and Location. Construction of the Project would also require the following Project features: clearing and grading required for earthwork terraces, construction of a new access road, laydown areas, and drainage channels, and evaporation ponds. Because of the size of the Project footprint (approximately 1,800 acres) and configuration of the solar troughs and power blocks, these various Project elements would be visible from I-10 and Corn Springs Road. Direct visual impacts associated with the Project would be alterations from the current views of open desert lands to distant views of a commercial-scale solar farm as seen from the KOPs described above. These visual impacts would not be considered significant because existing visual character and quality of the site and its surroundings would be altered to accommodate the construction and operation of the Project, but would not be substantially degraded. There are no indirect impacts to visual resources that would occur because of the construction or operation of the Project.

The following analysis presents the results of applying the BLM Contrast Rating System for each of the three KOPs. In all cases, the objectives of the assigned Interim VRM Class III would be met by the Project. Therefore, there would be no significant visual impacts at any of the KOPs.

KOP-1 – Ford Dry Lake Bridge Over I-10

After construction of Phase 1 of the Project, the view from KOP-1 on the bridge over I-10 at the Ford Dry Lake Exit would appear slightly altered as shown in Figure 5.10-15b). The Project site is approximately 3.2 to 4.9 miles north of this camera position, making this a foreground/midground viewing distance. The elevated camera position on the bridge provides a panoramic view of the flat desert plain that is constrained by the mountainous backdrop. The largest vertical element in the Project would be the Administration Building and Warehouse (one building). Because of its size and relative position on the south side of the site, this building attracts some attention as seen from KOP-1. However, because this building would be painted a light tan color, sympathetic to the desert

environment colors, it would not detract from the visual environment. The power block of Unit 1 is farther away from KOP-1 and does not attract attention. The solar troughs appear like a water body or lake, and slightly attract attention, but do not degrade the landscape. These Project features are evident, but remain subordinate to the natural form, line, color, or texture of the existing landscape character, thereby meeting the definition of VRM Class III.

After construction of Phase 2, the landscape would continue to look slightly altered, but not substantially degraded (see Figure 5.10-15c). The Administration Building and Warehouse continues to be the largest visual Project feature in the landscape, but it does not dominate any of the natural form, line color, or texture of the existing landscape character, thereby meeting the definition of VRM Class III.

KOP-2 – Wiley’s Well Bridge Over I-10

After construction of Phase 1 of the Project, the view from KOP-2 on the bridge over I-10 at the Wiley’s Well Road Exit would appear very slightly altered as shown in Figure 5.10-16b). The Project site is approximately 8.4 to 12.5 miles northwest of this camera position, making this a background viewing distance. The elevated camera position on the bridge provides a panoramic view of the flat desert plain that is constrained by the mountainous backdrop. At this distance, the solar fields appear like a water body or lake, but do not attract attention and do not degrade the landscape. The elements of form, line, color, and texture of the existing natural landscape are not degraded by the Project. The Administration Building and Warehouse is seen and is barely visible in the simulation, thereby providing weak visual contrast. The Project would not create moderate or strong visual contrasts, but rather would create weak visual contrasts as seen from KOP-2. The Project would be better than VRM Class III criteria and would achieve the VRM Class II definition.

After construction of Phase 2, the landscape would continue to look very slightly altered, but not substantially degraded (see Figure 5.10-16c). The Administration Building and Warehouse continues to be seen and a larger area of solar troughs is also seen. After construction of Phase 2, the Project would not create moderate or strong visual contrasts, but rather would create weak visual contrasts as seen from KOP-2. The Project would be better than VRM Class III criteria and would achieve the VRM Class II definition as seen from KOP-2.

