Section 3.1
Aesthetics and Visual Resources

This section evaluates potential aesthetics and visual resources impacts that may result from construction and/or operation of the proposed project. The following discussion addresses the existing aesthetics and visual resources of the affected environment, evaluates the project's consistency with applicable goals and policies, identifies and analyzes environmental impacts, and recommends measures to reduce or avoid significant impacts anticipated from implementation of the project.

The analysis in this section is partially based on the *Visual Impact Assessment* and *Addendum to Visual Impact Analysis* prepared by HDR (2018; see **Appendices B-1** and **B-2**) that were peer reviewed by Michael Baker International and Panorama Environmental, Inc.

ENVIRONMENTAL SETTING

REGIONAL SETTING

San Bernardino County contains three distinct geographic regions: (1) the Mountain Region, (2) the Valley Region, and (3) the Desert Region. The project site and surrounding area are in the Desert Region. The region's visual character is defined by its arid landscape, consisting of sparsely vegetated mountain ranges and broad valleys with expansive bajadas and scattered dry lakes.[1] In addition, the Desert Region features extensive open space and expansive vistas (County of San Bernardino 2007a).

The project site is in the Mojave Valley, just south of the Mojave River. The area is generally flat and flanked by mountainous terrain to the north, east, and south. The project site is approximately 1.25 miles north of the Newberry Mountains Wilderness Area, approximately 4,496 feet above mean sea level (amsl), and approximately 1 mile west of Black Butte, approximately 1,978 feet amsl. Elephant Mountain is less than 3 miles northwest of the project site, with a peak of approximately 2,674 feet amsl. The Calico Mountains are 7.5 miles north of the project site and have a peak elevation of 4,542 feet amsl. The town of Daggett and the Barstow Marine Corps Logistics Base are to the west of the project site. Elements in the regional visual landscape setting are shown in **Exhibit 3.1-1, Regional Landscape Setting.**

[1] A bajada is a broad slope of alluvial material at the foot of an escarpment or mountain.

PROJECT SETTING

Representative photographs were taken of the project site from varying distances and view directions that depict existing visual elements in the project area. **Exhibit 3.1-2, Site Photograph Location Map**, shows the location and view direction of each photograph. Photographs of the existing visual character and visual elements in the project area are shown in **Exhibit 3.1-3, Site Photographs.**

VISUAL CHARACTER

General

The project site and surrounding area are characterized by active or formerly active agricultural land, transportation infrastructure, high voltage transmission and electrical infrastructure, undeveloped land, decommissioned and existing utility-scale solar arrays, residences, and the existing Coolwater Generating Station and associated electrical infrastructure. The desert landscape of the project site and immediate surrounding area is characterized by a broad, flat alluvial plain covered with exposed, tan soils that are intermixed with short golden grasses and dotted with low, mounded, coarse-textured desert shrubs. The Mojave River is just north of the project site.

The flat alluvial terrain in the project valley is flanked by the Calico Mountains, Newberry Mountains, and Cady Mountains. Mountainous terrain abuts the alluvial plain to the north, west, and south. The eastern portion of the valley descends gradually along the Mojave River, with mountainous terrain approximately 10 miles east of the project area.

Coolwater Generating Station

The retired Coolwater Generating Station is a 626 megawatt (MW) natural gas-fired power plant built in 1960. After 1960, the property continued to be developed for electrical generation with the addition of three more natural gas-fired power generation units. Although it is not currently in operation, the industrial facility, including the tall cooling stacks, is highly visible throughout the surrounding area.

Residential Use

Single-story rural residences are scattered throughout the landscape along the local road network. Clusters or stands of trees tend to be planted along properties where residences front local roads.

Transportation Infrastructure

The project area and surrounding agricultural areas are bounded by Interstate 15 (I-15) on the north and Interstate 40 (I-40) on the south. Other major roadways in the project vicinity include the Route 66 National Trails Highway, Hidden Springs Road, Valley Center Road, and Minneola Road. Several paved and unpaved roads are located off Elkhorn Street and Santa Fe Street, south of the project site. Two railways run east to west across the valley. The Burlington Northern and Santa Fe (BNSF) railroad tracks are south of the project area, and the Union Pacific railroad tracks are to the north. Railroad infrastructure that was used to deliver coal to the Coolwater Generating Station is located adjacent to the proposed project site.

Electrical Infrastructure

The surrounding landscape is characterized by regional transmission infrastructure associated with the Coolwater Generating Station and other utility-related uses, including high-voltage transmission lines and two high-voltage substations. A 1,000-foot-wide high-voltage transmission corridor with transmission lines owned by Los Angeles Department of Water and Power (LADWP) bisects the project site (**Exhibit 3.1-3**). The Sunray Project, a 44 MW PV solar project, is located west of the project site (**Exhibit 3.1-3**).

Airport

Barstow-Daggett Airport, a County-owned, public-use, general-aviation airport, is directly south of the project site. The airport includes two runways, hangars for aircraft maintenance and storage, and buildings for airport operations and air traffic control. The airport is also used by the Fort Irwin National Training Center.

Military Base

The Barstow Marine Corps Logistics Base (MCLB Barstow) is approximately 8 miles to the west of the project site and encompasses over 6,000 acres, including headquarters and administration buildings, storage, shopping, housing, and rifle and pistol ranges.

VISUAL QUALITY

Vividness

The flat, broad valley and rugged, prominent mountainous terrain form a contrasting and moderately striking visual pattern. The texture and color of the desert vegetation are generally consistent and not overly striking. The project area mostly comprises active or formerly active agricultural land and industrial uses, which include an LADWP high-voltage transmission corridor and transmission lines owned by Southern California Edison (SCE). Adjacent industrial uses, including Barstow-Daggett Airport, the Coolwater Generating Station, interstate highways, and

railways, interrupt views of the flat agricultural areas and desert landscape. Transmission and distribution poles and conductors are aligned along other linear landscape features (e.g., roads) and within the existing transmission corridor. The scale of high-voltage electrical transmission towers in the area makes these features visible throughout the landscape and reduces the overall vividness of the project setting. Vividness of the landscape is moderately low.

Intactness

The rural landscape visible from the project area includes agricultural and undeveloped lands, mountainous terrain, the Coolwater Generating Station, an airport, high-voltage electrical transmission lines supported by large steel lattice towers, rural residential properties, and transportation infrastructure. The intactness of the existing landscape is low due to the existing industrial and transportation infrastructure within the viewshed.

Unity

Steel lattice towers bisect the western portion of the flat desert and agricultural landscape in the project area. Fences bordering the residential areas contrast in form and line with the surrounding desert and agricultural areas. Hangars and buildings at Barstow-Daggett Airport and buildings and exhaust stacks associated with the Coolwater Generating Station are visible in the landscape due to the height of these facilities in relation to the surrounding desert. These industrial facilities contrast in form, line, and color with the surrounding desert and mountains. The highway and railway infrastructure surrounding the project site also contrasts in form, line, and color with the surrounding vegetation and terrain. Visual unity of the landscape is low.

VIEWER RESPONSE

Approximately 100 rural residences are within a 0.5-mile radius of the project site. Residents adjacent to the project site with views of the existing desert and agricultural uses on the site and in the surrounding mountainous terrain will be aware of and sensitive to changes occurring in the visual landscape due to their long view duration. Area residents are expected to view the project from the adjacent roadways. Views from public roadways are considered within the context of CEQA. Regular motorists on local roadways, Route 66, I-15, and I-40 are assumed to be familiar with the landscape, and because of that familiarity, they are expected to be sensitive to changes in the landscape.

VIEWER GROUPS

Residents, motorists, and recreational users are the three viewer groups who would be afforded views of the proposed project. These viewer groups are discussed in greater detail below. Aircraft pilots and passengers traveling out of Barstow-Daggett Airport would be afforded short-duration

views of the project during takeoff and landing. Their focus would be on operation of the aircraft rather than the landscape below.

