APPLICANT'S SUPPLEMENTAL RESPONSE TO DATA REQUEST 16 AND 26: ADDITIONAL INFORMATION REGARDING VISUAL AND AESTHETIC RESOURCES

In this section of Applicant's Supplemental Response to CEC Staff Data Requests 16 and 26, Applicant describes the changes to the Visual and Aesthetics Resources section that will result from the changes to the Project Description relating to the removal of Unit 3. Per staff's request, Applicant uses a strike-out/underline format to identify changes to the Visual and Aesthetic Resources section of the Application for Certification that will result from the changes to the Project Description.

The Visual and Aesthetic Resource sub-sections that have been modified are listed in the table of contents below. If there has been no change to a Visual and Aesthetics sub-section relating to Applicant's Supplemental Response to Data Requests 16 and 26, the section is labeled "no changes" in the table of contents below.

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5.13 VISUAL RESOURCES

5.13.1 Introduction (see Section 2.2.1 for updated project description)

5.13.2 Laws, Ordinances, Regulations, and Standards

5.13.2.1 Federal

The National Environmental Policy Act

NEPA establishes a public, interdisciplinary framework for Federal agencies reviewing projects under their jurisdiction to consider environmental impacts. NEPA's basic policy is to assure that all branches of government give proper consideration to the environment prior to undertaking any major federal action that significantly affects the environment.

The BLM, as lead Federal agency for the Project, is responsible for preparation of an Environmental Impact Statement (EIS) in compliance with NEPA to evaluate the environmental impacts of the portions of the Rio Mesa SEGF on federal lands. ~~The Rio Mesa Solar III plant and~~Portions of the Project gen-tie line, upgraded Bradshaw Trail access road, and 33kV construction/emergency backup power supply line are located on public lands administered and managed by the BLM. NEPA compliance is required for ~~these~~ this portion~~s~~ of the Project through preparation of a Draft and Final EIS. The Applicant anticipates that BLM may consider RMS 1 and 2 as a connected action under NEPA. BLM is also responsible for Native American consultation, including government to government consultation regarding project facilities located on BLM land.

The Project will comply with NEPA visual resource guidelines through the preparation of an Interim Visual Resource Management System (VRM). The Interim VRM will rate the scenic quality of the existing environment within one mile of the project boundary. The Interim VRM provides an objective tool for assessing the visual impact of the portions of the Project which are on public land ~~on the existing visual character~~. Further information regarding the Interim VRM is provided in Section 5.13.3.

The Federal Land Policy and Management Act and California Desert Conservation Area Plan

In addition to NEPA, FLPMA also applies to the Project. FLPMA establishes procedures for the administration, management, protection, development, and enhancement of public lands that the BLM manages. §102(a)(8) of the act directs BLM to manage public lands in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values. In accordance with this provision, the BLM developed the CDCA Plan. This plan acts as the BLM's land use guide for the management of public lands and resources within the designated boundaries of the CDCA. Land within the CDCA is categorized into Multiple Use Classes (MUCs) which define the nature and intensity of activities/uses that are permitted in each use classification.

~~The~~ The portions of the gen-tie line, 33 kV construction/emergency backup power supply line~~service line~~, and upgraded Bradshaw Trail access road corridor situated on public lands are within ~~Project is situated~~

~~within lands defined as~~ MUC – Limited (L) and MUC – Moderate (M) (CDCA Plan Map 1, 1999; BLM 1999). Lands designated as MUC-L are managed to allow for generally lower-intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished. However, BLM may allow the use of MUC-L lands for solar electrical generation facilities provided that NEPA requirements are met. Lands designated as MUC-M allow for a wide variety of present and future uses, such as mining, livestock grazing, recreation, energy, and utility development. MUC-M is also designed to conserve desert resources and to mitigate damage to those resources that permitted uses may cause (for more information regarding the MUCs, see Section 5.6.2.1 Land Use). A summary of Project conformity with the MUCs within the project area is defined in Table 5.13-2.

Table 5.13-2
Conformity with BLM Multiple-Use Classes (MUC) (no changes)

Bureau of Land Management Visual Resource Management System (no changes)

1991 Intermodal Surface Transportation Act (no changes)

Federal Aviation Administration (no changes)

5.13.2.2 State (no changes)

5.13.2.3 Local

The following subsection summarizes the local LORS pertaining to the Project.

County of Riverside General Plan and Palo Verde Area Plan

The Project is located in unincorporated Riverside County and is subject to the provisions of the Riverside County General Plan, which was prepared in 2003 and updated in 2008. The General Plan includes Area Plans, which are tailored to fit the individual vision and needs of communities within Riverside County. The Project is located within the Palo Verde Valley Area Plan study area. According to the Riverside County Code, the property is zoned as Controlled Development and Natural Assets (Ordinance 348; Table 2.4-1 of the Riverside County Code) which sets dimensional lot standards such as height and setback requirements which in turn will impact the visual appearance of development within this zone. Applicable policies relating to visual and aesthetic resources within Riverside County are summarized in Table 5.13-3.

Table 5.13-3
Conformity with Riverside County General Plan and Palo Verde Area Plan

Provision	Conformity
Riverside County General Plan	
Land Use Element Policy LU 6.2. Direct public, educational, religious, and utility uses established to serve the surrounding community toward those areas designated for Community Development and Rural Community uses on the applicable Area Plan land use maps. These uses may be found consistent with any of the Community Development, Rural Community, or Rural foundation designations, including the Rural Village Overlay, as well as the Open Space – Rural and Agriculture designations, under the following conditions: (AI 1, 3). a. The facility is compatible in scale and design with surrounding land uses, and does not generate excessive noise, traffic, light, fumes, or odors that might have a negative impact on adjacent neighborhoods. b. The location of the proposed use will not jeopardize public health, safety, and welfare, or the facility is necessary to ensure the continual public safety and welfare.	Yes. With Mitigation. The Palo Verde Area Plan, Land Use Plan Element designates portions of the project site as Open Space Rural and Agriculture. While the Rio Mesa SEGF is not technically a utility use as defined by the California Public Utilities Commission (CPUC), it will provide wholesale electric power to customers within area power grid. Due to the similarity of the Rio Mesa SEGF to utility type uses, and according to Land Use Policy 6.2, such uses may be found consistent with Open Space (Rural and Agriculture) designations provided certain conditions are met. The Project will be larger in scale than the existing surrounding development. The Project will also add a new source of light as a result of the glow emitted from the solar boilers; however these impacts are not expected to be significant. See Section 5.13.4.3.10 for further discussion of this topic.
Land Use Element Policy LU 6.4. Retain and enhance the integrity of existing residential employment, agricultural, and open space areas by protecting them from encroachment of land uses that would result in impacts from noise, noxious fumes, glare, shadowing, and traffic.	Yes. The Project will be constructed near agriculture and residential uses, however, impacts associated with glare and shadowing are expected to be less than significant. See Section 5.13.4.4 for further discussion on this topic.
Land Use Element LU 8.1. Provide for permanent preservation of open space lands that contain important natural resources, hazards, water features, watercourses, and scenic and recreational values.	Yes. No areas within the Project boundary or surrounding area that are designated important scenic resources according to the General Plan. However, recreational opportunities do exist within the vicinity. See Section 5.6.3.3 for additional information on this topic.
Land Use Element Policy LU 13.1. Preserve and protect outstanding scenic vistas and visual features for the enjoyment of the traveling public.	Yes. No areas within the Project boundary or surrounding area are designated as outstanding scenic vistas which will require preservation and protection.
Land Use Element Policy 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 nearest visible element of the Project (solar power tower) is located ~~nearly 8~~approximately 10 miles south of Interstate 10 (I-10) which is eligible for designation as a State and County Scenic Highway. The opportunity for viewing the Project from I-10 is very limited. Nevertheless, the Applicant will coordinate with Riverside County staff to ensure Project structures, equipment, and grading are compatible with the surrounding scenic setting and environment to the extent practicable.

Table 5.13-3
Conformity with Riverside County General Plan and Palo Verde Area Plan

Provision	Conformity
Land Use Element Policy LU 13.4. Maintain at least a 50-foot setback from the edge of the right-of-way for new development adjacent to Designated and Eligible State and County Scenic Highways.	Yes. The 220 kilovolt (kV) generation tie line (gen-tie line), (the Project feature located closest to I-10) will be more than two miles south of the I-10 right-of-way (ROW) and will be obscured by two existing transmission lines, which are adjacent to and north of the planned gen-tie line.
Land Use Element Policy LU 13.5. Require new or relocated electric or telecommunication distribution lines, which would be visible from Designated and Eligible State and County Scenic Highways, to be placed underground.	Yes with explanation. The Project does have an electric transmission line which will be located above ground. However, this line will be in the existing transmission line corridor (designated and dedicated for future transmission) and will be obscured from view from I-10 by two existing transmission lines.
Land Use Element Policy LU 13.8. Avoid the blocking of public views by solid walls.	Yes. The Project does not include any solid walls which will block existing public views.
Land Use Element Policy LU 24.8. Require that industrial development be designed to consider the surroundings and visually enhance, not degrade, the character of the surrounding area.	Yes. Wherever possible, Project features will be designed to be visually compatible with the desert environment. Structures will be constructed of or painted mute colors (i.e., desert compatible colors, such as greys, browns, tans, or beige) where practicable. For a list of mitigation measures that ensure the Project complies with this standard see Section 5.13.6.
Open Space Element OS 11.3. Permit and encourage the use of passive solar devices and other state-of-the-art energy resources.	Yes. The Project will utilize BrightSource Energy's state-of-the-art solar power tower technology.
Open Space Element OS 21.1. Identify and conserve the skylines, view corridors, and outstanding scenic vistas within Riverside County.	Yes. Though the Project will add a noteworthy man-made/synthetic feature to the existing visual environment, existing views of the Palo Verde and Mule Mountains will be largely maintained. Furthermore, no outstanding scenic vistas have been identified within the project area.
Circulation Element C 19.1. Preserve scenic routes that have exceptional or unique visual features in accordance with California Department of Transportation (Caltrans)' Scenic Highways Plan.	Yes: The Project may have views from County eligible scenic highways 95 and Interstate 10. However, the closest visible feature from I-10 is ~~nearly 8~~ approximately 10 miles to the south, and the closest visible feature from US-95 is more than ~~14~~17 miles to the southwest. For more information regarding this subject refer to Section 5.6.2.3.
Palo Verde Area Plan	
Palo Verde Area Plan 10.1 Protect the scenic highways in the Palo Verde Valley planning area from change that would diminish the aesthetic value of adjacent properties in accordance with the Scenic Corridors sections of the General Plan Land Use, Multipurpose Open Space, and Circulation Elements.	Yes: The Project may have views from County eligible scenic highways 95 and Interstate 10. However, the closest visible feature from I-10 is ~~nearly 8~~approximately 10 miles to the south, and the closest visible feature from US-95 is more than ~~14~~ 17 miles to the southwest. For more information regarding this subject refer to Section 5.6.2.3.

Table 5.13-3
Conformity with Riverside County General Plan and Palo Verde Area Plan

Provision	Conformity
Palo Verde Area Plan10.2 Encourage the designation of Interstate 10 and US Highway 95 as eligible and subsequently Official Scenic Highways in accordance with the Caltrans Scenic Highway Program.	Yes: The Project may have views from County eligible scenic highways 95 and Interstate 10. However, the closest visible feature from I-10 is ~~nearly 8~~ approximately 10 miles to the south, and the closest visible feature from US-95 is more than 17~~14~~ miles to the southwest. For more information regarding this subject refer to Section 5.6.2.3.