KOP-3 – Corn Springs BLM Road

After construction of Phase 1 of the Project, the view from KOP-3 on the BLM Corn Springs Road that connects Corn Springs Campground and trailhead to I-10 at the Corn Springs Exit would appear very slightly altered, as shown in Figure 5.10-17b). The Project site is approximately 9.0 to 14.25 miles east of this camera position, making this a background viewing distance. The elevated camera position on the fluvial plain at the lower slopes of the Chuckwalla Mountains provides a panoramic view of the flat desert plain that is only constrained by the mountainous backdrop of the Palen and McCoy Mountains. At this distance, the solar fields appear like a small water body or lake, and are visible but do not attract attention. The Project would not create moderate or strong visual contrasts, but rather would create weak visual contrasts as seen from KOP-3. The Project would be better than VRM Class III criteria and would achieve the VRM Class II definition as seen from KOP-3.

After construction of Phase 2, the landscape would continue to look very slightly altered, but not substantially degraded (see Figure 5.10-17c). At this distance, the solar fields appear like a small water body or lake, and are visible but do not attract attention. The Project would not create moderate or strong visual contrasts, but rather would create weak visual contrasts as seen from KOP-3. The

Project would be better than VRM Class III criteria and would achieve the VRM Class II definition as seen from KOP-3.

5.10.2.5.1.4 Impact VR-4: Create a New Source of Substantial Light or Glare That Would Adversely Affect Day or Nighttime Views in the Area

LESS THAN SIGNIFICANT AFTER IMPLEMENTATION OF PROJECT DESIGN FEATURES AND MITIGATION MEASURES: CREATION OF A NEW LIGHT SOURCE BUT NOT SUBSTANTIAL LIGHT OR GLARE. As described in Section 3.4.12.2 – Lighting System – the Project’s lighting system will provide operations and maintenance personnel with illumination in both normal and emergency conditions. The system will consist primarily of AC lighting, but will include DC lighting for activities or emergency egress required during an outage of the plant’s AC electrical system. The lighting system will also provide AC convenience outlets for portable lamps and tools. Lighting will be designed to provide the minimum illumination needed to achieve safety and security objectives and will be shielded and oriented to focus illumination on the desired areas and minimize additional nighttime illumination in the site vicinity.

The new aboveground electric transmission line for the Project would use tubular steel monopoles and galvanized steel cross arms, similar to the Buck to Julian Hinds 161-kV transmission line that is currently being constructed south of and parallel to I-10. The monopoles do not reflect sunlight because of the specific galvanizing treatment that was used. However, the new arms on the newly constructed monopoles reflect sunlight and create glint, as illustrated in Figure 5.10-18. Implementation of Project Design Features and Mitigation Measures would reduce sunlight reflection and glint to a less than significant level. Please see Section 5.10.3 Proposed Mitigation Measures and Project Design Features.

5.10.2.5.2 Visual Effects Seen from the Air

The Project will use solar thermal equipment comprised of arrays of parabolic trough mirrors. Each solar collector mirror is parabolic in shape and focuses the sun’s energy on the glass-encased metal receiver tube containing the heat transfer fluid, thus limiting the potential for stray reflections. The receiver tube may glow as the reflected sun rays enter the collector. The reflections from the curved surface of the receiver tube are greatly diminished in intensity from those that would be associated with a reflection of the sun in a mirror. These reflections are similar to the reflections one would observe from a body of water with waves on it if the viewer is in the right spot. The glow could be observed by a pilot if the aircraft were positioned at the right angle above the array, but it would not be a bright source of glare.

The Solar Electric Generating Station (SEGS) power plants in the Mojave Desert at Harper Lake and Kramer Junction have been operating since the 1980s and provide a reference for the issue of potential glare impacts to pilots. In the nearly 20 years that the SEGS facilities have been in operation, glare has not been reported as a distraction to pilots. As an additional data point, on October 4, 2007, Caltrans Aeronautics and CEC staff flew over the Kramer Junction and Harper Lake solar thermal facilities during a sunny mid-morning at about 1,500 feet above ground level and no glare was observed, although from a distance of four miles the solar facility appeared to be a lake or pond and reflected some sunlight (CEC, 2007).