Landscape visibility and viewer perception of details, such as form, color, and texture, diminish as distance increases. The U.S. Bureau of Land Management (BLM) defines foreground and middleground views as 0 to 5 miles from the point of interest, and background reviews as 5 to 15 miles from the point of interest. Views that are seldom seen are over 15 miles away. A description of the BLM Visual Resource Methodology for evaluating visual change is provided in the methodology section below.

Residents/Motorists on Local Roads

Residences in the area are afforded both immediate and partial views of the project site, depending on proximity, orientation, and intervening elements. For example, trees, roadways, overhead power lines, and existing residential and industrial uses immediately adjacent to the project site tend to obstruct direct views of the site from more distant residences in the area.

Local residents experience views of the project site from public roads while driving to their homes. The views from the local roads would approximate views that would be experienced by residents at homes adjacent to those roads. Local roads surrounding the project site are shown on **Exhibit 3.1-2, Site Photograph Location Map**. Most of these roads have a low level of use and provide direct access to residences (approximately 100) surrounding the project area. A few local roads, including Hidden Springs Road, Minneola Road, and Valley Center Road, have a higher level of use (approximately 400 to 900 average vehicles trips per day) and provide access to Barstow-Daggett Airport and to I-40, I-15, and Route 66, all of which provide regional access to a far greater volume of motorists.

Motorists on I-15 and I-40

Motorists traveling on I-15, approximately 1.75 miles north of the project site, would have partial views of the project site in the middleground. I-15 is a major regional highway, and motorists would be a mix of people living in the surrounding communities and people passing through the area. The Mojave River separates I-15 from the project area. The average annual daily traffic on I-15 at Yermo Road is approximately 43,000 vehicles (Caltrans 2016a).

Motorists traveling on I-40 would have partial views of the project site in the middleground of their view. The foreground contains rural residential residences and other visual encroachments, including fencing, overhead utilities, and other roadways. The average annual daily traffic on I-40 at A Street is 14,400 vehicles (Caltrans 2016a).

Motorists on Route 66

Motorists traveling west on Route 66 would have partial views of the project site in the foreground and middleground. In the middleground, a combination of agriculture and rural residential uses and associated windrows are present. Ridgelines, including the Calico Mountains on the left and Alvord Mountain in the center, are visible in the background. Motorists traveling east on Route 66 would have partial views of the project site in the foreground and middleground, in additional to physical encroachments such as roadways, overhead poles and power lines, and rural residential structures. Mountains and ridgelines, including Solder Mountain, are visible in the distant background to the east. The average annual daily traffic on Route 66 adjacent to the project site is 472 vehicles per day (Tetra Tech 2018).

Recreational Users from Newberry Mountains Wilderness Area

Views near Camp Rock Road in the Newberry Mountains Wilderness Area include grazing lands in the foreground and large institutional facilities, railways, utility distribution lines, and agricultural fields in the middleground, which appear subordinate to the visible landscape. Recreationalists using the Newberry Mountains Wilderness Area are afforded middleground views of the project site over a moderate duration of time.

NIGHTTIME LIGHTING

Permanent sources of nighttime light in the project area are limited to streetlights, including lighting on I-15 and I-40, and structural lighting at scattered residential locations, the airport, and surrounding industrial facilities. Mobile sources of light and glare originate from railway trains, vehicles, and metal buildings.

REGULATORY FRAMEWORK

FEDERAL

National Scenic Byways Program

The National Scenic Byways Program, a part of the Federal Highway Administration (FHWA), recognizes, preserves, and enhances selected roads throughout the United States as All-American Roads or National Scenic Byways based on one or more archaeological, cultural, historic, natural, recreational, and scenic qualities. Route 66 is a designated National Historic Trail and is designated as Historic Highway Route 66, which makes the route eligible for consideration for designation as an All-American Road or National Scenic Byway by the FHWA.

STATE

Caltrans Scenic Highway Program

State scenic highways are those that are either officially designated as state scenic highways by the California Department of Transportation (Caltrans) or are eligible for such designation. The scenic designation is based on the amount of natural landscape visible by motorists, the scenic quality of the landscape, and the extent to which development intrudes on the motorist's enjoyment of the view.

According to Section 263.1 of the Streets and Highways Code, I-15 from Route 58 to Route 127 and I-40 from Barstow to Needles are included in the State Scenic Highway System (Caltrans 2016b). Both segments are eligible for the state scenic highway designation.

In 1991, the California Assembly officially designated historic Route 66 as Historic Highway Route 66 (under Assembly Concurrent Resolution No. 6 - Relative to Route 66, filed with the Secretary of State on July 11, 1991).

LOCAL

County of San Bernardino General Plan

Relevant policies from the County of San Bernardino General Plan are summarized below by element/section.

Land Use Element

Policy LU 1.2 The design and siting of new development will meet locational and development standards to ensure compatibility of the new development with adjacent land uses and community character.

Policy LU 1.4 Encourage preservation of the unique aspects of the rural communities and their rural character.

Conservation Element

Policy CO 8.1 Maximize the beneficial effects and minimize the adverse effects associated with the siting of major energy facilities. The County will site energy facilities equitably in order to minimize net energy use and consumption of natural resources and avoid inappropriately burdening certain communities. Energy planning should conserve energy and reduce peak load demands, reduce natural resource consumption, minimize environmental impacts, and treat local communities fairly in providing energy efficiency programs and locating energy facilities.

Programs

3. Require undergrounding of new and existing transmission lines when feasible.

4. Assist in the development and use of new designs for major transmission line towers that are aesthetically compatible with the environment from a close viewing distance.

8. The County shall consult with electric utilities during the planning construction of their major transmission lines towers to ensure that they are aesthetically compatible with the surrounding environment.

Policy D/CO 1.2 Require future land development practices to be compatible with the existing topography and scenic vistas, and protect the natural vegetation.

Policy D/CO 3.1 Protect the Night Sky by providing information about and enforcing existing ordinances.

a. Provide information about the Night Sky ordinance and lighting restrictions with each land use or building permit application.

b. Review exterior lighting as part of the design review process.

Policy D/CO 3.2 All outdoor lighting, including street lighting, shall be provided in accordance with the Night Sky Protection Ordinance and shall only be provided as necessary to meet safety standards.

Open Space Element

Policy OS 5.1 Features meeting the following criteria will be considered for designation as scenic resources:

a. A roadway, vista point, or area that provides a vista of undisturbed natural areas.

b. Includes a unique or unusual feature that comprises an important or dominant portion of the viewshed (the area within the field of view of the observer).

c. Offers a distant vista that provides relief from less attractive views of nearby features (such as views of mountain backdrops from urban areas).

Policy OS 5.2 Define the scenic corridor on either side of the designated route, measured from the outside edge of the right-of-way, trail, or path. Development along scenic corridors will be required to demonstrate through visual analysis that proposed improvements are compatible with the scenic qualities present.

Policy OS 5.3 The County desires to retain the scenic character of visually important roadways throughout the County. A "scenic route" is a roadway that has scenic vistas and other scenic and aesthetic qualities that over time have been found to add beauty to the County. Therefore, the County designates the following routes as scenic highways and applies all applicable policies to development on these routes (regarding the Desert Region): Route 66, from Oro Grande to the Arizona state line, and I-15 from I-215 to the Nevada state line.

Renewable Energy and Conservation Element

Policy 4.1 Apply standards to the design, siting, and operation of all renewable energy facilities that protect the environment, including sensitive biological resources, air quality, water supply and quality, cultural, archaeological, paleontological and scenic resources.

Policy 4.4 Encourage siting, construction and screening of RE generation facilities to avoid, minimize or mitigate significant changes to the visual environment including minimizing light and glare.

Policy 4.4.1 Reduce visual impacts through a combination of minimized reflective surfaces, context-sensitive color treatments, nature-oriented geometry, minimized vegetation clearing under and around arrays, conservation of pre-existing native plants, replanting of native plants as appropriate, maintenance of natural landscapes around the edges of facility complexes, and lighting design to minimize night-sky impacts, including attraction of and impact to nocturnal migratory birds.