Applicant = Rio Mesa I, LLC~~,~~ and Rio Mesa II, LLC. ~~And Rio Mesa III, LLC~~, collectively
Caltrans = California Department of Transportation
I-10 = Interstate 10
ROW = right-of-way
kV = kilovolt

5.13.3 Affected Environment

This section discusses the visual environment of the project site and surrounding environment. The following analysis focuses on the existing visual character and scenic resources within the project area, the boundaries of which are defined by the VSOI (see Figure 5.13-1a (rev) and Figure 5.13-1b (rev)). Figure 5.13-1a (rev) depicts the areas from which the solar power towers and gen-tie line are visible. Figure 5.13-1b (rev) depicts the smaller area from which the heliostat field is visible. The VSOI forms a radial boundary extending 10 miles from the Project (this includes the gen-tie line).

5.13.3.1 Regional Setting

The project site is located on the Palo Verde Mesa within the Colorado Desert region of the Desert Southwest. The site itself is characterized by gently rolling open terrain and is dominated by desert scrub vegetation and occasional ephemeral washes. The project site is currently undeveloped with the exception of several off highway vehicle (OHV) trails, two 161 kV transmission lines that traverse the eastern and northern boundary of the project site, and the TransCanada gas line that traverses the eastern boundary of the project site.

The Palo Verde Valley borders the eastern limits of the Palo Verde Mesa and project site. This area is predominantly used for agriculture and crop production. This agricultural influence creates a somewhat unique landscape for a desert region. While principally open space, it is characterized by cultivated crops and other anthropogenic influences. In addition to the agricultural areas, the Palo Verde Valley also contains the Cibola National Wildlife Refuge (NWR), the Colorado River, and the communities of Palo Verde, Ripley, and Blythe. The Palo Verde Mountain Wilderness is 3.75 miles south of the Project. These mountains are distinguished by their jagged peaks and rocky outcrops which provide contrast to the comparatively flat Palo Verde Mesa and Valley. To the west and north of the project site lie the Mule Mountains. These mountains contain a BLM-designated Area of Critical Environmental Concern (ACEC), known as the Mule Mountain ACEC. This ACEC is situated approximately 2 miles north and ~~0.7 mile west of the project site, and~~ 0.6 miles southwest of the gen~~t~~-tie line corridor. Bradshaw Trail, a

designated Back Country Byway, terminates near the eastern boundary of the project site and traverses westward through the Mule Mountains to its origin near the Salton Sea. Evidence of an historic mining operation is visible on portions of the mountain facade.

As noted, nearby population centers include Palo Verde, Ripley and Blythe. Palo Verde, the smallest of these three communities, is located approximately two miles southeast of the Project in Imperial County, California. According to the 2010 Census, Palo Verde has a recorded population of 171 residents. Ripley, the second largest of these three communities, is located roughly seven miles east of the project site. According to the 2010 Census, Ripley has a recorded population of 692 residents. The community of Blythe, which is the largest of the three area communities, is located more than 12 miles northeast of the project site. According to the 2010 Census, Blythe has a recorded population of 20,817 residents. In addition to these communities, the Colorado River, Cibola NWR, and Mule Mountain Long-Term Visitor Area (LTVA) are some of the key features that attract travelers, recreationists, and visitors to the area. BLM lands within the VSOI also contain Off Route Trails, which draw Off Highway Vehicle (OHV) users to the area. A discussion of viewer sensitivity and an analysis of impacts to views from the locations listed above are discussed in Section 5.13.3.8.

5.13.3.2 Project Description Summary

The dimensions of major structures associated with the Project, including those within the power blocks and common area, are listed in Table 5.13-4.

Table 5.13-4
Approximate Dimensions of Project Structures

Structure	Floor Area (square feet)	Approximate Size (feet)		
		Length	Width	Height
~~Rio Mesa I, and II,~~RMS 1 and 2 ~~and III~~ Major Structures				
Air Cooled Condenser	65,100	310	210	~~150~~120
~~Mirror Wash Parking Shed~~	~~15,000~~	~~300~~	~~50~~	~~20~~
Plant Services Building	~~8,000~~3,588	~~122~~92	~~38~~39	~~15~~20
Plant Electrical Building	4,884	132	37	30
Water Treatment Building	~~12,750~~5,700	~~150~~100	~~85~~57	~~30~~15
~~Rio Mesa I, and II,~~RMS 1 and 2 ~~and III~~ Solar Receiver Steam Generator (SRSG) Tower				
Solar Receiver Tower	~~7,238~~4,072	~~96~~ 72 (diameter)		~~573~~640
SRSG	n/a	102 (diameter)		~~177~~110
Total Tower Height with SRSG				approx. 750 (760 including lightning rod)
~~Rio Mesa I, and II,~~RMS 1 and 2 ~~and III~~ Major Equipment				
~~Auxiliary Boilers (3)~~	~~7,200~~	~~80~~	~~90~~	~~25~~

Table 5.13-4
Approximate Dimensions of Project Structures

Structure	Floor Area (square feet)	Approximate Size (feet)		
		Length	Width	Height
~~Stack~~	~~n/a~~	~~8.3 (diameter)~~		~~135~~
Start-up/Auxiliary Boiler	~~4760~~5,304	68	~~70~~78	~~18~~38
Stack	n/a	5.5 '(diameter)		135
Night Preservation Boiler	375	25	15	14
Stack	n/a	1.5 (diameter)		30
Generator Step-up Transformer	2,320	40	58	25 high concrete wall (one side)
Unit Auxiliary Transformer	500	25	20	14 high concrete wall (one side)
Steam Turbine Generator	4,370	110	43	45
Fin Fan Dry Coolers	4,800	80	60	13.5
Wet Surface Air Cooler (WSAC)	1,680	35	48	11
Emergency Diesel Generator	~~184~~795	~~23~~53	~~8~~15	~~10~~13 Stack 31agl
MCC Transformers	96	12	8	8
BCP UPS Transformers	54	9	6	7
Electric Equipment Modules				
ISAC/Fin Fan Water Treatment Module	~~672~~800	~~14~~40	~~48~~20	~~16~~20
~~Solar~~ SRSG Tower Module	~~1,440~~364	~~24~~28	~~60~~13	~~16~~20
Fuel Gas/Auxiliary Boiler Module	~~1,440~~672	~~24~~48	~~60~~14	~~16~~20
Air Cooled Condenser Module	~~2,204~~1,640	~~29~~82	~~76~~20	~~16~~24
Feedwater Pump Module	678	48	14	20
Fire Pumps ~~Modul~~Module	629	37	17	12
~~Fuel Gas~~SRSG Base Module	~~336~~1,078	~~14~~77	~~24~~14	~~16~~20
Rio Mesa Tanks				
Demineralized Water Tank	~~415~~707	~~23~~30 (diameter)		~~16~~32
Treated Water Storage Tank	~~855~~881	~~33~~33.5 (diameter)		32
Waste Water Collection Tank	415	23 (diameter)		~~16~~24
Service/Fire Water Tank	~~882~~1,288	~~33.5~~40.5 (diameter)		32
Mirror Wash Water Storage Tank	415	23 (diameter)		16
~~Potable Water Storage Tank~~Wastewater Residue Tank	~~28~~78	~~6~~10 (diameter)		~~9~~12

Table 5.13-4
Approximate Dimensions of Project Structures

Structure	Floor Area (square feet)	Approximate Size (feet)		
		Length	Width	Height
Rio Mesa Common Area Major Structures				
Administration/Control Building~~/~~ Warehouse Building	~~25,480~~12,907 9,605	~~304~~74155.5 130	~~852~~883 74	~~14~~ 15 - Admin 22 - Warehouse
Heliostat Assembly Building	57,600	480	120	30
Pad Bonding Building (2)	11,200	140	80	30
Water Treatment Building	29,900	230	130	25.5
Mirror Wash Machine Maintenance Shed	~~8,000~~3,575	~~100~~70~~65~~	~~806~~55~~5~~	~~24~~35
Switchyard Control House	~~1,980~~1,170	~~55~~45	~~36~~26	~~12~~14
Equipment				
Emergency Diesel Generator	~~52~~282	~~13~~23.5	~~4~~12	~~7~~10
MCC Transformers	96	12	8	8
Tanks				
Potable Water Storage Tank	28	6 (diameter)		9
Treated Water Storage Tank	1,256	40 (diameter)		32
Wastewater Collection Tank	855	33 (diameter)		24
Fire Water Storage Tank	855	33 (diameter)		~~24~~32

SRSG = Solar Receiver Steam Generator

5.13.3.3 Existing Site Conditions and Proposed Project Features

Overview

The proposed Project will include ~~three~~ two solar concentrating thermal power plants and a shared common area. Each of the ~~three~~ two solar plants will require roughly 1,850 acres (or 2.9 square miles)~~-~~of land to operate. The total area for ~~all three~~the two plants, ~~ex~~including the shared facilities, is approximately ~~5,750~~3,805 acres. The project site is currently undeveloped desert, with the exception of OHV trails, two transmission lines, a natural gas line alignment, and groundwater monitoring wells. No other anthropogenic features or structures exist within the Project boundaries. Currently, the site is comprised primarily of creosote desert scrub, with areas of desert wash scrub in the on-site washes. The following paragraphs describe each of the major project features which together make up the Rio Mesa SEGF. The existing landscape that will be affected by each of the project features described below does not vary from the description provided above. A detailed assessment of the direct, indirect, and cumulative impacts associated with construction, operation, and maintenance of the Project is provided in Section 5.13.4.2.

Power Blocks

Each of the ~~three~~ solar concentration thermal power plants will utilize a solar power boiler, located on top of a dedicated concrete solar power tower, and a solar field based on heliostat mirror technology. The heliostat (mirror) fields will focus solar energy on the solar power boiler or SRSG. Each solar power tower is to be a cylindrical concrete tower with the SRSG located atop the concrete structure. The overall tower and SRSG height will be 750 feet. Each solar power tower will have a 10 foot lightening rod atop the towers, for a combined height of 760 feet (231.6 meters). The height of the tower allows for denser array of heliostats which is more efficient on a megawatt per acre basis. Supporting buildings surrounding the solar power towers and within each power block will include a mirror wash truck parking shed, plant services building, water treatment building, deaerator/feedwater heater, and an air cooled condenser. The air-cooled steam condenser system is the main steam-cycle heat rejection system. The air cooled steam condenser will receive exhaust steam from the low-pressure section of the steam turbine and from the boiler feed pump turbine to drive and condense it back to water for reuse. The air cooled condensers will be among the tallest structures at each power block (aside from the solar power towers) as shown in Table 5.13-4 above. All structures within each power block will be painted in muted tones (i.e., gray, brown, or tan) to blend with the surrounding desert landscape (as applicable).

Heliostats

Each of the ~~three~~ plants ~~located on site~~ will also consist of one heliostat array (or mirror field). Each array will contain approximately 85,000 heliostats, for a combined total of ~~255,000~~170,000 heliostats across ~~all three~~the two plants. The heliostat arrays focus solar energy on the solar power towers (which are located near the center of each of the heliostat arrays). For each plant the solar energy heats water in the SRSG located atop the solar power tower, producing steam that runs the steam turbine generator. No intermediary fluid is used in this process. Each heliostat will have two mirrors. Each mirror is 8.5 feet wide by 12 feet high, resulting in a total reflecting surface of 102.41 square feet per mirror, and 205 square feet per heliostat. The heliostat installation allows for a 1.5 foot clearance from the ground when it is in a vertical position.