Given this history of aircraft operations in the vicinity of nearby existing solar thermal power plants and no recorded aviation safety issues, it is not expected that the Project solar array will cause adverse effects on aviation operations in the Project vicinity.

5.10.2.5.3 Visible Plume Effects

Vapor Plume Analysis

The two meteorological factors that are most significant in determining the potential for vapor plume formation are the ambient temperature and the relative humidity. Given the dry, desert location, relative humidity tends to be low and ambient temperature warm during the daytime hours. Consequently, any visible vapor plumes will tend to form during periods with lower temperatures and high humidity such as during periods of winter precipitation. Thus, it is expected that the visual impacts of vapor plumes from the Project will be limited and concentrated during periods of inclement weather when the ambient conditions already will likely be contributing to reduced visibility.

Visible plumes that occur during daylight hours have the potential for producing an impact on visual resources. The Project's cooling tower is a potential source of visible water vapor plumes. A quantitative analysis will be performed to estimate the potential size and frequency of visible plume formation during daylight hours. The Seasonal and Annual Cooling Tower Impacts (SACTI, Version 9/30/90) model will be used for this analysis.

Based on other analyses done on similar solar energy projects, the approximate facility size of over 1800 acres, and the location of the cooling tower in the power block in the center of the site, the daytime cooling tower plume length is not expected to extend beyond the site boundaries in any case.

5.10.3 Proposed Mitigation Measures and Project Design Features

Project features have been designed to minimize visual impacts, including but not limited to, painting structures with colors sympathetic to the desert environment, shielding light sources, and using non-reflective materials for Project components other than the solar trough mirrors. Specific Project design features that minimize visual impacts to less than significant levels include the following elements:

- Design Feature 1: The surfaces of all aboveground structures except the solar collectors (*i.e.*, water treatment building, electrical building, cooling tower electrical building, control room/warehouse in power block, administration/warehouse building, steam turbine generator building, water storage tanks, etc.) will be given low reflectivity finishes with neutral desert tan colors sympathetic to the desert environment in order to minimize the contrast of the structures with their backdrops. Colors of exterior building and tank surfaces will be selected in consultation with BLM.
- Design Feature 2: All substation equipment will be specified with low reflectivity, neutral finishes. All insulators at the substations and on the takeoff equipment will be non-reflective and non-refractive. The chain-link fences surrounding the substations and the Project site will have a dulled finish to reduce visual contrasts with the desert surroundings.
- Design Feature 3: For overhead transmission lines, tubular steel poles and arms will be galvanized steel that has been treated at the factory to dull the surfaces and reduce sunlight reflection. (If concrete monopoles are used, they will be natural concrete with light-gray colors, and arms will be dulled galvanized steel.) All insulators specified for the Project will be made of materials that do not reflect or refract light. All conductors specified for the Project will be non-specular, that is, they will be treated at the factory to dull their surfaces to reduce their potential to reflect light.

- Design Feature 4: All construction-related operations at the construction laydown areas will be kept clean and tidy. The Applicant will remove construction debris promptly at regular intervals, not to exceed two weeks at any one location.
- Design Feature 5: All outdoor lighting will be the minimum required to meet safety and security standards and all light fixtures will be hooded to eliminate any potential for glare effects and prevent light from spilling off the site or up into the sky. In addition, the light fixtures will have sensors and switches to permit the lighting to be turned off at times when it is not required.

5.10.4 Cumulative Impacts

The geographic extent of the cumulative visual impacts analysis is the same as the extent of the Project analysis. In accordance with BLM standards, the visibility analysis and viewshed analysis were limited to a radius of 15 miles from the Project site.