Policy 5.1 Encourage the siting of RE generation facilities on disturbed or degraded sites in proximity to necessary transmission infrastructure.

Policy 5.7 Support renewable energy projects that are compatible with protection of the scenic and recreational assets that define San Bernardino County for its residents and make it a destination for tourists.

Policy 5.7.1 Site renewable energy generation facilities in a manner that will avoid, minimize or substantially mitigate adverse impacts to sensitive habitats, cultural resources, surrounding land uses, and scenic viewsheds.

COMMUNITY PLANS AND ACTION PLANS

The project site is not located in an area covered by a Community Plan adopted in support of the County's General Plan. However, the County is currently preparing action plans for review by the Board of Supervisors to address land use planning issues relative to the Daggett, Newberry Springs and Yermo areas. The policy-guiding documents will be included in the County Policy Plan if adopted by the Board of Supervisors. After the adoption of the County Policy Plan, the Development Code will be updated to reflect the new policies.

No specific goals or policies for guiding future development from these proposed plans are applicable to the project because the proposed plans are still being reviewed and have not been adopted.

San Bernardino County Development Code

Section 82.19.040, Development Criteria within Scenic Areas

Section 82.19.040 establishes criteria to evaluate land use proposals in scenic areas. The following development criteria established in this code section are applicable to (1) areas with unique views of the county's desert, mountain, and valley areas or any other aesthetic natural land formations and (2) an area extending 200 feet on both sides of the ultimate road right-of-way of State- and County-designated scenic highways as identified in the General Plan. The area covered may vary to reflect the changing topography and vegetation along the right-of-way.

- **Report**. A special viewshed analysis may be required if it is determined that the proposed project may have a significant negative impact on the scenic values of the subject parcel.
- **Building and Structure Placement**. Structure placement must be compatible with and not detract from the visual setting or obstruct significant views.
- **Aboveground Utilities**. Utilities must be constructed and routed underground except in those situations where natural features prevent the underground siting or where safety considerations necessitate aboveground construction and routing. Aboveground utilities are required to be constructed and routed to minimize detrimental effects on the visual setting of the designated area. Where practical, aboveground utilities must be screened from view from either the scenic highway or the adjacent scenic or recreational resource by existing topography, or by placement of structures.

- **Grading**. The alteration of the natural topography of the site is to be minimized and avoid detrimental effects to the visual setting of the designated area and the existing natural drainage system. Alterations of the natural topography are required to be screened from view from either the scenic highway or the adjacent scenic or recreational resource by landscaping and plantings that harmonize with the natural landscape of the designated area and that are capable of surviving with a minimum of maintenance and supplemental water.

- **Storage Areas**. Outside storage areas associated with commercial activities are required to be completely screened from view of the right-of-way with landscaping and plantings that are compatible with the local environment and are capable of surviving with a minimum of maintenance and supplemental water.

Section 83.07.040, Glare and Outdoor Lighting – Mountain and Desert Regions

Section 83.07.040 establishes standards for outdoor lighting in the County's Mountain and Desert Regions (the proposed project site is located in the Desert Region). This section requires new permitted lighting for construction and operational lighting to be fully shielded to preclude light pollution or light trespass on adjacent property, other property within the line of sight (direct or reflected) of the light source, or members of the public who may be traveling on adjacent roadways or rights-of-way.

Section 84.29.035, Required Findings for Approval of a Commercial Solar Energy Facility

Section 84.29.035 includes the following provisions:

a) In order to approve a commercial solar energy generation facility, the Planning Commission shall, in addition to making the findings required under Section 85.06.040(a) of the San Bernardino County Development Code, determine that the location of the proposed commercial solar energy facility is appropriate in relation to the desirability and future development of communities, neighborhoods, and rural residential uses, and will not lead to loss of the scenic desert qualities that are key to maintaining a vibrant desert tourist economy by making each of the findings of fact in subdivision (C).

b) In making these findings of fact, the Planning Commission shall consider:

    1. The characteristics of the commercial solar energy facility development site and its physical and environmental setting, as well as the physical layout and design of the proposed development in relation to nearby communities, neighborhoods, and rural residential uses; and

2. The location of other commercial solar energy generation facilities that have been constructed, approved, or applied for in the vicinity, whether within a city of unincorporated territory, or on state or federal land.

c) The finding of fact shall include the following:

1. The proposed commercial solar energy generation facility is either:

   A. Sufficiently separated from existing communities and existing/developing rural residential areas so as to avoid adverse effects, or

   B. Of a sufficiently small size, provided with adequate setbacks, designed to be lower profile than otherwise permitted, and sufficiently screened from public view so as to not adversely affect the desirability and future development of communities, neighborhoods, and rural residential use.

2. Proposed fencing, walls, landscaping, and other perimeter features of the proposed commercial solar energy generation facility will minimize the visual impact of the project so as to blend with and be subordinate to the environment and character of the area where the facility is to be located.

3. The siting and design of the proposed commercial solar energy generation facility will be either:

   A. Unobtrusive and not detract from the natural features, open space and visual qualities of the area as viewed from communities, rural residential uses, and major roadways and highways, or

   B. Located in such proximity to already disturbed lands, such as electrical substations, surface mining operations, landfills, wastewater treatment facilities, etc., that it will not further detract from the natural features, open space and visual qualities of the area as viewed from communities, rural residential uses, and major roadways and highways.

4. The siting and design of project site access and maintenance roads have been incorporated in the visual analysis for the project and shall minimize visibility from public view points while providing needed access to the development site.

5. The proposed commercial solar energy generation facility will avoid modification of scenic natural formations.

Section 84.29.040, Solar Energy Development Standards

Section 84.29.040 includes the following standards applicable to the proposed project:

b) *Glare*. Solar energy facilities shall be designed to preclude daytime glare on any abutting residential land use zoning district, residential parcel, or public right-of-way.

c) *Night Lighting*. Outdoor lighting within a commercial solar energy generation facility shall comply with the provisions of Chapter 83.07 of the Development Code.

San Bernardino County Ordinance No. 3900

Because desert and mountain residents value the night sky conditions, the County adopted Ordinance No. 3900, also known as the Night Sky Ordinance. This ordinance outlines specific standards relating to glare and outdoor lighting. These standards are included in the sections of the Development Code described previously.