Common Area

~~The 120~~ A 19.5-acre common area will be established on the northeast~~ern~~ ~~border of the site to~~ portion of the Unit 1 solar field west of the WAPA transmission line. The Common Area will accommodate an administration/control room, warehouse, and maintenance complex; an onsite substation; asphalt-paved visitor and employee parking area; potentially a tire cleaning station, and landscape areas.~~two 2-acre evaporation ponds; and landscape areas.~~ Each of these structures will be painted in muted tones to blend with the desert landscape. The administration complex will occupy approximately 6 acres and will be served by power from the local 33 kV distribution system and water from water supply wells located in the common area. ~~The common area will also be used for temporary construction parking areas, construction trailers, a tire cleaning station, and other construction support facilities. Each of these structures will be painted in muted tones to blend with the desert landscape.~~

The Rio Mesa SEGF is described in greater detail in Section 2 of the AFC. Additionally, Figures 1.3-1-thru- 1.3-4 (rev), included in the Executive Summary, provide an oblique aerial view of the site, aerial

views of the plant, and close-up views of the common area structures. For a detailed analysis of the potential impacts to the existing site visual conditions for each of the project features including the: power block, heliostat arrays, common area, and gen-tie line, see Section 5.13.4.2.

Lighting (no changes)

Gen-Tie Line

~~Rio Mesa I, and II,~~RMS 1 and 2~~ and III~~ will be interconnected to the SCE grid via the approximately 9.7 mile gen-tie line, which will link the Project facilities to the approved CRS. This area is mainly comprised of desert scrub habitat.

Cooling and Water Vapor Plumes (no changes)

~~Construction Laydown Areas~~Construction Logistics Area

Construction laydown areas for the power block and common areas will be located adjacent the power block sites, and within ~~the common area or the power block areas~~a 103-acre Construction Logistics Area (CLA~~).~~) that will be established on the eastern border of the site east of the WAPA and TransCanada transmission lines to accommodate construction logistics needs. ~~- The construction laydown area for the gen-tie line will be located within the 1,000 foot wide buffer area that was surveyed for the transmission line alignment.~~ No construction laydown areas will occur outside the Project boundaries. This area is mainly comprised of desert scrub habitat.

5.13.3.4 Landscape Character of the Area

Figure 5.13-2a (rev) and 5.13-2b (~~-~~rev) shows the footprints of the ~~Rio Mesa 1 I, II, and III~~ RMS 1and 2 plants and the locations where landscape character (LC) and key observation point (KOP) photographs were taken during the field reconnaissance activities conducted for this analysis. Figure 5.13-2a (rev) depicts the areas from which the solar power towers and gen-tie line are visible. Figure 5.13-2b (rev) depicts the smaller area from which the heliostat field is visible. This figure also shows the direction in which each photo was taken (See Section 5.13.8 for overview of how Sensitive Viewing Areas and KOPs were chosen). Figure 5.13-3 (rev) displays population data for the region, as defined by census block groups within the VSOI, and portions of the surrounding areas. This figure also illustrates the average daily traffic counts for State Route 78. Figures 5.13-1a through 5.13-1b (rev) provide~~s~~ a visual analysis of the Project and show~~s~~ the areas from which the Project will likely be visible. Figures 5.13-4 through 5.13-7 are landscape character photos which are intended to assist the reader with understanding the existing visual environment of the project area. Descriptions of each of the landscape character photos are provided below.

Figure 5.13-4: Photo Location LC-1: View looking south from State Route 78 at its intersection with I-10. This view shows typical agricultural land in the foreground and the project area in the background. The existing transmission lines provide one of the few vertical features in an otherwise horizontal trending landscape. The Palo Verde Mountains provide a backdrop to the project site and are a prominent and visually interesting feature on the horizon. This shot was also chosen as a KOP due to the relatively

high volume of traffic which was observed at this off/on ramp to I-10. From this location, ~~all three~~the two solar power towers and potentially portions of the heliostat arrays will be visible (See Section 5.13.4.3 for greater detail).

Figure 5.13-~~5~~7: Photo Location LC-2: View looking south southeast from the base of the Mule Mountains. This view is indicative of the flat and sparsely/patchy vegetated nature of the Palo Verde Mesa. ~~Rio Mesa Plants I, II, and III~~ RMS 1 and 2 will be visible from this elevated perspective, though this location is not highly visited.

Figure 5.13-6: Photo Location LC-3: View looking southwest from Wiley's Well Campground, which is part of the BLM's Mule Mountain LTVA. Bradshaw Trail is located just south of this campground, and this photo also represents views from the trail. This photo portrays the typical desert landscape which characterizes the area. It is also representative of the appearance of BLM-managed campgrounds in the Desert Region. This photo shows that Rio Mesa ~~I, II, and III~~ 1 and 2 will be not be visible from the campground or Bradshaw Trail due to obstructions created by the Mule Mountains.

Figure 5.13-~~7~~5: Photo Location LC-4: View looking north-northwest from Palo Verde Park with State Route 78 in the foreground. Photo location provides an expansive view of the Palo Verde Valley and Mule Mountains as a backdrop. While the distance of this area from the Project will blur certain structures within the power block and common area, the solar power towers will be visible on the upper horizon line.

5.13.3.5 Potential Project Site Visibility

As described above, the VSOI for the Project (Figure 5.13-1a (rev) and Figure 5.13b (rev) depicts the area within which the solar power towers and gen-tie line, as well as the heliostats, could be seen. Figure 5.13-1a (rev) is a viewshed analysis which was run according to the heights of the solar power towers (approximately 750 feet) and the gen-tie line (85-120 feet). The viewshed analysis for Figure 5.13-1b (rev) was run according to the heights of the heliostats only (12 feet), and does not include an analysis of the solar power towers or gen tie line. The VSOI is used to define areas where potentially significant impacts could occur as a result of the Project as a whole. The furthest distance at which potentially significant visual effects could occur was identified as 10 miles. This distance was based primarily on the description of the potential visibility of major Project components (e.g., solar power towers, gen-tie line) as seen from sensitive viewing areas. Section 3.0 contains a general layout of Project components and site elevations. Typically, viewshed boundaries are drawn no more than 3 miles from the edge of a project. However, due to the height of the solar power towers in relation to the existing environment, it was determined that a 10-mile boundary should be used to capture a comprehensive range of views. Additionally, the flat and horizontal nature of the existing landscape suggested that the solar power towers would be visually conspicuous in relation to existing development in the Palo Verde Valley. While the heliostats and common area structures will not be visually prominent, the solar power towers will be visibly prominent features. As one moves farther from the solar power towers, however, these features will become increasingly blurred and or screened as a result of vegetation, structures, or changes in topographical elevation in the immediate foreground. Below ground components of the Project, specifically the natural gas line and water pipelines, were not considered relevant to the viewshed analysis as they will not be visible.

Furthermore, the distance selected for the analysis was based on the guidelines established in the United States Forest Service (USFS) publication titled *Visual Management System* (USFS 1974, 1995). Based on USFS distance definitions, the Project was reviewed for sensitive resources within the view ranges noted below.

- **Foreground:** 0 to 0.5 mile from the observer's position. At this distance, the observer can view details of trees, shrubs, wildflowers, and animals.
- **Middleground:** 0.5 to 5 miles from the observer's position. At this distance, the observer can see forest stands, natural openings, masses of shrubs, and rock outcrops.
- **Background:** 5 miles to horizon from the observer's position. At this distance, the observer can view mountain peaks, ridgelines, and patterns of forest stands and openings.

Figure 5.13-1a (rev) suggests that the solar power towers and gen-tie line will be the most visible elements associated with the Project. Figure 5.13-1b (rev) suggests that the heliostats will not be as visually conspicuous as the power towers and gen-tie line. Together, both Figures 5.13-1a and 5.13-1b (rev) suggest that the Project as a whole will be most visible from the northeast, east and southeast boundaries of the Project, which are also where the communities of Blythe, Ripley, and Palo Verde are located. Other notable features in these directions include I-10, State Route 78, the Colorado River, and Cibola NWR. While noticeable from these directions, direct views of the Project will be occasionally screened by natural and/or man-made features. Visual impediments could include vegetation, natural variations in topography, elevated irrigation canals, and structures such as single-family homes or agriculture-related buildings. Occupants of residences on the north and west sides of Palo Verde will have the greatest opportunity for direct views of the solar power towers, common area features, heliostat arrays and gen-tie line. Occupants of residences located on the south and west outskirts of Ripley will have the closest views of these same project features due to their proximity to the Project boundary. Viewers from portions of Blythe, located south of I-10, will have the potential for views of the solar power towers; however; at a distance of ~~over 12~~approximately 10 miles, the towers will appear blurred and relatively small on the horizon line. With respect to views of the solar power towers, common area, heliostat arrays, and gen-tie line as seen from I-10, motorists traveling westbound will have the greatest and most extended view of each of these features. Motorists traveling eastbound will have somewhat obscured views of the Project as a result of the Mule Mountains which obstruct direct views. Views from the Colorado River and Cibola National Wildlife Refuge are also likely to be generally obstructed due their lower elevation and the fact that these areas are more densely vegetated.

The following subsections detail the visual study inventory components used in the assessment of potential effects. The three primary components inventoried were: (1) an evaluation of Scenic Quality; (2) consideration of Interim VRM Class; and (3) the identification of sensitive viewing areas.

5.13.3.6 Scenic Quality (no changes)

5.13.3.7 VRM Management Classes (no changes)

5.13.3.8 Viewer Sensitivity and Sensitive Viewing Areas (no changes)

Viewer Sensitivity (no changes)

Visibility (no changes)

5.13.3.9 Key Observation Points

KOPs are viewing locations chosen to be representative of the most critical viewpoints from which the Project will be viewed (see Figures 5.13-14 thru 5.13-19 (rev)). The inventory of KOPs included three components: 1) identification and photo-documentation of viewing areas and potential KOPs; 2) classification of visual sensitivity of KOPs; and 3) description of Project visibility from KOPs. KOPs were identified based on a review of available land use data, a field inspection, and discussions with CEC staff responsible for the evaluation of visual resources.

Six KOPs were identified as representative of viewers who will live, work or travel through the viewshed. Photos were taken from each of these viewing areas (KOPs). A summary of the viewshed, as described from each KOP, follows below. Scenic Attractiveness Evaluation Forms (Figures 5.13-8 thru 5.13-13 (rev)) were developed for each KOP within the VSOI. The values underlined in the Scenic Quality rating box on the forms illustrate the assigned values (H - high, H/M - high/medium, M - medium, M/L - medium/low, and L - low) for each natural feature (e.g., landform, vegetation, water) or negative/positive cultural modification.

KOP 1

This image was taken from the nearest residence to the Project[1]. This residence is located approximately 1.32 miles east southeast of the southeast corner of the Project boundary. This image offers the most proximate view of the project. As shown in the photo, direct views of the majority of Project related features (heliostats, common area, and power block structures) are obscured due to hillside topography in the mid-ground area of viewshed. Cultivated crops are visible in the immediate foreground, with the Mule Mountains just slightly visible above the mesa ridgeline in the mid-ground of the photo. From this viewpoint, the Project will be located in the mid- to background areas of the viewshed (Figure 5.13-14a thru 5.13-14b (rev)).

A Scenic Attractiveness Evaluation Form was completed for this KOP which rated the existing visual character of the viewshed. This form is used to scale and rate the scenic quality of the environment based on the following environmental categories: form, line, color and texture. Based on these fundamental

[1] The buildings at this site are not currently inhabited. The Applicant assumes for the purpose of this analysis, that there could be a habitable dwelling at this location.

categories, the landform/water, vegetation, and structures were evaluated and scored. Numbers quantifying the scenic value of each of these features were then assigned. Based on this evaluation, the scenic attractiveness of this KOP was rated "C."