The Blythe Solar Project (CACA 048811) would be located eight miles west of the City of Blythe and three miles north of I-10, approximately 8.5 miles east from the Project. The Project consists of four parabolic trough solar thermal plants that would be developed in four phases for a total of 968 MW over 6,300 acres of land. The Genesis Solar Energy Project is visually separated from the Blythe Solar Project by McCoy Peak and the McCoy Mountain Range, and therefore, would not be visually cumulative. Cumulative visual impacts would be less than significant.

As described in Table 5.1-1, BLM Solar Facility Applications within Study Area (see Cumulative Section of AFC), there are 16 additional solar projects within 15 miles of the Project that are proposed and have received serial numbers from the CEC. There would be comparable or greater visual impacts of these other proposed projects that would combine with the visual impacts of the Project. Without definitive descriptions of these other solar projects, it is not possible to determine if significant cumulative visual impacts would occur. Therefore, assuming worst case, the Project plus possible future solar projects could have significant cumulative visual impacts.

5.10.5 Applicable Laws, Ordinances, Regulations, and Standards (LORS)

5.10.5.1 Introduction

This section describes the LORS relevant to visual resources.

5.10.5.2 Bureau of Land Management

The Federal Land Policy and Management Act of 1976 established guidelines for the administration, management, protection, development, and enhancement of public lands. Section 102 (a)(8) of the Act emphasizes that public lands be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values. Section 101 (b) of the National Environmental Policy Act (NEPA) requires that measures be taken to ensure aesthetically pleasing surroundings be retained for all Americans.

5.10.5.3 County General Plan and Ordinances

The Project site is located within unincorporated Riverside County on Federal land managed by the BLM. The Project's electric transmission lines, natural gas line, and water lines are also located within Riverside County on BLM-managed land. The BLM is, therefore, the only agency having jurisdiction.

Because the Project is located within Riverside County, the County's General Plan and zoning information are provided in this section for informational purposes, but the County does not have discretionary authority regarding the Project. Visual resources are addressed in the Riverside County

Integrated Project (2009a), the Riverside County Desert Specific Area Plan (2003a), the Riverside County Palo Verde Valley Specific Area Plan (2003b), and the Riverside County Ordinances No. 655 and 859 related to glare, outdoor lighting, and night sky protection and water efficient landscaping.

5.10.5.4 Pertinent LORS

The LORS that are pertinent to the Project are listed in Table 5.10-4 and the specific provisions of each plan or ordinance that have potential relevance to the Project are discussed below. Table 5.10-4 summarizes the applicable Federal, State, and local LORS. Additional discussion of these LORS is provided following the table.

Table 5.10-4. Summary of Applicable Visual Resource LORS

LORS Authority	Requirement	Administering Agency	AFC Section Explaining Conformance
Federal			
California Desert Conservation Area Plan	This Plan is the BLM's land use guide for the management of public lands and resources within the California Desert Conservation Area.	Bureau of Land Management	Section 5.10.1.6
Federal Land Policy and Management Act of 1976	Establishes guidelines for the administration, management, protection, development, and enhancement of public lands.	Bureau of Land Management	Section 5.10.5.2
National Environmental Policy Act	Requires that measures be taken to ensure aesthetically pleasing surroundings be retained for all Americans.	Bureau of Land Management	Section 5.10.5.2
State:			
California Environmental Quality Act, (CEQA); California Public Resources Code, Section 2100 et seq.	CEQA Guidelines require and provide criteria for assessment of visual resource impacts.	California Energy Commission	Sections 5.10, 5.10.2.1
California Scenic Highway Program, (Streets and Highways Code Section 260 et seq.)	Enacted in 1963 with the goal of preserving and protecting the State's scenic highway corridors from changes that would diminish their aesthetic value.	California Department of Transportation	Sections 5.10.1.1, 5.10.2.5.1.2
Local:			
Riverside County Integrated Plan (RCIP)	The purpose of the RCIP is to guide future development within the county. Specific plan elements and guidelines direct development to prevent visual degradation, scenic obstruction, and environmentally sensitive landscaping designs.	County of Riverside	Section 5.10.5.3

Table 5.10-4. Summary of Applicable Visual Resource LORS

LORS Authority	Requirement	Administering Agency	AFC Section Explaining Conformance
Ordinance No. 655	Restricts the permitted use of certain light fixtures emitting into the night sky undesirable light rays which have a detrimental effect on astronomical observation and research.	County of Riverside	Section 5.10.5.3
Ordinance No. 859	Establishes water-efficient landscape requirements.	County of Riverside	Section 5.10.5.3

Conformity with Federal, State, and local LORS is explained in Table 5.10-5.