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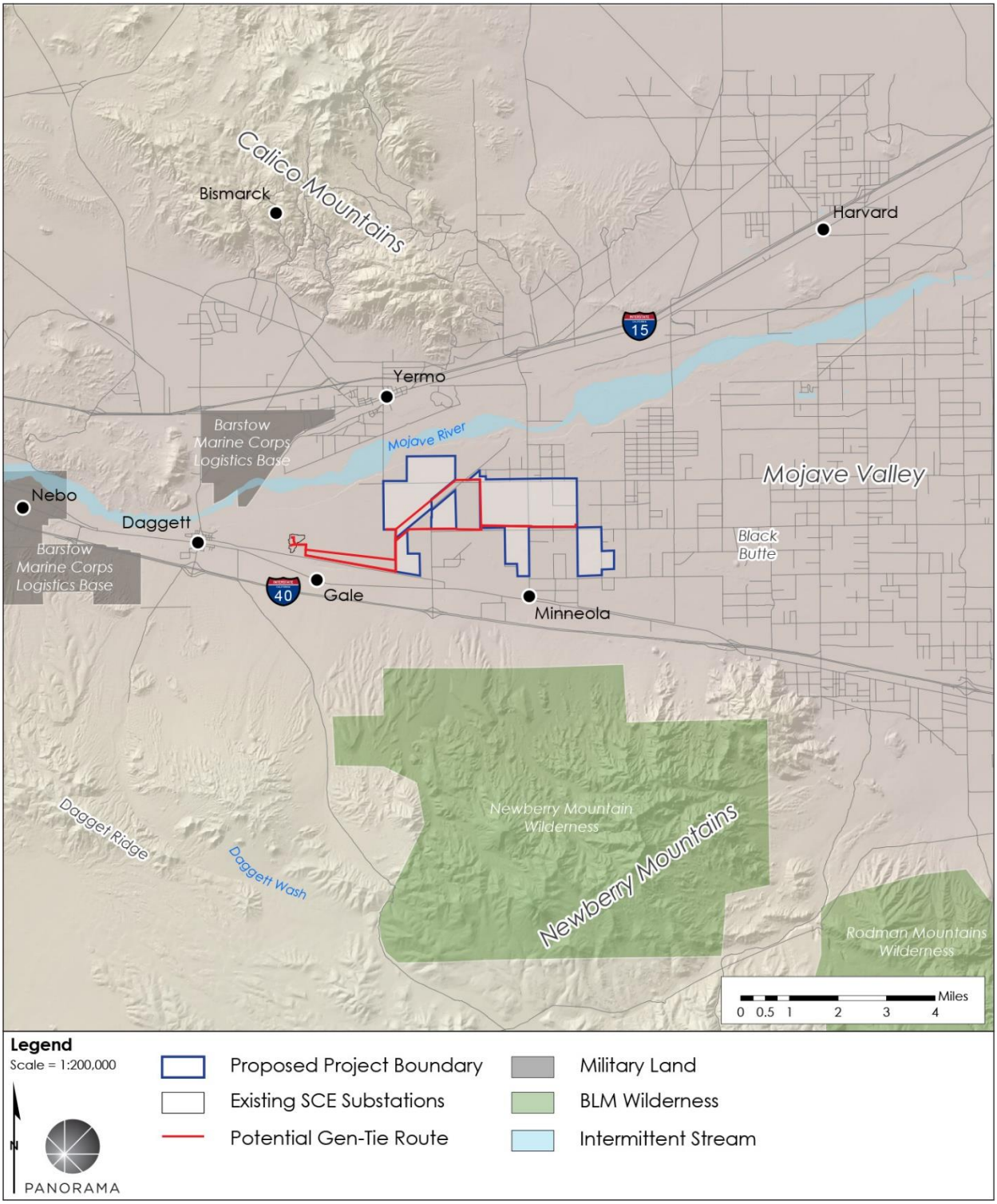
Exhibit 3.1-1 Regional Landscape Setting



Source: USGS 2016a, 2016b; Tele Atlas North America 2018

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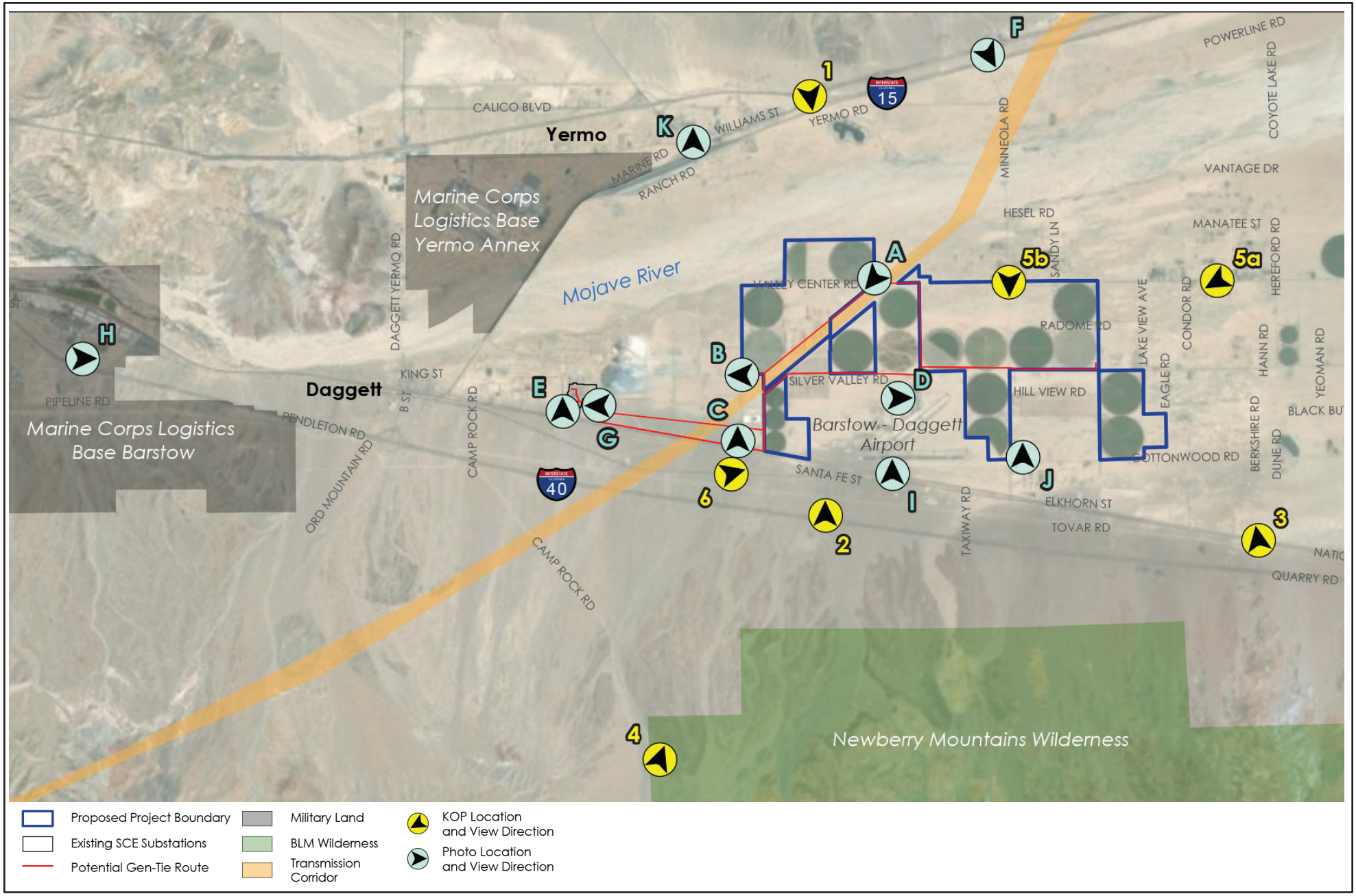

Michael Baker INTERNATIONAL

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Source: Panorama, 2018. Aerial imagery flown Summer 2016.
Tele Atlas North America 2018; Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community 2017; USGS 2016a, 2016b; HDR 2017

DAGGETT SOLAR POWER FACILITY
ENVIRONMENTAL IMPACT REPORT

Site Photograph Location Map

Exhibit 3.1-2

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Exhibit 3.1-3 Site Photographs

Photograph A. Southwesterly view of the LADWP Transmission Corridor from Valley Center Road. The multiple steel lattice towers of the LADWP Transmission Corridor, crossing the project site, are visible from the area surrounding the project site and when seen in close proximity dominate the view.

Photograph B. View facing west from SunRay Lane, approximately 1.2 miles west of the project site. The SunRay Project facilities are visually prominent in the foreground. The terrain is flat with low density vegetation. The electrical transmission lines and mountains are visible in the background.

Photograph C. View from the north side of Santa Fe Street, approximately 1 mile west of the project site, facing north towards the project site and the surrounding area. Views of the SunRay Project facilities are dominated by the LADWP Transmission Corridor. The surrounding terrain is generally flat with low shrubs and residential development and mountains in the background.

Photograph D. View from the south side of Northern Access Road, approximately 0.12 mile south of the project site, facing east towards the airport and the project site. The Barstow-Daggett Airport's large structures dominate the view with fencing and flat terrain with low shrubs in the foreground.

Exhibit 3.1-3 Site Photographs (continued)

Photograph E. View from the north side of Santa Fe Street, approximately 2.5 miles west of the project site, facing north towards the surrounding area. Structures on northern end of Coolwater Generating Station are visually prominent. Flat terrain, desert shrubs and tan soils are visible in the foreground with views of the Calico Mountains in the background.