A sensitivity-level rating was also assigned to this KOP. As described above, sensitivity-level ratings are based on factors including the type of user, the amount of use, the public interest in preserving the viewshed and adjacent land uses. This KOP was assigned a sensitivity-level rating of "moderate" based on the number of receptors present at this site combined with the principal use of the site. Residents are assumed to have long-term exposures to their surroundings, which in turn elevates the assigned sensitivity level. In this case, however, the buildings are not currently inhabited, and the principal use of the property is agriculture based. Therefore viewers from this location are assumed to be primarily engaged agricultural management related tasks. Consequently, it is assumed viewers from this location would be less concerned with the aesthetic appeal of the environment than a traditional single family home in a residential subdivision. This assumption is based on the goals and expectations of this user group (i.e., the resident). Because the principal user is primarily engaged in agricultural management activities, they are not considered a highly sensitive user. Additionally, the average number of users at this site will vary by season and harvest. For purposes of this rating assignment, it was assumed that this location would have approximately 10 average daily viewers. It was also assumed this number would fluctuate, increasing during harvest times, and decreasing during growing seasons or times when the fields may be left fallow.

Accounting for the scenic attractiveness, sensitivity level, and distance zone to the Project, this area was assigned an ESIL Class "C" designation (See Figure 5.13-8 (rev), Scenic Attractiveness Evaluation Form for KOP #1).

KOP 2

This image was taken on Bradshaw Trail approximately one mile west of its intersection with State Route 78. It is nearly 2 miles east of the eastern project boundary. In order to capture the full extent of the landscape, this photo was taken from the high point of an elevated irrigation canal. As a result, this photo offers a clear view of the entire Palo Verde Mesa and project site. An irrigation canal, natural desert vegetation, transmission lines, agricultural related structures, and fields with cultivated crops are present within the foreground of this photo. From this view point, the Palo Verde Mesa and project site are shown in the mid-ground area of the image, with the Mule and Palo Verde Mountains in the background (Figure 5.13-15a thru 5.13-15d (rev)).

The sensitivity level of this observation point was rated "moderate" based on the recreational usage of Bradshaw Trail. Bradshaw Trail is a BLM designated Open Route[2] trail which receives moderate usage by OHV recreationists. It is estimated that Bradshaw Trail may be utilized by roughly 2-3 recreationists per day (URS Field Observations, 2011). OHV users are assumed to have moderate viewer sensitivity and concern for changes to their aesthetic surroundings. This assessment is based on the activity which such viewers are involved in. While operating an OHV, these users will be primarily focused on the relationship of their vehicle and the off-highway experience. Additionally, they are assumed to have

[2] An Open Route is a designated Off Highway Vehicle (OHV) trail managed by the BLM.

more accepting level of expectation when it comes to the addition of manmade structures and development. This is based on the fact that they are using a motorized vehicle to experience the outdoors, which differs from a hiker, whose state of mind and attitude would likely be in search of a natural experience with the environment.

Accounting for the scenic attractiveness, sensitivity level, and distance zone to the Project, this area was assigned an ESIL Class "B" designation (See Figure 5.13-9 (rev), Scenic Attractiveness Evaluation Form for Sensitive View Area and KOP 2).

KOP 3 (no changes)

KOP 4

This image was taken ~~0.9~~1.9 miles east of the Project boundary, facing west. This image represents the view of the Project as seen from State Route 78 at its intersection with 34th Avenue. This view demonstrates typical views of the solar power towers, heliostats, common area, and other structures associated with the power block as seen by travelers on State Route 78. This view presents the most proximate and most visible view of the Project from the road. Currently, agricultural land and transmission lines are visible in the foreground, with the Palo Verde Mesa shown in the mid-ground and Mule Mountains in the background. The elevated nature of the Palo Verde Mesa serves to partially obstruct views of the Project from this vantage point. This is due to the angle at which the project is viewed. The ~~common area~~temporary construction facilities will be immediately visible in the foreground, with the solar power towers, some common area features, and heliostats mostly visible in the midground (Figure 5.13-17a thru 5.13-17h (rev)).

The sensitivity level of this observation point was rated "medium" based on the low population density and the fact that most travelers are local area residents. These viewers, being local residents and travelers, are less likely to be concerned with modifications to their viewshed. This assessment is based on the fact that local residents and travelers will be focused on driving, or completing work related tasks. Therefore, they will have a greater degree of acceptance for changes to the visual landscape as their preconceived expectation of visual quality will be more forgiving than someone traveling to the area expecting to have a pristine experience with nature.

Accounting for the scenic attractiveness, sensitivity level, and distance zone to the Project, this area was assigned an ESIL Class "C" designation (See Figure 5.13-11 (rev), Scenic Attractiveness Evaluation Form for Sensitive View Area and KOP 4).

KOP 5

This image was taken facing northwest, ~~within~~ north of the Cibola NWR and is ~~4.1~~4.6 miles southeast of the Project boundary. This photo represents the most proximate vantage point of the Project as seen from the vicinity of the NWR, although it was not taken from within the Refuge. ~~as the photo was taken from one of the most northerly boundaries of the Refuge.~~ Additionally, the photo was taken from atop an elevated flood control berm which allowed for unobstructed views of the Palo Verde Mesa and project area. Viewed from grade level, the Project will be largely screened from visibility. This is due to the immediate presence of vegetation and/or natural variations in topography in the foreground of the

viewer's line of site. The NWR is much more densely vegetated than the surrounding areas. This photo characterizes distant views of the Project as seen from one of the outermost reaches of the VSOI. Views of the Colorado River and expanses of undeveloped open space characterize typical scenery from within the NWR (Figure 5.13-18a thru 5.13-18c (rev)).

The sensitivity level of this observation point was rated "high" based on user expectation and visitation numbers. Typical users will visit the NWR to hunt, fish, and camp and therefore seek a natural experience absent of anthropogenic modification. Additionally, the NWR receives approximately 45,000 tourists/patrons annually (USFWS, 2011). For these reasons, the visual sensitivity was rated "high."

Accounting for the scenic attractiveness, sensitivity level, and distance zone to the Project, this area was assigned an ESIL Class "B" designation (See Figure 5.13-12 (rev), Scenic Attractiveness Evaluation Form for Sensitive View Area and KOP 5).

KOP 6 (no changes)

5.13.4 Environmental Analysis

5.13.4.1 Analysis Procedures (no changes)

5.13.4.2 Assessment of Visual Effects

Visual effects to the surrounding areas are a result of the size and scale of a project and the presence of people or activities near the project where the view is an important attribute. The proposed Project will be a newly introduced and prominent feature of the landscape; however it is not expected to create significant impacts when multiple considerations are taken into account. The following section provides a detailed assessment of visual impacts created by the project from each of the KOPs identified above.

The current open and expansive views existing in the area will not be occluded by the presence of the Project. The scenic quality in the project area is currently moderate to low and the presence of the solar power towers, heliostats, and other project structures will not affect visual quality to the extent that it will affect the overall character of the existing visual environment. While the Project is expected to alter the existing character of the area, creating effects to the general scenic quality of the VSOI area as a whole, the overall impacts are not expected to be significant. It is clear the Project will be visible from adjacent population centers in the area. This is due to the large scale of the Project (approximately ~~5,750~~3,805 developed acres), the lack of significant topographic features as viewed from the north, east and south of the Project, and the limited degree of existing landscape modification within the project site. However, as described in greater depth blow, landscapes inventoried within the VSOI will largely retain their existing moderate to low scenic quality even with the addition of the Project. Therefore, even if significant effects to the visual resources in the area occur, they will yield less than significant impacts given the context of the existing scenic quality.

It should be noted that the Project may also draw positive visual interest to the area. As one of the largest projects of its kind in California, the Project has the potential to become a tourist attraction, drawing visitors from the energy industry, environmental community, and government/political figures who seek a direct, personal experience with progressive renewable energy solutions. Because of this, some viewers

may see the Project as having a beneficial impact on the visual resources in the area. For example, since its development, the wind farm of approximately 4,000 wind turbine generators/windmills in the San Gorgonio Pass area (which includes portions of Palm Springs, Desert Hot Springs, and the Coachella Valley) have become a symbol of the area. The technology, as well as the total size and number of wind turbines, create a point of interest that attracts tourists.

High-sensitivity viewpoints identified in the study area include existing nearby residences, and the Cibola NWR. Moderate to low sensitivity viewers identified in the study area consist of recreational users travelling along State Route 78, I-10, and Bradshaw Trail.

The more distant open space and agricultural areas were identified as low sensitivity views due to the fact this area is used for food production and not recreation. The main visual interest and/or draw for the area is essentially created by the open expanses of land and the panoramic view of the mountains, desert and agricultural valley influenced by the Colorado River. While the flat and open topography creates large expanses of open space, a persistent dust haze, characteristic of the air quality in the area, can impair the clarity from distant views of the Project on windy or particularly humid days.

Visual Simulations

A comparison of existing views (KOPs) with visual simulations, depicted in Figures 5.13-14 (rev) through 5.13-19 (rev) aided in verifying Project-related effects. The simulations present a representative sample of the existing landscape settings contained within the VSOI, as well as an illustration of how the Project may look from specific key viewing locations.

To ensure a high degree of visual accuracy in the visual simulations, computer-aided drafting and design (CADD) equipment, geographic information systems (GIS), and the use of a global positioning system allowed for life-size modeling within the computer. This translated to using real-world scale and coordinates to locate Project facilities, other site data, and the camera locations corresponding to three-dimensional (3D) simulation viewpoints.

A GIS site map was imported as a background reference. CADD drawings of proposed Project facilities were placed on top of the project site map in GIS. Locations of sensitive viewing areas are also input into GIS. The camera positioning information was then referenced to the 3D data set. The 3D massing models of the proposed Project (including ancillary facilities) are generated in real-world coordinates, scaled, and input into GIS.

A Nikon 6.1 megapixel digital camera set to take a 19.2-millimeter lens image was used consistently throughout the process. This lens setting selection allows for viewing of the computer-generated model in the same way that the Project would be viewed in the field.

Next, the photographs taken in the field were imported into the 3D database and loaded as an environment within which the view of the 3D model was generated. To generate the correct view relative to the actual photograph, the electronic camera was placed at a location (within the computer) from where the photograph was taken. From there, the 3D wire frame model was displayed on top of the existing photo so that proper alignment, scale, angle, and distance could be verified. When all lines of the wire frame model exactly matched the photograph, the camera target position was confirmed.

It should be noted that final simulations were created using CADD files obtained from the Project engineer to remain consistent with general Project development engineering. Once field KOP location photos and coordinates for photo locations were gathered, these were incorporated into the final simulation production. The processes described above relate to general simulation construction and are included to assist the reader in understanding the procedures followed to create simulations.

The visual simulations developed for the Project were designed to be viewed 10 inches from the viewer's eye. This distance portrays the most realistic life-size image from the location of the sensitive viewing area.

KOP 1 – Visual Simulation of View from Closest Residence to Project

KOP 1 represents views of the Project as seen by the closest resident. Residents are typically considered sensitive viewers as they are assumed to have prolonged viewing durations of their surroundings. However, this KOP was assigned a sensitivity-level rating of "moderate" based on the number of receptors present at this site, and taking into account the principal use of the property. As previously discussed, viewers from this location are assumed to primarily engaged in agricultural management related tasks. Furthermore, the existing view quality of the project area as seen from this KOP was rated "C." In other words, the existing views toward the project area are considered unremarkable due to similar views seen throughout the desert region.