Table 5.10-5. Conformity of Genesis Solar Energy Project with Applicable Visual Resource LORS

Provision	Conformity
Federal	
BLM California Desert Conservation Area Plan Multiple Use Class M (Moderate Use). Lands are managed to provide for a wider variety of uses such as mining, livestock grazing, recreation, utilities, and energy development, while conserving desert resources and mitigating damages permitted uses may cause. Class M areas are managed to achieve a balance between higher-intensity use and the protection of public land. This designation accommodates mining, livestock grazing, energy and utility development, and recreational uses, provided impacts generated by those activities are mitigated. New major electric transmission facilities may be allowed only within designated utility corridors. Existing facilities within designated utility corridors may be maintained and upgraded or improved in accordance with existing rights-of-way or amendments to right-of-way grants.	Yes. Table 1 Multiple-Use Class Guidelines, in the California Desert Conservation Area Plan indicates solar electric generation plants may be allowed after NEPA requirements are met. Table 1 also indicates new transmission facilities may be allowed only within designated corridors, and NEPA requirements must be met. The Applicant will comply with the BLM's requirements for setbacks and other design regulations. The applicant chose the site, in part, because of its location and lack of effect on visual resources.
State	
California Environmental Quality Act Determination of significance of aesthetic impact.	Yes. Contrast rating worksheets were completed to determine that the Project impacts to aesthetics would be less than significant (Figures 5.10-20, 5.10-21 and 5.10-22).
Riverside County Integrated Plan LU-4 Relates to Project Design LU 4.1 Require that new developments be located and designed to visually enhance, not degrade the character of the surrounding area through consideration of the following concepts:	

Table 5.10-5. Conformity of Genesis Solar Energy Project with Applicable Visual Resource LORS	
Provision	Conformity
c. Require that an appropriate landscape plan be submitted and implemented for development projects subject to discretionary review.	No. The Applicant does not propose to landscape the Project site, and therefore would not submit a landscape plan for the Project area.
d. Require that new development utilize drought-tolerant landscaping and incorporate adequate drought-conscious irrigation systems.	No. The Applicant does not propose any landscaping, and therefore will not require irrigation or unnecessarily use water in the desert.
l. Mitigate noise, odor, lighting, and other impacts on surrounding properties.	Yes. All outdoor lighting at the Project site will be the minimum required to meet safety and security standards and all light fixtures will be hooded to eliminate any potential for glare effects and to prevent light from spilling off the site or up into the sky. In addition, the light fixtures will have sensors and switches to permit the lighting to be turned off at times when it is not required.
m. Provide and maintain landscaping in open spaces and parking lots.	No. The Project footprint, as proposed, includes no open space, and parking facilities would be minimal. Planting and maintaining landscaping in the parking area of the Genesis Project, which would be inaccessible to the public, would require that water be used unnecessarily.
n. Include extensive landscaping.	No. Including extensive landscaping would not serve the project or surrounding viewers, and would require that water be used unnecessarily.
o. Preserve natural features, such as unique natural terrain, drainage ways, and native vegetation, wherever possible, particularly where they provide continuity with more extensive regional systems.	No. By the very nature of solar energy collection technology, the land surface will be necessarily cleared of vegetation and graded.
p. Require that new development be designed to provide adequate space for pedestrian connectivity and access, recreational trails, vehicular access and parking, supporting functions, open space, and other pertinent elements.	No. The Project would not be accessible by pedestrians, recreationists, or general vehicular travel.
LU 4.2 Require property owners to maintain structures and landscaping to a high standard of design, health, and safety through the following:	
c. Promote and support community and neighborhood based efforts for the maintenance, upkeep, and renovation of structures and sites.	Yes. Applicant would maintain the appearance of the Project and ensure proper maintenance practices.
Scenic Corridors	
LU 13.1 Preserve and protect outstanding scenic vistas and visual features for the enjoyment of the traveling public.	Yes. The Project is located in a VRM Class III area, meaning the scenic quality of the area is not considered to be outstanding. Furthermore, the Project would not inhibit viewing the scenery of background mountain ranges.