Photograph F. View from Yermo Road facing southwest, approximately 1.5 miles north of the project site. The Union Pacific railroad tracks, located on a slightly, elevated berm, are visually prominent. Electrical distribution and transmission infrastructure traverse the landscape and are noticeable visual features, with distant views of mountains in the background. The terrain is generally flat with low shrubs.

Photograph G. View facing east from Santa Fe Street, approximately 2.2 miles west of the project site. The BNSF railroad tracks, located on a slightly, elevated berm, are visually prominent in views to the south, with distant views of mountains in the background. Electrical distribution lines are visually prominent in views to the north. The terrain is generally flat with low shrubs.

Photograph H. View of Route 66 National Trails Highway and I-40 looking east approximately 7 miles from the project site. Views include low hills to the south and generally flat terrain to the north, covered by low shrubs with distant views of mountains are available in the background.

Exhibit 3.1-3 Site Photographs (continued)

Photograph I. View looking north from Route 66 National Trails Highway, approximately 1.2 miles south of the project site. Views of the Barstow-Daggett Airport site includes runways, hangars, airport operations buildings, fencing houses, a sewage treatment plant, and a water tank. The BNSF railroad tracks on a slightly, elevated berm, is visible in the foreground. The surrounding terrain is generally flat with low shrubs and mountains in the background.

Photograph J. View from the east side of Minneola Road, facing north. The project site is immediately adjacent and visible on the west side of the road. Views of agricultural support buildings and actively farmed land are prominent in the foreground with irrigation equipment and mountains in the background. Stands of trees and electrical distribution lines are visible along the roadway.

Photograph K. View from the south side of Yermo Road, approximately 1.5 miles northeast of the project site, facing north towards the surrounding area. Single family, single story, residential uses are visible foreground and middleground with Calico Mountains making up the background.

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IMPACT ANALYSIS AND MITIGATION MEASURES

METHODOLOGY

Viewshed Analysis

The viewshed is generally the area that is visible from an observer's viewpoint and includes the screening effects of intervening vegetation and/or physical structures. A topographic viewshed analysis was conducted for the project to illustrate the geographic extent of potential views of the project area and to comply with Development Code Section 82.19.040. The topographic viewshed analysis for the project is shown in **Exhibit 3.1-4, Topographical Viewshed Analysis**. The analysis indicates that the project site may be visible from the surrounding valley areas for up to approximately 5 miles to the north and south and up to approximately 10 to 12 miles to the east, southeast, and northwest, depending on elevational differences and intervening topography. Although some portion of the project site may be visible from a relatively large area, the degree of visibility would depend on distance and view angle.

Generally, the project site would be most visible from viewpoints within 1 mile, while site visibility would diminish as distance increases and view angle decreases. Air quality, including dust and other visible particulates, can affect visibility in the area.

Key Observation Points

Six key observation points (KOPs) were selected as representative vantage points in the landscape that offer motorists, including local residents traveling on area roadways, views of the proposed project. KOPs 1 through 6 are shown on **Exhibit 3.1-2, Site Photograph Location Map**. Factors considered in the selection of KOPs included locations with sensitive viewers (e.g., local residences, Route 66) and potential for the project site to be visible (e.g., distance and view angle). The KOPs were selected to capture representative vantages from scenic routes (I-15, I-40, and Route 66), residential areas northeast of the project site, the Calico Ghost Town, and the Newberry Mountains Wilderness Area.

Digital photographs were taken from the selected KOP locations to support the discussion on existing visual setting and the analysis of potential visual impacts associated with the proposed project. Photographs of existing conditions were taken in August 2017 using a digital single-lens reflex (DSLR) Canon 5D Mark III camera. Photographs from KOPs 1 through 6 are provided below (see **Exhibits 3.1-5** through **3.1-11**). Version "a" of **Exhibits 3.1-5** through **3.1-11** depicts existing views.

Visual Simulations

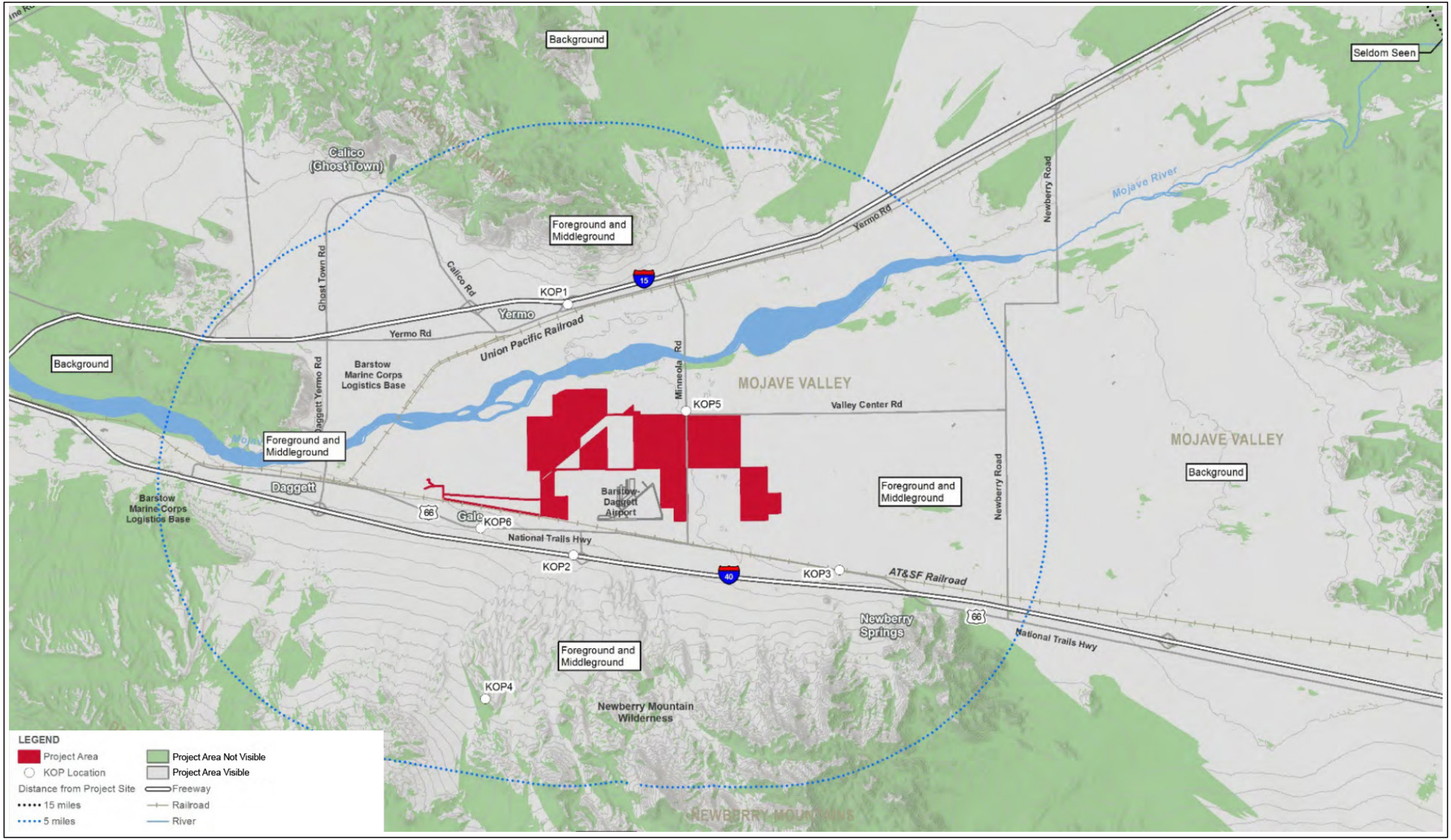
Three-dimensional (3-D) visual simulations from each KOP were rendered to approximate the visual conditions resulting with project implementation. Using the photographs acquired at KOP 1 through KOP 6, a 3-D physical massing model was created that incorporated the PV scale model, placed in array configurations as shown in the site plan provided in **Exhibit 2.0-2, Project Site** (see Section 2.0, Project Description). The model was then georeferenced and placed on GPS-controlled site-specific photographs to create simulations that demonstrate visual changes from the project. Version "b" of **Exhibits 3.1-5** through **3.1-11** provides simulated views of project features.