As shown in Figures 5.13-14a thru 5.13-14b (rev) the majority of Project related features (e.g. the common area structures, heliostats, gen-tie line) are not visible from this KOP. ~~In fact, only two of the~~The two solar power towers (i.e., ~~Rio Mesa~~RMS 1 and 2~~II and III~~) are noticeable from this vantage point. While the two solar power towers occupy the upper horizon line of the viewshed, the hillside of the mesa serves to occupy the majority of ones line of site~~.~~

Accounting for the moderate sensitivity of the viewer and considering the current viewshed quality was rated "C", the overall aesthetic effect to this KOP with the addition of the Project is expected to be less than significant.

KOP 2 – Visual Simulation of Eastern View from Bradshaw Trail

KOP 2 characterizes views of the Project as seen from the top of an elevated irrigation canal east of the entrance to the unpaved/OHV portion of Bradshaw Trail. From this vantage point, ~~Rio Mesa~~RMS 2~~II and III~~, ~~and~~ portions of the common area, and ~~a portion of the~~ heliostat arrays associated with ~~Rio Mesa~~RMS 2 are visible (Figures 5.13-15a and 5.13-15d (rev)). The existing visual environment offers views of the Palo Verde Mesa, open desert, Mule and Palo Verde Mountains and was assigned an ESIL Class "B" rating as described above.

Bradshaw Trail, which receives approximately 2-3 recreationists per day (URS Field Observations, 2011) is a lightly traveled, partially unpaved road. Its designation as a Backcountry Byway indicates that there is public interest in the trail (see Cultural Resources Section 5.3.5 for further discussion regarding the section of the trail which traverses the project site). Typical users of Bradshaw Trail include OHV enthusiasts who are likely to place a lower value on their visual surroundings. Furthermore, the BLM encourages OHV users to access Bradshaw Trail from Wiley's Well Road, which is located more than six

miles west of this KOP (BLM, 2011). As a result, the portion of Bradshaw Trail which traverses the project site is likely to be used less frequently than more western reaches.

Review of Figures 5.13-15a thru 5.13-15d (rev) shows that Project related features will alter the form, line, and texture of the existing visual environment. Visual effect of the Project from this location is characterized as moderate, however, as the existing intactness of the viewshed has been previously altered by the erection of several transmission lines. Though the visual character will change from mostly open space/desert to that of a developed landscape, the overall visual impact of the Project is not expected to severely degrade existing visual quality. In fact, some viewers may see the development of a solar resource facility as a point of positive visual interest. Taken as a whole, visual impacts to this KOP resulting from the Project are expected to be less than significant.

KOP 3 – Visual Simulation of View from I-10

KOP 3 captures views of the CRS, 220 kV gen-tie line, and the solar power towers, ~~and the common area~~ from the closest point of the Project to I-10. From this location, the CRS and gen-tie line are dominant features in the fore- to mid-ground areas of the viewshed. Views of other Project features are less pronounced (Figure 5.13-16a thru Figure 5.13-16b (rev)). Though the Project will alter the current undeveloped nature of the landscape, it will not dominate it disproportionately. The distance of the Project from I-10, coupled with the expansive views from the freeway in multiple directions, preclude the Rio Mesa SEGF from overpowering the landscape.

The view from I-10 looking toward the Project is rated low in terms of scenic quality, and as previously stated this KOP was assigned an ESIL Class "C" designation. While the portion of I-10 within the Palo Verde Area Plan boundaries is eligible for designation as a scenic highway, views in the project direction are not particularly noteworthy when considering form, line, color, and variation in the current landscape. Visual susceptibility from this location is characterized moderate to low based on the criteria listed above as well as the Project being out of the normal cone of vision of a driver on I-10. Given the above, the Project is not expected to have a significant impact on the existing visual quality.

KOP 4 – Visual Simulation of View from State Route 78 at 34 Avenue (no changes)

KOP 5 – Visual Simulation of View from Cibola National Wildlife Refuge (no changes)

KOP 6 – Visual Simulation of View from I-10 at Neighbors Drive

KOP 6 presents views of the Project from the I-10 off ramp at Neighbors Drive. From this perspective, all aspects of the Project are visible, including the ~~all three~~two solar power towers, heliostat arrays, common area and power block facilities. While the Project is highly visible, it also appears smaller on the horizon when compared to other KOP locations taken at closer vantage points. The Palo Verde Valley is primarily used for agriculture and crops which are small in height. Both major and secondary electric transmission and distribution lines cross the valley at variable intervals, and are typically visible from any one location across the valley and mesa. Direct views of the Project are largely unobstructed from this portion of State Route 78, with occasional berms and elevated irrigation ditches precluding direct views of the project from lower elevations nearby. Views of the Project from this KOP, and traveling south along State Route 78 will be altered by the Project (Figure 5.13-19a thru 5.13-19b (rev)).

While most users of will be traveling this off-ramp for work related purposes (thus lowering their sensitivity to the viewshed), it is expected that recreationists traveling to other points of interest in the area, including Cibola NWR, would frequent this road interchange. As a result, viewer sensitivity is rated moderate.

While viewer sensitivity is moderate, this viewshed was previously assigned an ESIL "C" rating, indicating that has previously been altered and is not highly visually intact. Accounting for these factors lowers the actual sensitivity of the viewer. Therefore the overall impact of the Project is expected to be less than significant.

5.13.4.3 Individual Project Feature Impacts

Power Block (no changes)

Common Area

~~The 120-acre common area will be established on the eastern border of the site to accommodate an administration, warehouse, and maintenance complex; an onsite substation; asphalt-paved visitor and employee parking area; two 2-acre evaporation ponds; and landscape areas. The administration complex will occupy approximately 6 acres and will be served by power from the local 33 kV distribution system and water from water supply wells located in the common area. The common area will also be used for temporary construction parking areas, construction trailers, a tire cleaning station, and other construction support facilities.~~Located at the far northern reach of the RMS-1 solar field are the ~~The~~ Common Area facilities. They are comprised of an administration/control room, warehouse, and maintenance complex, fire pumps, ground water wells, water treatment facilities and two ~~2~~acre each evaporation ponds. Each of these structures will be painted in muted tones to blend with the desert landscape. As a result, common area structures are not expected to have a significant impact on visual quality.

Cooling and Water Vapor Plumes (no changes)

Light and Reflectivity Impacts (no changes)

Heliostats

Each of the ~~three~~ two plants ~~located on-site~~ will also consist of one heliostat array (or mirror field). Each array will contain approximately 85,000 heliostats, for a combined total of 170,000~~255,000~~ heliostats ~~across all three plants~~. The closest resident and the communities of Palo Verde and Ripley are located at a lower elevation than the project site. The Project is located on the Palo Verde Mesa, which is at a slightly higher elevation than the Palo Verde Valley. As a result, the heliostat arrays are likely to be largely screened from these locations, and the visual simulations conducted from each of the KOPs reflect this determination. West of the Project, as viewers travel into the Palo Verde and Mule Mountains, recreationists will be at a higher elevation, which will allow them to view the heliostats more clearly. From such elevated viewpoints, the heliostats will be seen as having bright, and occasionally reflective, surfaces. The appearance of the heliostats will depend on the angle of the sun and the heliostats in relation to the position of the viewer. Although the bright surface will be visible, these portions of the

heliostat arrays will not be a source of glare that affects the viewers. Additionally, these areas are almost exclusively unpopulated, and are not heavily trafficked.

Transmission Line (no changes)

Landscaping (no changes)

~~Construction Laydown Area~~Construction Logistics Area

A temporary~~120~~103-acre Construction Logistics Area (CLA) will be established on the eastern border of the site east of the WAPA and TransCanada transmission lines and will accommodate construction parking, office, equipment, and conference trailers, equipment staging assembly and material storage, a tire cleaning station and other construction support facilities. The surface areas within the CLA area will be stabilized and dust suppression maximized in areas subject to heavy daily traffic. ~~Construction laydown~~The CLA areas will be situated within the project boundaries. Visual impacts related to scenic quality of the existing landscape will be short in duration. No construction related impacts are expected to be more significant than those created by the long term impacts associated with the Project as a whole. Furthermore, all construction related laydown areas will be within the project boundaries.

5.13.4.4 Impact Significance (no changes)

5.13.5 Cumulative Effects (no changes)

5.13.6 Mitigation Measures (no changes)

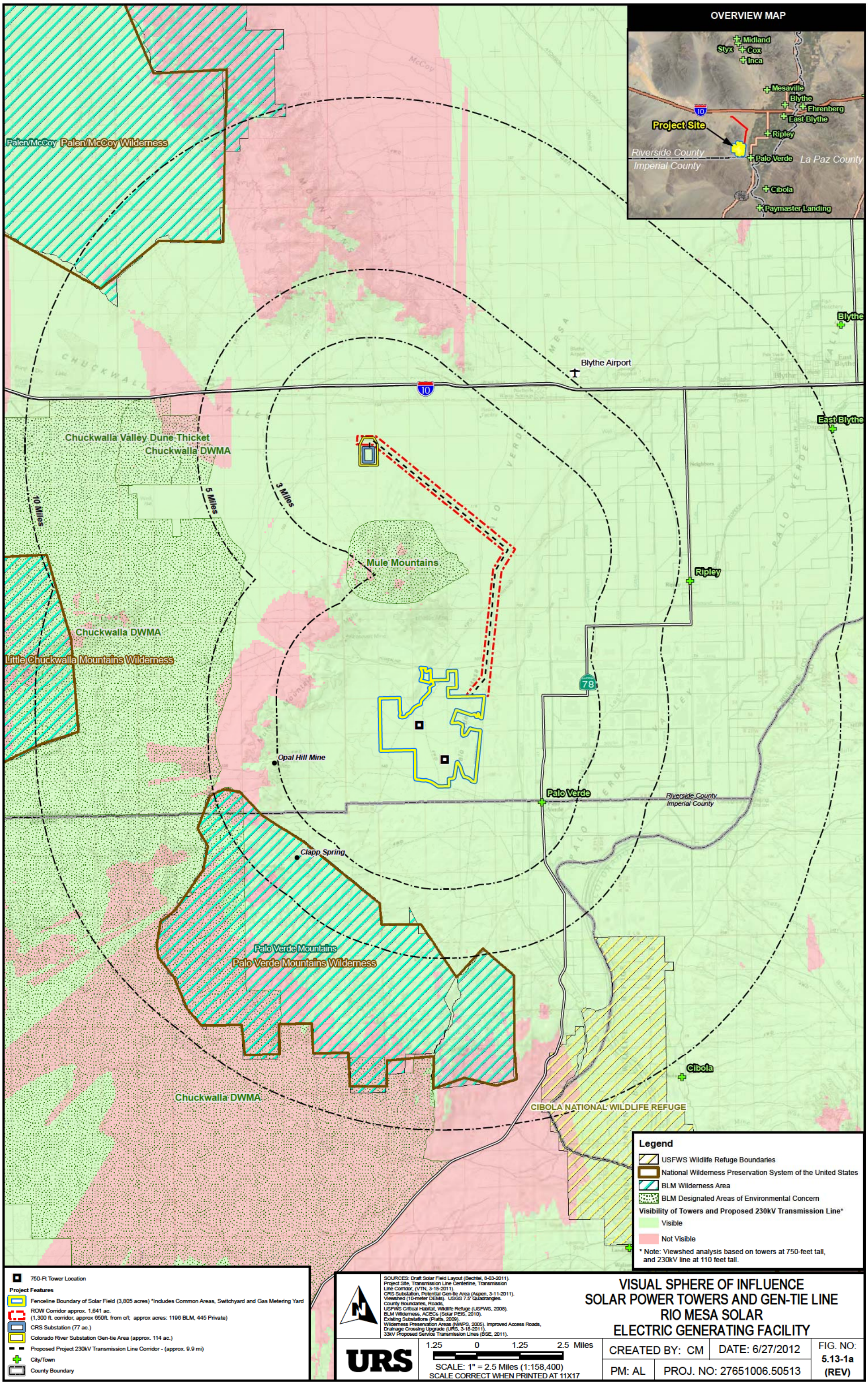
5.13.6.1 VIS-1 (no changes)