Table 5.10-5. Conformity of Genesis Solar Energy Project with Applicable Visual Resource LORS	
Provision	Conformity
LU 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. The Project is compatible in design and appearance with scenic highway corridors. Riverside County has requested that Interstate 10 (I-10) be designated a State Scenic Highway, but Caltrans has not designated I-10 as either an Eligible or Officially Designated Scenic Highway. Therefore, Riverside County has designated I-10 to be a County Scenic Highway from SR-62 near Palm Springs to the California-Arizona border.
LU 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 proposed electric line would be a transmission line, not a distribution line, and it would be located aboveground. See above regarding scenic highways.
LU 13.6 Prohibit offsite outdoor advertising displays that are visible from Designated and Eligible State and County Scenic Highways.	Yes. The Project would not include offsite outdoor advertising displays.
LU 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. The Project would include simple identification signage at the facility gate. Such signage would be visible from I-10, a Designated County Scenic Highway.
LU 13.8 Avoid the blocking of public views by solid walls.	Yes. None of the Project elements would block any views.
The following policies apply to properties designated as Open Space-Rural on the area plan land use maps.	
LU 20.1 Require that structures be designed to maintain the environmental character in which they are located.	Yes. The flat nature of the proposed solar troughs and the flat roofs of the buildings and tanks would repeat the flat planar topography of the existing site.
LU 20.2 Require that development be designed to blend with undeveloped natural contours of the site and avoid an unvaried, unnatural, or manufactured appearance.	Yes. The flat nature of the proposed solar troughs and the flat roofs of the buildings and tanks would repeat the flat planar topography of the existing site. By the very nature of solar energy collection technology, the land surface will be necessarily graded and covered with solar collection troughs, which have an industrial and manufactured appearance.
LU 20.3 Require that adequate and available circulation facilities, water resources, sewer facilities, and/or septic capacity exist to meet the demands of the proposed land use.	Yes. The proposed access road, administrative building, water sources, and disposal have been included as part of the Project design.

**Table 5.10-5. Conformity of Genesis Solar Energy Project with
Applicable Visual Resource LORS**

Provision	Conformity
LU 20.4 Ensure that development does not adversely impact the open space and rural character of the surrounding area.	Yes. The Project has been intentionally located away from populated areas and sensitive viewers and away from outstanding scenery. The Project site is located in open space so vast that the area covered by the facility footprint would not cause the surrounding area to feel any less rural or change its desert character.

5.10.6 Permits Required and Permit Schedule

No permits are required that are specific to visual resources.

5.10.7 Involved Agencies and Agency Contacts

Agencies and agency contacts relative to visual resources are provided in Table 5.10-6.

Table 5.10-6. Involved Agencies and Agency Contacts

Agency/Address	Contact/Telephone	Reason for Involvement
Bureau of Land Management Palm Springs/South Coast Field Office 1201 Bird Center Drive Palm Springs, CA 92262-8001	Greg Hill Planning & Environmental Coordinator 760-833-7140	Information on California Desert Conservation Area Plan, Interim VRM Classes, Devers-Palo Verde 2 EIR/EIS, consultation on KOP selection.

5.10.8 References

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