Visual Change Analysis

The existing view photographs were compared to the simulated views to define the degree of visual change and visual impacts of the proposed project. The BLM Visual Resource Management (VRM) System was used to evaluate visual change by comparing the project features with the basic features (i.e., landform, vegetation, and structures) in the existing landscape using the basic design elements of form, line, color, and texture. The BLM VRM System was used to evaluate visual change for the project because the County has not developed or adopted its own visual resource analysis methodology and the VRM System is an industry standard method for analysis of landscape visual change. The BLM also manages landscapes with similar characteristics to the project site. Visual contrast rating forms (BLM Form 8400-4) were completed for each KOP and are provided in Appendix D of the Visual Impact Assessment (HDR 2018; refer to **Appendix B-1**). The anticipated degree of viewer sensitivity (i.e., low, moderate, or strong) is disclosed for each KOP. Consistent with the BLM's VRM System, factors considered in determining degree of contrast include distance, view angle, view exposure, relative size or scale, and spatial relationships.

Glint and Glare Review

The FAA interim policy for Solar Energy System Projects on Federally Obligated Airports and Sandia National Laboratories Solar Glare Hazard Analysis Tool (SGHAT) were used to evaluate the potential for glint and glare associated with the proposed project. The FAA interim policy provides standards for measuring ocular impact of proposed solar energy systems on pilots and/or air traffic controllers, and they required the use of the SGHAT to demonstrate compliance with the interim policy standards. Refer to Attachment 4 of **Appendix H-3** for further details on the glare analysis study that was conducted for the project.



Michael Baker INTERNATIONAL

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Source:

DAGGETT SOLAR POWER FACILITY
ENVIRONMENTAL IMPACT REPORT

Topographical Viewshed Analysis

Exhibit 3.1-4

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Exhibit 3.1-5a KOP 1 (Existing View)

Eastbound on-ramp to I-15 at Yermo Road, facing south

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Exhibit 3.1-5b KOP 1 (Visual Simulation)

Eastbound on-ramp to I-15 at Yermo Road, facing south

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Exhibit 3.1-6a KOP 2 (Existing View)

Westbound on-ramp of I-40 at Hidden Springs Road, facing north

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Exhibit 3.1-6b KOP 2 (Visual Simulation)

Westbound on-ramp of I-40 at Hidden Springs Road, facing north

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Exhibit 3.1-7a KOP 3 (Existing View)

Route 66, facing north toward the BNSF railway berm

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Exhibit 3.1-7b KOP 3 (Visual Simulation)

Route 66, facing north toward the BNSF railway berm

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Exhibit 3.1-8a KOP 4 (Existing View)

Newberry Mountains Wilderness Area near Camp Rock Road, facing north

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Exhibit 3.1-8b KOP 4 (Visual Simulation)

Newberry Mountains Wilderness Area near Camp Rock Road, facing north

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Exhibit 3.1-9a KOP 5A (Existing View)

Valley Center Road at Condor Road, facing west-southwest

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Exhibit 3.1-9b KOP 5A (Visual Simulation)

Valley Center Road at Condor Road, facing west-southwest

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Exhibit 3.1-10a KOP 5B (Existing View)

Valley Center Road at Minneola Road, facing south

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Exhibit 3.1-10b KOP 5B (Visual Simulation)

Valley Center Road at Minneola Road, facing south

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Exhibit 3.1-11a KOP 6 (Existing View)

Route 66, east of the town of Daggett between A Street and Hidden Springs Road, facing east-northeast

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Exhibit 3.1-11b KOP 6 (Visual Simulation)

Route 66, east of the town of Daggett between A Street and Hidden Springs Road, facing east-northeast

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THRESHOLDS FOR DETERMINATION OF SIGNIFICANCE

A project would result in a significant aesthetic impact 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 the site and its surroundings.
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

PROJECT IMPACTS AND MITIGATION

SCENIC VISTA

Impact 3.1-1	**The project would not have an adverse effect on a scenic vista. No impact would occur.**

No designated scenic vistas are in the viewshed of the proposed project. Policy OS 5.1 of the General Plan Open Space Element states that a roadway, vista point, or area can be considered a scenic resource if it (a) provides a vista of undisturbed natural areas, (b) includes a unique or unusual feature that comprises an important or dominant portion of the viewshed, or (c) offers a distant vista that provides relief from less attractive views of nearby features, such as views of mountain backdrops from urban areas. The project site is not considered an undisturbed natural area and does not have unique or unusual features that dominate a portion of the viewshed. The project site includes existing and previously farmed land and is surrounded by rural residential land uses and transportation, industrial, and utility infrastructure. The project area is subject to agricultural use and contains existing industrial infrastructure; it is not a distant vista that provides relief from less attractive views of nearby features. The project area is not a scenic vista or visible from any designated scenic vista. No impact on scenic vistas would occur.

Mitigation Measures: None required.

Level of Significance: No impact.

SCENIC HIGHWAY

Impact 3.1-2	**The project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway. Impacts would be less than significant.**

Route 66 is eligible to be designated as a National Scenic Byway, and I-15 and I-40 in proximity to the project site are part of the state scenic highway system. I-15 is also a County-designated scenic route; however, the portion of I-15 with views of the project site is not designated as a scenic route by the County. The project site and surrounding landscape include existing and previous agricultural uses, an airport, various transportation and utility infrastructure, and scattered residences, most of which are located to the east of the project site. The project site is generally flat and contains no significant geologic feature or vegetation that is particularly unique for the area, nor does it contain vegetation that would be considered scenic. Development of the proposed facilities would not involve the removal of visually significant trees, rock outcroppings, and/or historic buildings, as these features do not occur on the project site.

The proposed project would convert active and fallow agricultural land that contributes to the scenic qualities of views from Route 66, I-40, and I-15. From I-15 (KOP 1, **Exhibit 3.1-5**), the solar arrays would be visible in the middleground view. The solar panels and related fencing would be barely discernable and would blend into the agricultural land use pattern at this distance and obstructed by existing residential structures to the east. The new gen-tie structures would be barely discernable at this distance and would blend in with the existing lattice structures already located in the existing transmission corridor. The project would result in a low visual change in the viewshed from I-15.

From I-40 (KOP 2, **Exhibit 3.1-6**), the solar arrays would be visible in the foreground (on the west) and middleground views, with the solar panels and related fencing becoming less discernable at a distance and blending into the agricultural land use pattern. Few encroachments exist that otherwise shield the project from view. The new gen-tie structures would be barely discernable in the far middleground and would blend in with the existing lattice structures in the existing transmission corridor farther north. The landscape conversion at the solar site would be less apparent due to the setback from the highway. The project would result in a moderately low change to views from I-40.

From Route 66 (KOP 3, **Exhibit 3.1-7**, and KOP 6, **Exhibit 3.1-11**), the solar arrays and fencing would be visible in the foreground and middleground, north of the railway. From KOP 3, the solar arrays and fencing would be visible in the immediate foreground and middleground. From KOP 6, the solar arrays would replace the view of an irrigated pasture, also in the immediate foreground and middleground. The new gen-tie structures and substation would be visible

behind the solar array from KOP 6 in the middleground and just west of Barstow-Daggett Airport. Solder Mountain would continue to be visible in the background. From KOP 3, the gen-tie structures would be barely discernable at this distance in the middleground and would blend in with the existing lattice structures in the existing transmission corridor farther north. The project would add to the existing visual encroachments in the viewshed, and the conversion of landscape at the solar site would be less apparent and set back from the highways.

Converted landscape and project facilities may be visible to motorists traveling on Route 66, I-15, and I-40; however, project features would be indistinct at distances greater than two miles. Views of the surrounding mountains and desert landscape from the highways would still be experienced due to the setback between the highways and the project facilities.