5.13.6.2 VIS-2 (no changes)

5.13.7 Involved Agencies and Agency Contacts (no changes)

5.13.8 Permits Required and Permit Schedule (no changes)

5.13.9 References (no changes)



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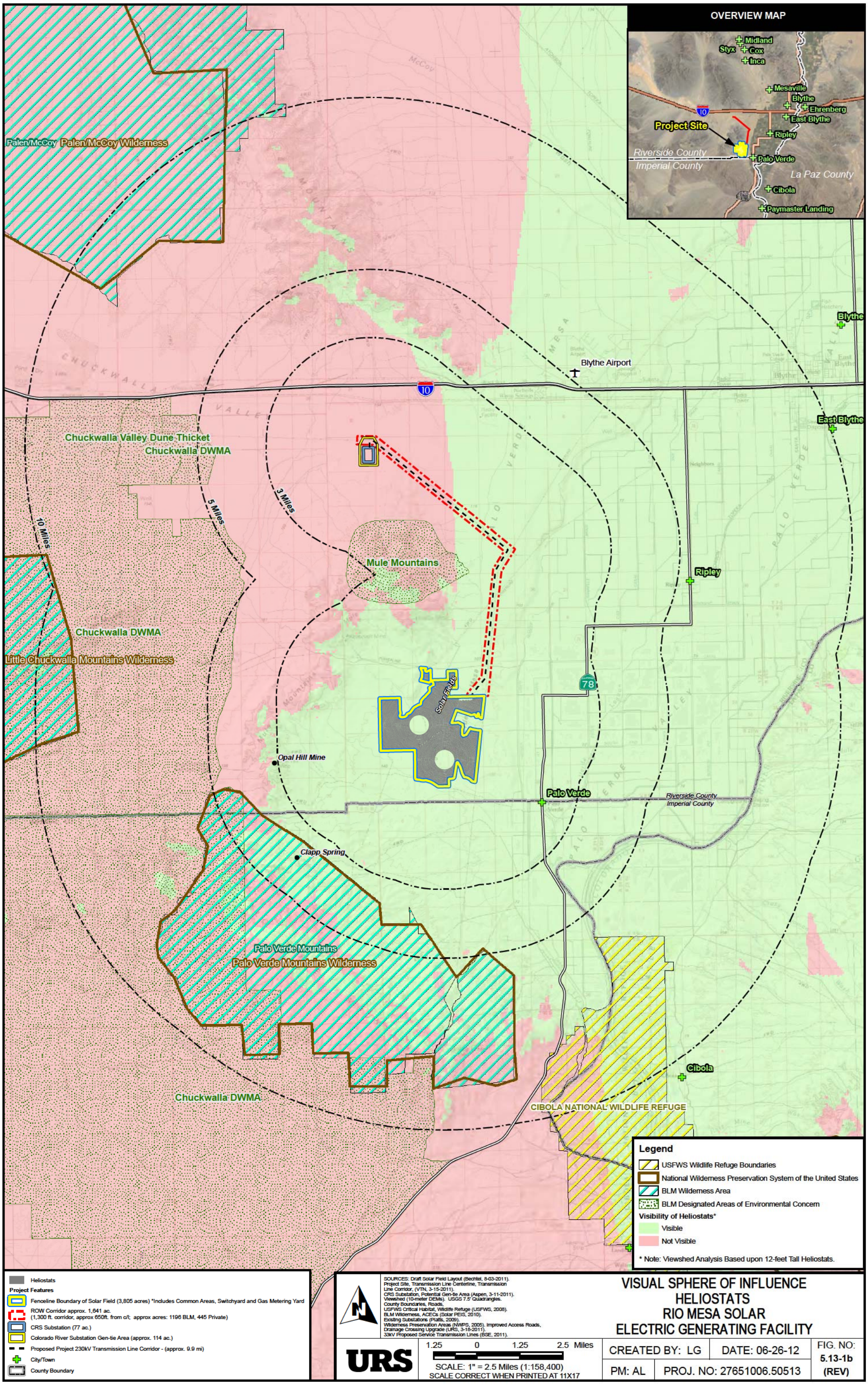

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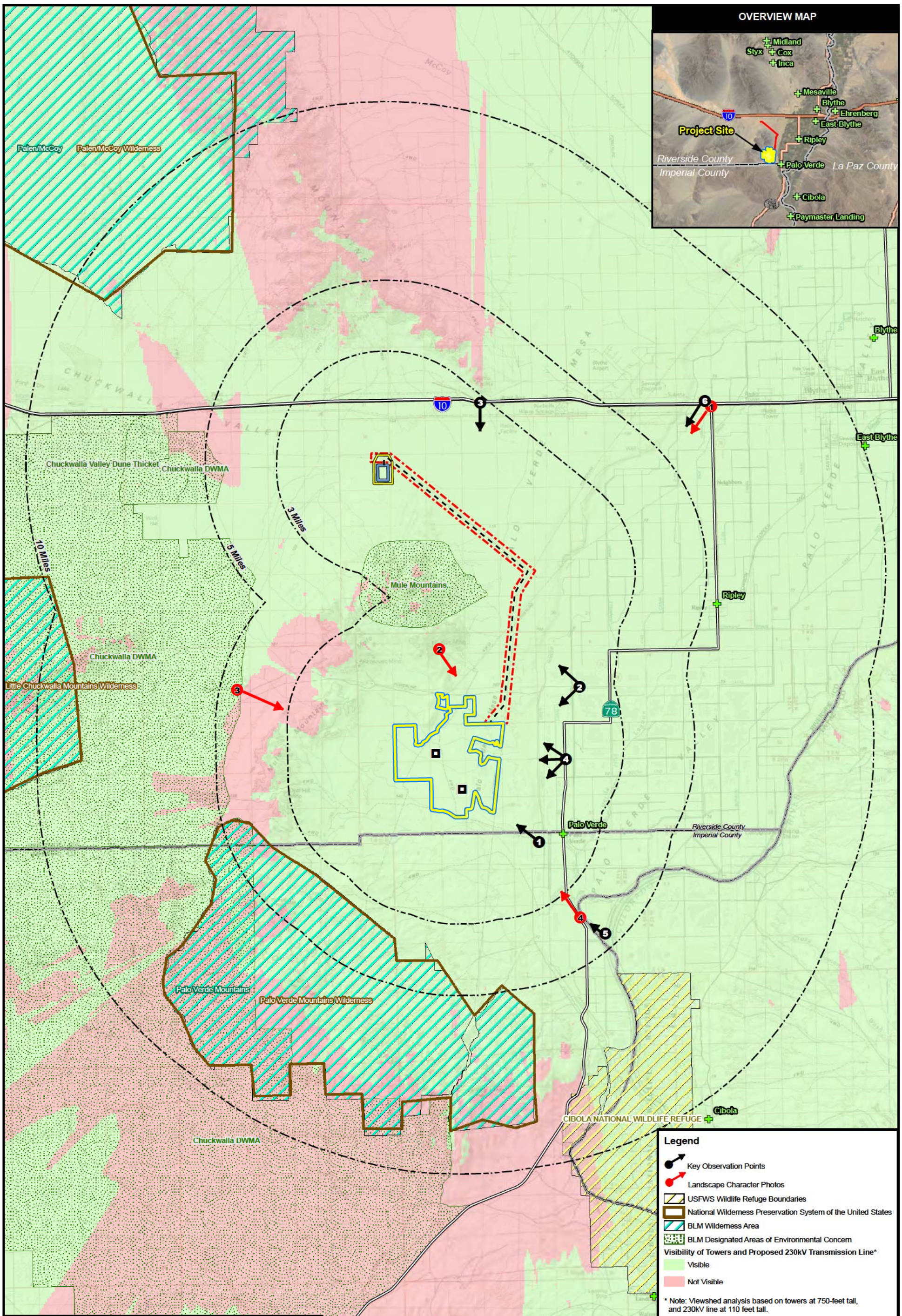

750-Ft Tower Location

Project Features

- Fenceline Boundary of Solar Field (3,805 acres) *Includes Common Areas, Switchyard and Gas Metering Yard
- ROW Corridor approx. 1,641 ac. (1,300 ft. corridor, approx 650ft. from c/l; approx acres: 1196 BLM, 445 Private)
- CRS Substation (77 ac.)
- Colorado River Substation Gen-tie Area (approx. 114 ac.)
- Proposed Project 230kV Transmission Line Corridor - (approx. 9.9 mi)
- City/Town
- County Boundary

SOURCES: Project Site, Transmission Line Centerline (VTN, 3-15-2011).
CRS Substation, Potential Gen-tie Area (Aspen, 3-11-2011).
Viewshed (10-meter DEMs). USGS 7.5' Quadrangles.
County Boundaries, Roads (ESRI, 2007).
Wildlife Refuge (USFWS, 2008). Prime Farmlands (Ca Dept of Conservation (2008).
BLM Wilderness, ACECs (Solar PEIS, 2010).
Existing Transmission Lines, Existing Substations (Platts, 2009).
Wilderness Preservation Areas (NWPS, 2005).

KEY OBSERVATION POINTS & LANDSCAPE CHARACTER PHOTOS SOLAR POWER TOWERS AND GEN-TIE LINE RIO MESA SOLAR ELECTRIC GENERATING FACILITY