Given the low existing scenic quality of the area based on the numerous existing visual encroachments, and the low to moderately low degree of visual change resulting from the solar facility, the impact on scenic resources from a scenic highway would be less than significant.

Mitigation Measures: None required.

Level of Significance: Less than significant.

VISUAL CHARACTER

Impact 3.1-3	**The project would not substantially degrade the existing visual character or quality of the site and its surroundings. Impacts would be less than significant.**

The existing visual quality of the project site and surrounding lands is low to moderately low due to the presence of numerous anthropogenic elements in the landscape, including scattered rural residential properties, existing transportation infrastructure (i.e., I-15, I-40, Route 66, railroads), Barstow-Daggett Airport, the Coolwater Generating Station, and electrical infrastructure in the transmission corridor. Existing views and the analysis of visual change are described below for representative local roads surrounding the site, I-15, 1-40, and Route 66. The location and view direction of KOP photos are shown on **Exhibit 3.1-2, Site Photograph Location Map**.

FOREGROUND VIEWS OF THE PROJECT

Immediate Foreground Views from Local Roads Less Than 0.25 Miles Away

KOP 5B (**Exhibit 3.1-10a**) represents a view of the solar and energy storage facility from just north of the intersection of Valley Center Road and Minneola Road, which have a volume of approximately 64 to 708 and 387 to 909 average daily trips, respectively. The project site is in the immediate foreground, and the visual simulation represents the change in visual quality at a close viewing distance. KOP 5b represents views available to nearby residents and to motorists on the

local road network adjacent to the project site. The post-project simulated views from KOP 5B is depicted in **Exhibit 3.1-10b**. As shown, the solar arrays and fencing would be visible in the foreground, and views of the solar panels and fence would be partially obstructed by desert shrubs, trees, and existing fencing. The new gen-tie structures are not visible from the KOP 5B vantage point. The Newberry Mountains would continue to be visible in the background, similar to existing conditions. The level of visual change would be moderate; the fence would blend in with the form and line of the existing fence line in the area, and the tops of the solar panels would be the predominant visible project features. The solar panels would have a uniform color, texture, and form, which would contrast with the color and form of the desert vegetation and landscape. The existing scenic quality of the area is moderately low due to the existing visual encroachments, including fences and introduced trees. The moderate level of visual change on the landscape in an area with moderately low visual quality would result in a less than significant impact on visual quality.

Foreground Views from Route 66 Less Than 0.5 Miles Away

Foreground views of the project site from Route 66 are represented by KOP 6, which faces east-northeast and is situated just south of the project site. KOP 6 represents views of the project site available to nearby residents, just east of KOP 6, and to motorists traveling eastbound on Route 66.

The solar arrays and fencing would be visible in the foreground and middleground and would replace the view of an irrigated pasture, as shown in the simulation on **Exhibit 3.1-11b**. The new gen-tie structures and substation would be visible behind the solar array, in the middleground and just west of Barstow-Daggett Airport. Solder Mountain would continue to be visible in the background. The project would add to the existing visual encroachments in the viewshed; however, the landscape currently includes a number of visual encroachments, including power poles, the railroads, and buildings and infrastructure at Barstow-Daggett Airport. The project solar arrays would be vertically shallow and uniform in form, line, and color. The transmission poles and substation in the middleground view would not be visually prominent due to the existing infrastructure in the middleground view. The visual change would be moderately low. The moderately low visual change in scenic quality in a landscape with low visual quality would result in a less than significant impact on visual quality.

MIDDLEGROUND VIEWS OF THE PROJECT

Middleground views of the proposed project from I-40 and Route 66 are represented by KOPs 1, 2, and 3. Project facilities would be indistinct and not visually prominent in middleground views from I-15, I-40, and Route 66. Project components would appear low to the ground and less discernable in middleground views. The project facilities would become visually imperceptible at

the distance and viewing angle of KOP 1 (**Exhibit 3.1-5b**). Intervening topography and infrastructure, including berms along the railroads north and south of the project site, would provide some screening of the solar facilities.

The proposed project would appear as a series of flat, greyish horizontal forms from KOP 2 at I-40 (**Exhibit 3.1-6b**), and the mountains in the background (i.e., Calico Mountains) would remain visually prominent. The proposed project elements would be slightly noticeable in the middleground at KOP 2 due to the contrast in color with the surrounding desert and agricultural landscape; however, the, proposed project elements would result in a low level of visual change on views from I-40.

The solar arrays and fencing would be visible in the middleground behind the existing railroad when viewed from KOP 3 (**Exhibit 3.1-7b**). The project would add to the existing encroachments in the viewshed for KOP 3, including residential structures, power lines, and fencing. The new gen-tie structures would be barely discernable in the middleground and would blend in with the existing lattice structures in the existing transmission corridor farther north of KOP 3. The project would result in a low level of visual impact on the low existing scenic quality due to the viewing distance to the project and the numerous existing visual encroachments, including the railroad, berms, airport, and existing electrical generation and transmission infrastructure. The impact on visual quality from middleground views of the project would be less than significant.

BACKGROUND VIEWS OF THE PROJECT

The project would be visible in the background from recreational areas at the Newberry Mountains Wilderness Area. KOP 4 (**Exhibit 3.1-8b**) represents views of the project that would be afforded to recreational users at a distance of approximately 4 miles. Project facilities would be indistinct and barely discernable in background views. The solar arrays would blend in with the existing agricultural land uses. The gen-tie structures would be barely discernable at this distance and would blend in with the existing lattice structures already located in the existing transmission corridor. The project would result in a low level of visual change on the moderate existing scenic quality due to the viewing distance to the project and the numerous existing visual encroachments. The project features would barely be discernible from the Calico Ghost Town, which is in the general direction of KOP 1, but farther from the project. The impact on visual quality from background views of the project would be less than significant.

Mitigation Measures: None required.

Level of Significance: Less than significant.

LIGHT OR GLARE

Impact 3.1-4	**The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. Impacts would be less than significant.**

NIGHTTIME LIGHTING

Construction

Construction of the proposed project is anticipated to occur during daytime hours as permitted by the County of San Bernardino. However, if necessary and approved by the County, nighttime construction activities could occur, which may involve the use of temporary construction lighting equipment. The use of any bright construction lighting would only occur for a short duration if nighttime work was necessary and approved by the County. Any construction lighting would be directed away from adjacent residences and toward active construction areas. The impact would be less than significant.

Operation and Maintenance

Manual, timed, and motion sensor lights would be installed at equipment pads and substations for maintenance and security purposes. Such lighting would be shielded and aimed downward, and would comply with the County dark sky ordinance. No other lighting is proposed. Project lighting would normally be off unless activated by project personnel. The project would result in a change in the environment where Fort Irwin training exercises occur, primarily at the airport. However, the limited locations and amount of nighttime lighting proposed for the project, in addition to the motion sensors and shades directing the lights toward the ground will minimize the extent of light pollution from the site. Therefore, the project's use of nighttime security lighting would not result in a significant impact to Fort Irwin's nighttime training exercises.

Nighttime lighting associated with the proposed project would be subject to County approval and compliance with County requirements. As summarized in the Regulatory Framework subsection above, County Ordinance No. 3900 regulates glare, outdoor lighting, and night sky protection. County Development Code Section 83.07.040, Glare and Outdoor Lighting, regulates outdoor lighting practices geared toward minimizing light pollution, glare, and light trespass; conserving energy and resources while maintaining nighttime safety, visibility, utility, and productivity; and curtailing the degradation of the nighttime visual environment. Proposed lighting would be shielded and directed downward, and motion-activated lighting would normally be turned off unless needed for nighttime emergency work, consistent with County requirements. County lighting regulations require submittal of an approval of exterior lighting plans per General Plan Conservation Element Policy D/CO 3.1(b). Compliance with General Plan Conservation Element

Policy D/CO 3.2 would ensure that impacts associated with new sources of nighttime lighting for the proposed project would be less than significant.