URS

1.25 0 1.25 2.5 Miles

SCALE: 1" = 2.5 Miles (1:158,400)
SCALE CORRECT WHEN PRINTED AT 11X17

CREATED BY: LG	DATE: 6/27/2012	FIG. NO:
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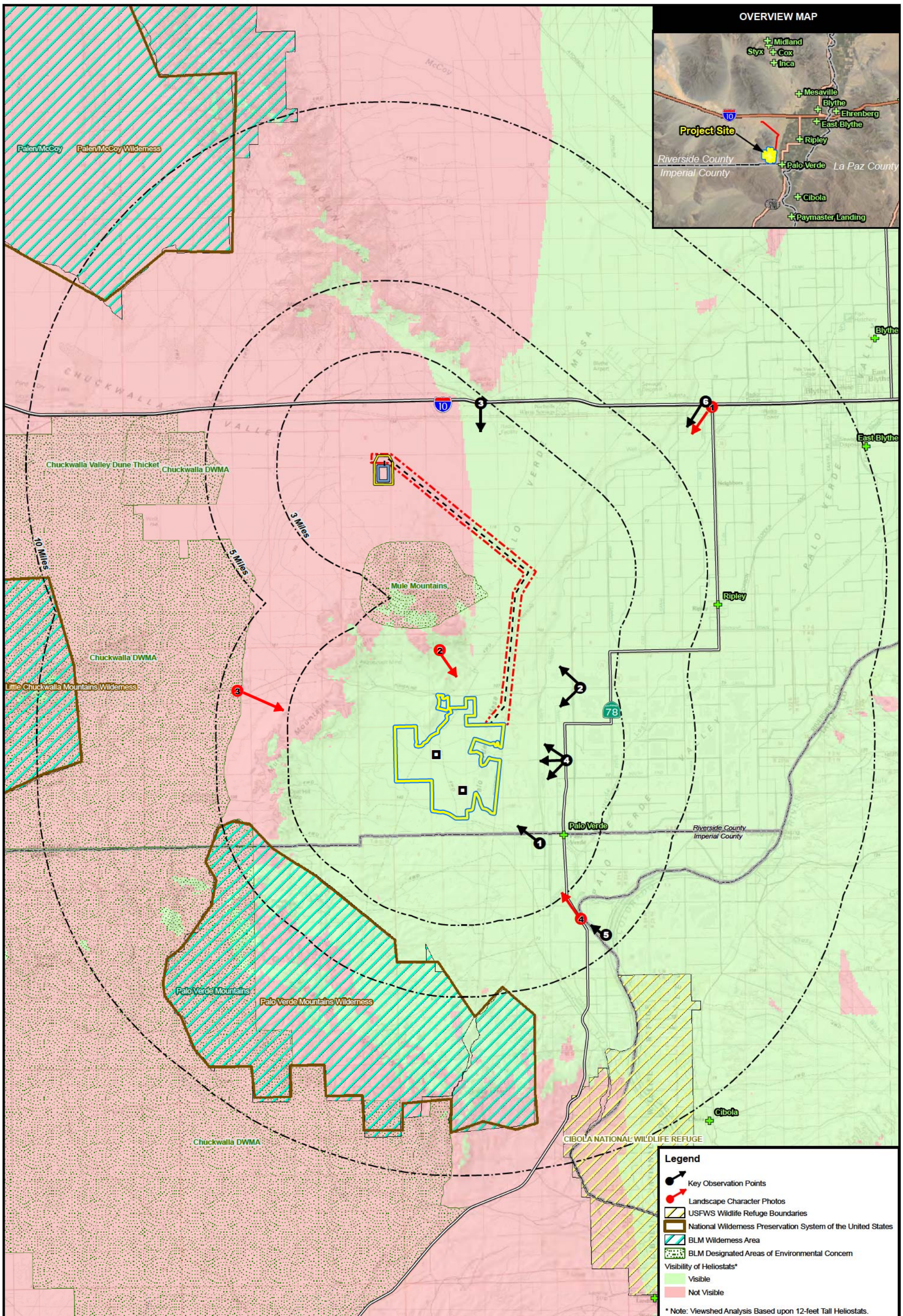
OVERVIEW MAP
Midland
Styx
Cox
Inca
Mesaville
Blythe
Ehrenberg
East Blythe
Project Site
Ripley
Riverside County
Imperial County
Palo Verde
La Paz County
Cibola
Paymaster Landing
Palen/McCoy
Palen/McCoy Wilderness
Chuckwalla Valley Dune Thicket
Chuckwalla DWMA
10 Miles
5 Miles
3 Miles
Mule Mountains
Little Chuckwalla Mountains Wilderness
Palo Verde Mountains
Palo Verde Mountains Wilderness
CIBOLA NATIONAL WILDLIFE REFUGE
Legend
Key Observation Points
Landscape Character Photos
USFWS Wildlife Refuge Boundaries
National Wilderness Preservation System of the United States
BLM Wilderness Area
BLM Designated Areas of Environmental Concern
Visibility of Heliostats*
Visible
Not Visible
* Note: Viewshed Analysis Based upon 12-feet Tall Heliostats.
750-Ft Tower Location
Project Features
Fenceline Boundary of Solar Field (3,805 acres) *Includes Common Areas, Switchyard and Gas Metering Yard
ROW Corridor approx. 1,641 ac.
(1,300 ft. corridor, approx 650ft. from c/l; approx acres: 1196 BLM, 445 Private)
Colorado River Substation Gen-tie Area (approx. 114 ac.)
CRS Substation (77 ac.)
Proposed Project 230kV Transmission Line Corridor - (approx. 9.9 mi)
City/Town
County Boundary
SOURCES: Draft Solar Field Layout & Fenceline, MWD Land (Bechtel, 6-13-2012).
Transmission Line Corridor (URS, 6-14-2012). Private Lands (BSE, 2012).
CRS Substation, Potential Gen-tie Area (Power Engineers, 5-7-2012).
Viewshed (10-meter DEMs). USGS 7.5' Quadrangles.
County Boundaries, Roads (ESRI, 2007).
Wildlife Refuge (USFWS, 2008). Prime Farmlands (Ca Dept of Conservation (2008).
BLM Wilderness, ACECs (Solar PEIS, 2010).
Existing Transmission Lines, Existing Substations (Platts, 2009).
Wilderness Preservation Areas (NWPS, 2005).
URS
1.25 0 1.25 2.5 Miles
SCALE: 1" = 2.5 Miles (1:158,400)
SCALE CORRECT WHEN PRINTED AT 11X17
KEY OBSERVATION POINTS &
LANDSCAPE CHARACTER PHOTOS
HELIOSTATS
RIO MESA SOLAR
ELECTRIC GENERATING FACILITY
CREATED BY: CM
DATE: 6/27/2012
FIG. NO: 5.13-2b (REV)
PM: AL
PROJ. NO: 27651006.50513
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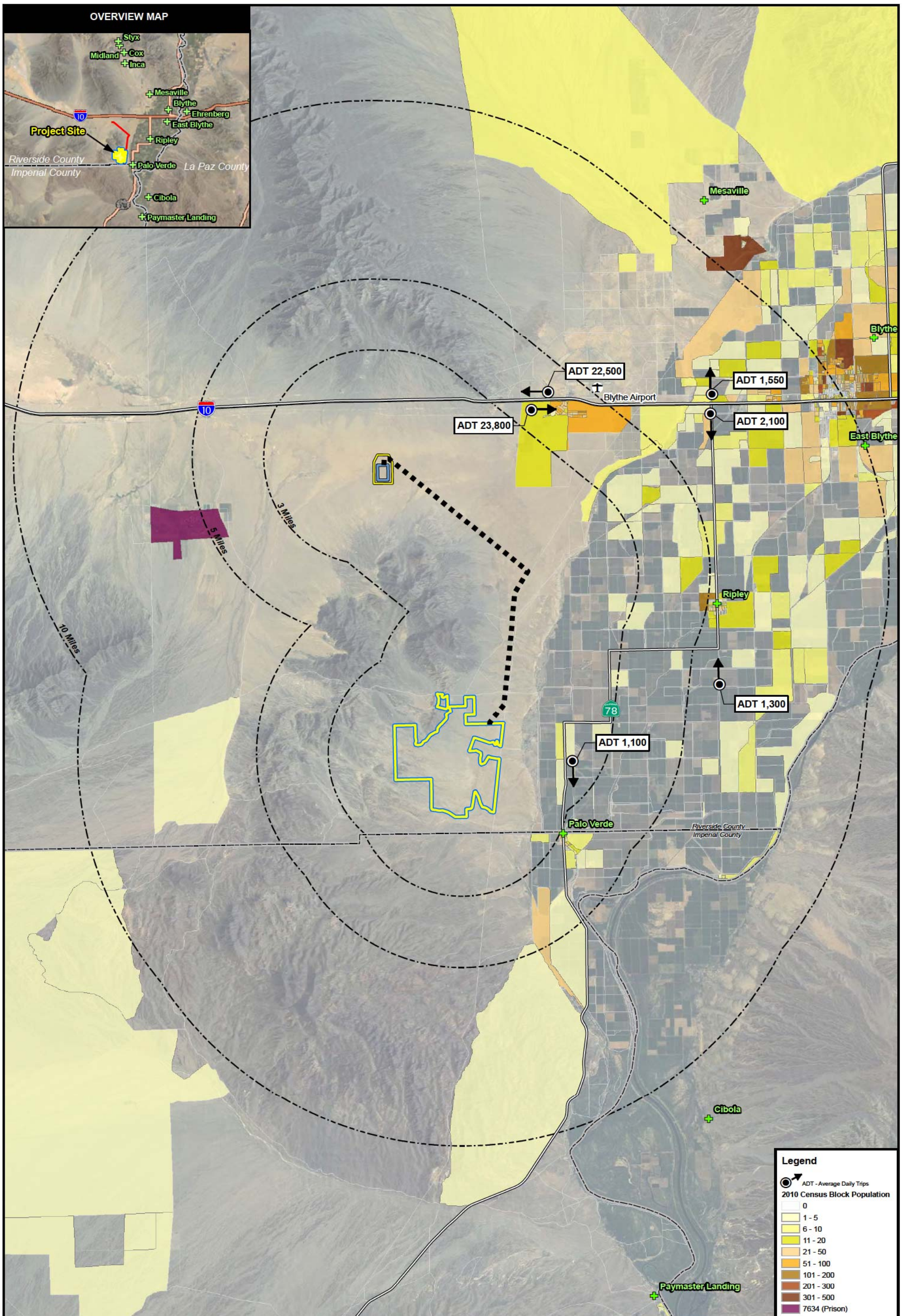

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Project Features

- Fenceline Boundary of Solar Field (3,805 acres) *Includes Common Areas, Switchyard and Gas Metering Yard
- Colorado River Substation Gen-tie Area (approx. 114 ac.)
- CRS Substation (77 ac.)
- Proposed Project 230kV Transmission Line Corridor - (approx. 9.9 mi)
- City/Town
- County Boundary

SOURCES: Draft Solar Field Layout & Fenceline, MWD Land (Bechtel, 6-13-2012). Transmission Line Corridor (URS, 6-14-2012). Private Lands (BSE, 2012). CRS Substation, Potential Gen-tie Area (Power Engineers, 5-7-2012). Census Blocks (Tiger 2010). ADTs (URS). Aerial Imagery (NAIP, 5-25-2009). County, State Boundaries, Roads (ESRI, 2007). PLSS Sections (BLM, 12-11-2007). ADT (URS, 2011)

AVERAGE DAILY TRAFFIC COUNTS & POPULATION DATA
RIO MESA SOLAR ELECTRIC GENERATING FACILITY

URS

1.25 0 1.25 2.5 Miles

SCALE: 1" = 2.5 Miles (1:158,400)
SCALE CORRECT WHEN PRINTED AT 11X17

CREATED BY: CM	DATE: 6/27/2012	FIG. NO: 5.13-3 (REV)
PM: AL	PROJ. NO: 27651006.50513	

Figure 5.13-8
Scenic Attractiveness Evaluation Form for
Sensitive View Area and Kop No. 1

Landform	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Vegetation	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Water	H (5)	H/M (4)	M (3)	M/L (2)	**L (1)**
Color	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Adjacent Scenery	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Scarcity	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Modifications*	H (2)	H/M (1)	**M (0)**	M/L (-2)	L (-4)
Scenic Attractiveness Class C (11)					

Scenic Quality Classifications
A = 19 or more
B = 12 to 18
C = 11 or less

Notes:
Evaluation score is bold and underlined
H = High; M = Moderate; and L = Low
* = Explains cultural modifications present in the landscape, ranging from negative intrusions (-4) to those that complement the scenic quality and promote visual harmony (2)

Narrative Landscape Description and Photograph. Sensitive Viewing Area and KOP No. 1 (Figure 5.13-14a-5.13-14b rev, see also Figure 5.13-2a-5.13-2b rev for KOP location) was taken from the nearest residence to the Project. This residence is located approximately 1.16 miles east southeast of the southeast corner of the Project boundary. This image offers some of the most immediate and "worst case" views for long-term observers. Direct views of the Project are partially obscured due to hillside topography in the mid-ground area of viewshed. Cultivated crops are visible in the immediate foreground, with the Mule Mountains just slightly visible above the mesa ridgeline/hillside in the mid-ground of the photo. Unique forms are created by the mesa in the midground and mountains in the background. Cultural modifications include cultivated crops, irrigation canals, transmission lines/towers, property fencing, and dilapidated/abandoned farm structures which are located just east of this viewpoint. Crops add vivid greens to the color palate which is largely made up of mute desert tones. There are no visible water sources within the immediate project vicinity or within view from this KOP.