GLINT AND GLARE

Solar PV Panels

The proposed project would use darkly colored matte PV solar panels featuring an anti-reflective coating. Photovoltaic solar panels are designed to be highly absorptive of light that strikes the panel surfaces, generating electricity rather than reflecting light. The solar panels are also designed to track the sun to maximize panel exposure to the sun, which would direct the majority of any reflected light back toward the sun in a skyward direction. PV panels have a lower index of refraction/reflectivity than common sources of glare in residential environments. The glare and reflectance levels from a given PV system are lower than the glare and reflectance levels of steel, snow, standard glass, plexiglass, and smooth water (Shields 2010). The glare and reflectance levels of panels are further reduced with the application of anti-reflective coatings. PV suppliers typically use stippled glass for panels as the "texturing" of the glass to allow more light energy to be channeled/transmitted through the glass while weakening the reflected light. With the application of anti-reflective coatings and use of modern glass technology, project PV panels would display overall low reflectivity.

The PV solar panels would be angled perpendicular to the general east–west direction of the sun and are designed to track the position of the sun throughout the day to maximize panel exposure if a tracking system is used. Alternatively, the panels could be installed on a fixed-tilt system and would face to the south. The greatest potential for light reflection to reach viewer locations would occur with a tracking system when the panels would be angled toward the horizon at sunrise and sunset. During these periods, the solar panels would be tilted approximately 10 degrees below a horizontal plane in the direction of the sun. Unabsorbed incoming light would reflect at approximately 20 degrees above the opposite horizon.

The solar power facility would be located in a broad flat valley. Potential viewers of the facility, including motorists on I-15, I-40, and Route 66, and residents, would be less than 20 degrees above the facility. Residents and motorists would not be exposed to the glare at sunrise or sunset due to the low viewing angle. Residents and motorists may perceive indirect glare as an increase in color contrast in the early morning hours when the darkly colored PV panels could appear as lightly colored or white (Sullivan and Abplanalp 2013). This indirect glare would be brief (a few minutes in the morning and evening hours) and would not cause a nuisance to residents or motorists.

A glint and glare study was prepared to identify whether the proposed project would significantly impact Barstow-Daggett Airport operations (see **Appendix H-3**). Specifically, this analysis

considered the impact on aircraft approaching Runways 08/26 and 04/22. The results of the study show that there is a "low potential for after image" associated with glare emanating from Array 6 of the proposed project. This glare may be seen by aircraft making approaches to Runway 22. This level of glare is deemed acceptable by FAA standards per the interim policy for Solar Energy System projects on Federally Obligated Airports. No glare was identified that would have an effect on Runway 08/26 from any of the project arrays. Therefore, there would be a less than significant impact on airport operations as a result of glint and glare from the proposed project.

The proposed project would also be designed to ensure consistency with San Bernardino County Code Section 84.29.040, which requires solar energy facilities to be designed to preclude daytime glare on any abutting residential land use zoning district, residential parcel, or public right-of-way. The solar PV panels would not create a substantial source of glare due to the use of anti-reflective coating on the panels and the elevation of potential receptors relative to the facility. The impact would be less than significant.

Metallic Electrical Equipment, Power Poles, and Buildings

Proposed project facilities, including the gen-tie line, battery storage facilities, and on-site substations, would be constructed with metallic components, which could introduce new sources of glare compared to the undeveloped area. Any glare associated with the proposed facilities would be minor and highly scattered because the metallic components would be separated geographically and would not concentrate potential glare in any area. The new overhead conductor and steel support structures installed for the on-site substation and gen-tie line and in the existing SCE substations would reflect approximately the same level of light as the existing transmission line facilities in the project area. The facilities would not involve concentrated light reflection that would become a nuisance or adversely affect daytime views. The impact would be less than significant.

Mitigation Measures: None required.

Level of Significance: Less than significant.

CUMULATIVE IMPACTS

Impact 3.3-5	**The project would not result in cumulative aesthetic impacts. Impacts would be less than significant.**

GEOGRAPHIC SCOPE

The geographic scope for the analysis of cumulative impacts on aesthetic resources includes both the local viewshed within a one-mile radius of the project site and area (generally the Daggett area). Local cumulative effects could occur in the immediate project viewshed if related projects,

activities, and landscapes are visible in the same field of view as the proposed project and could generally be visible from the proposed project area. Beyond 1 mile, structures become less distinct or not visible because they blend sufficiently with background forms, colors, and textures. Also, beyond 1 mile, it is likely that sight lines will become impaired or blocked by intervening terrain and vegetation. However, regional cumulative effects could still occur if viewers perceive that the general visual quality or landscape character of a regional area is diminished by the proliferation of visible similar structures or construction, even if the changes are not in the same field of view as existing or known future structures or facilities. The result is a perceived "industrialization" or "urbanization" of the existing landscape character. The extent of regional cumulative effects is limited to the project valley.

POTENTIAL CUMULATIVE IMPACTS

The Minneola Solar Project (#4) and Solar 33 Project (#9) are the only cumulative projects that are proposed within 1 mile of the project site. Minneola Solar is the closest and is proposed adjacent to the proposed project and just north of Route 66. The Solar 33 Project is located southwest of the proposed project, between I-40 and Route 66.

The Solar 66 Project (#10), and Silver Valley Solar Project (#13), and Eddie's World (#22) are located within 5 miles of the project site, but the Silver Valley Solar project is outside of the project viewshed. Due to the visual separation between the proposed project and the Silver Valley Solar Project north of I-15, the proposed project's aesthetic impacts would not be cumulative with the projects north of I-15 or solar projects in other valleys. Eddie's World, a proposed commercial development, would not contribute to cumulative aesthetic impacts with the proposed project because the visual elements of the commercial development would appear visually distinct and unrelated to the proposed project solar facility. The Solar 66 Project is within the project viewshed and could contribute to regional cumulative aesthetic impacts. The Solar 66 Project is considered in the cumulative impact analysis below.

Scenic Vistas

The proposed project and cumulative project are not located within a scenic vista or visible from any designated scenic vistas. No cumulative impact on scenic vistas would occur.

Scenic Highways

The proposed project is in proximity to I-40, I-15, and Route 66. The Minneola Solar Project, Solar 33 Project, and Solar 66 Project would be adjacent to Route 66 and within view of I-40 and I-15. Converted landscape and Minneola Solar, Solar 33, and Solar 66 Project facilities may be visible to motorists on Route 66, I-15, and I-40. However, given the low scenic quality of the area based on the numerous existing visual encroachments and the low to moderately low degree of visual

change expected from the Minneola Solar Project, Solar 33 Project, Solar 66 Project, and the proposed project, substantial cumulative damage to scenic resources within a state scenic highway is not anticipated. Cumulative impacts would be less than significant.

Visual Quality

Construction and operation of the Minneola Solar, Solar 33, and Solar 66 Projects would modify the local and regional landscape in the Daggett area. The Minneola Solar Project and Solar 33 Project would be visible from the proposed project area and in the immediate proposed project viewshed. The Minneola Solar Project may appear as an extension of the proposed project and would extend the area where solar facilities would be visible from nearby roads and highways. Similar to the proposed project, the Minneola Solar, Solar 33, and Solar 66 Projects would be expected to result in a moderate level of visual change on the landscape due to existing encroachments in the viewshed, including the adjacent airport, railroad, and electrical transmission infrastructure. Implementation of the cumulative project and proposed project in an area with moderately low visual quality would result in a less than significant cumulative impact on visual quality.

Light and Glare

San Bernardino County is known for its dark skies. All of the cumulative projects would be subject to the County's outdoor lighting ordinance, which would limit the amount of lighting that would be introduced in the area and restrict the type of lighting that could be used. The cumulative impact on the night sky would be less than significant due to conformance with the County's lighting ordinance.

The proposed project and cumulative projects would not introduce new sources of glare that would be directed cumulatively onto any area. No cumulative glare impacts would occur.

Mitigation Measures: None required.

Level of Significance: Less than significant.