Figure 5.13-9
Scenic Attractiveness Evaluation Form for
Sensitive View Area and Kop No. 2

Landform	H (5)	H/M (4)	**M (3)**	M/L (2)	L (1)
Vegetation	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Water	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Color	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Adjacent Scenery	H (5)	H/M (4)	**M (3)**	M/L (2)	L (1)
Scarcity	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Modifications*	H (2)	H/M (1)	**M (0)**	M/L (-2)	L (-4)
Scenic Attractiveness Class B (14)					

Scenic Quality Classifications
A = 19 or more
B = 12 to 18
C = 11 or less

Notes:
Evaluation score is bold and underlined
H = High; M = Moderate; and L = Low
* = Explains cultural modifications present in the landscape, ranging from negative intrusions (-4) to those that complement the scenic quality and promote visual harmony (2)

Narrative Landscape Description and Photograph. Sensitive Viewing Area and KOP No. 2 (Figure 5.13-15a-5.13-15d rev, see also Figure 5.13-2a-5.13-2b rev) was taken on Bradshaw Trail approximately one mile west of its intersection with State Route 78. It is nearly 2 miles east of the eastern project boundary. In order to capture the full extent of the landscape, this photo was taken from the high point of an elevated irrigation canal. As a result, this photo offers a clear view of the entire Palo Verde Mesa and project site. An irrigation canal, natural desert vegetation, transmission lines, agricultural related structures, and fields with cultivated crops are present within the foreground of this photo. From this view point, the Palo Verde Mesa and project site are shown in the mid-ground area of the image, with the Mule and Palo Verde Mountains in the background. Cultural modifications include agricultural fields, irrigation canals, transmission lines, and other structures. The irrigation canal does contain water, however it would not be visible from grade level. There are no natural water sources within the immediate project vicinity or within view from this KOP. This landscape is considered somewhat interesting within its setting, but fairly common within the region. It should be noted that views to the site from some of the other residences to the west are partially screened by vegetation and/or other residences in the foreground.

Figure 5.13-10
Scenic Attractiveness Evaluation Form for
Sensitive View Area and Kop No. 3

Landform	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Vegetation	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Water	H (5)	H/M (4)	M (3)	M/L (2)	**L (1)**
Color	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Adjacent Scenery	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Scarcity	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Modifications*	H (2)	H/M (1)	**M (0)**	M/L (-2)	L (-4)
Scenic Attractiveness Class C (11)					

Scenic Quality Classifications
A = 19 or more
B = 12 to 18
C = 11 or less

Notes:
Evaluation score is bold and underlined
H = High; M = Moderate; and L = Low
* = Explains cultural modifications present in the landscape, ranging from negative intrusions (-4) to those that complement the scenic quality and promote visual harmony (2)

Narrative Landscape Description and Photograph. Sensitive Viewing Area and KOP No. 3 (Figure 5.13-16a-5.13-16b rev, see also Figure 5.13-2a-5.13-2b rev). The mountains in the distant background provide moderate form and line characteristics in the area. However a persistent haze, characteristic of the air quality in the area, impairs clarity in distant views. The main visual interest and/or draw for the area is essentially created by the open expanses of land and with the mountain areas as a contrasting backdrop. There is some variety in colors and contrast of the area, however it is typical of the desert region and is not a dominant scenic element.

Figure 5.13-11
Scenic Attractiveness Evaluation Form for
Sensitive View Area and Kop No. 4

Landform	H (5)	H/M (4)	**M (3)**	M/L (2)	L (1)
Vegetation	H (5)	H/M (4)	M (3)	M/L (2)	**L (1)**
Water	H (5)	H/M (4)	M (3)	M/L (2)	**L (1)**
Color	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Adjacent Scenery	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Scarcity	H (5)	H/M (4)	M (3)	M/L (2)	**L (1)**
Modifications*	H (2)	H/M (1)	**M (0)**	M/L (-2)	L (-4)
Scenic Attractiveness Class C (10)					

Scenic Quality Classifications
A = 19 or more
B = 12 to 18
C = 11 or less

Notes:
Evaluation score is bold and underlined
H = High; M = Moderate; and L = Low
* = Explains cultural modifications present in the landscape, ranging from negative intrusions (-4) to those that complement the scenic quality and promote visual harmony (2)

Narrative Landscape Description and Photograph. Sensitive Viewing Area and KOP No. 4 (Figure 17a-17h rev, see also Figure 5.13-2a-5.13-2b rev). This image was taken ~~0.9~~1.9 mile east of the Project boundary, facing west. This image represents the view of the Project as seen from State Route 78 at its intersection with 34th Avenue. This view demonstrates typical views of the Project as seen by travelers on State Route 78, and presents a "worst case" view of the Project from the road. Currently, agricultural land is visible in the foreground, with the Palo Verde Mesa shown in the mid-ground and Mule Mountains in the background. The elevated nature of the Palo Verde Mesa serves to partially obstruct views of the Project from this vantage point. There is some variety in colors and contrast of the area, however it is typical of the desert region and is not a dominant scenic element. Cultural modifications including transmission lines, and agricultural related structure are visible. Colors are largely mute tones, and the form and line is influenced by the tiered nature of the mesa in the midground with the mountains in the background. No water is visible from this KOP.

Figure 5.13-12
Scenic Attractiveness Evaluation Form for
Sensitive View Area and Kop No. 5

Landform	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Vegetation	H (5)	H/M (4)	**M (3)**	M/L (2)	L (1)
Water	H (5)	H/M (4)	M (3)	M/L (2)	**L (1)**
Color	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Adjacent Scenery	H (5)	H/M (4)	**M (3)**	M/L (2)	L (1)
Scarcity	H (5)	H/M (4)	**M (3)**	M/L (2)	L (1)
Modifications*	H (2)	H/M (1)	**M (0)**	M/L (-2)	L (-4)
Scenic Attractiveness Class B (14)					

Scenic Quality Classifications
A = 19 or more
B = 12 to 18
C = 11 or less

Notes:
Evaluation score is bold and underlined
H = High; M = Moderate; and L = Low
* = Explains cultural modifications present in the landscape, ranging from negative intrusions (-4) to those that complement the scenic quality and promote visual harmony (2)

Narrative Landscape Description and Photograph. Sensitive Viewing Area and KOP No. 5 (Figure 5.13-18a-18c rev, see also Figure 5.13-2a-5.13-2b rev) was taken facing northwest within the Cibloa National Wildlife Refute (NWR) and is ~~4.1~~4.6 miles southeast of the Project boundary. This photo represents a "worst case" vantage point of the Project as seen from the NWR, as the photo was taken from one of the most northerly boundaries of the Refuge. Additionally, the photo was taken from atop an elevated flood control berm which allowed for unobstructed views of the Palo Verde Mesa and project area. Viewed from grade level, the Project will be largely screened from visibility. This is due to the immediate presence of vegetation and/or natural variations in topography in the foreground of ones viewshed. The NWR is much more densely vegetated than the surrounding areas which contribute to a higher vegetative score. Additionally, though no direct views of water are seen facing this location, canals within the NWR are visible facing southeast from this same position. Views of the Colorado River and expanses of undeveloped open space characterize typical scenery from within the NWR, which are most visually interesting when compared to other KOPs. Furthermore, no outstanding cultural modifications are present within this viewshed.

Figure 5.13-13
Scenic Attractiveness Evaluation Form for
Sensitive View Area and Kop No. 6

Landform	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Vegetation	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Water	H (5)	H/M (4)	M (3)	M/L (2)	**L (1)**
Color	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Adjacent Scenery	H (5)	H/M (4)	**M (3)**	M/L (2)	L (1)
Scarcity	H (5)	H/M (4)	M (3)	**M/L (2)**	L (1)
Modifications*	H (2)	H/M (1)	M (0)	**M/L (-2)**	L (-4)
Scenic Attractiveness Class C (10)					

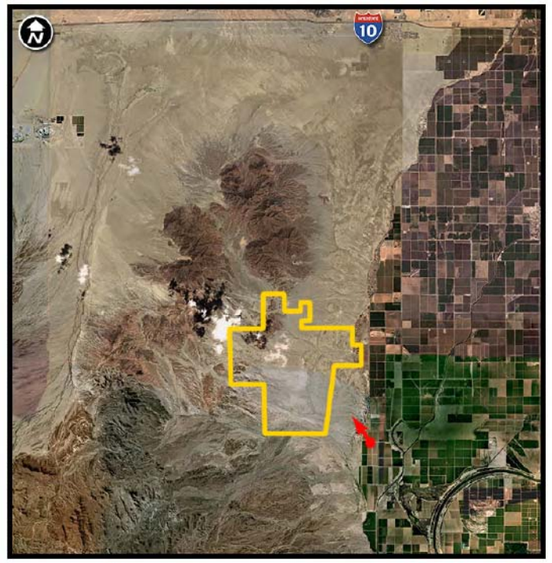
Scenic Quality Classifications
A = 19 or more
B = 12 to 18
C = 11 or less

Notes:
Evaluation score is bold and underlined
H = High; M = Moderate; and L = Low
* = Explains cultural modifications present in the landscape, ranging from negative intrusions (-4) to those that complement the scenic quality and promote visual harmony (2)

Narrative Landscape Description and Photograph. Sensitive Viewing Area and KOP No. 6 (Figure 5.13-19a-19b rev, see also Figure 5.13-2a-5.13-2b rev) was taken from the Neighbors Road off ramp at I-10. This photo offers full views of the Project site with agricultural land in the fore/midground and the Mule and Palo Verde Mountains in the background. This photo provides a holistic understanding of the area topography from a highly traveled route. From this elevated perspective, vast views of the Palo Verde Valley and its agricultural influence are highly prominent. No water is visible from this KOP. The flat valley is bordered by mountains which add an interesting line and texture contrasting with the flat and largely undeveloped agricultural lands. Colors are generally faded greens, browns and tans.

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	5:24:39 PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	West/Northwest
Latitude :	33° 25' 47.49" N
Longitude :	114° 44' 39.06" W

View from Closest Residence
Existing Conditions

June 2012

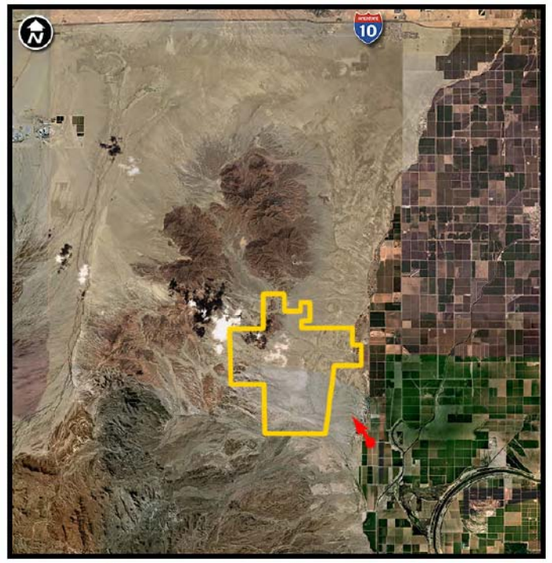
RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

URS

FIGURE 5.13-14a (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	5:24:39 PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	West/Northwest
Latitude :	33° 25' 47.49" N
Longitude :	114° 44' 39.06" W

View from Closest Residence
Proposed Facility

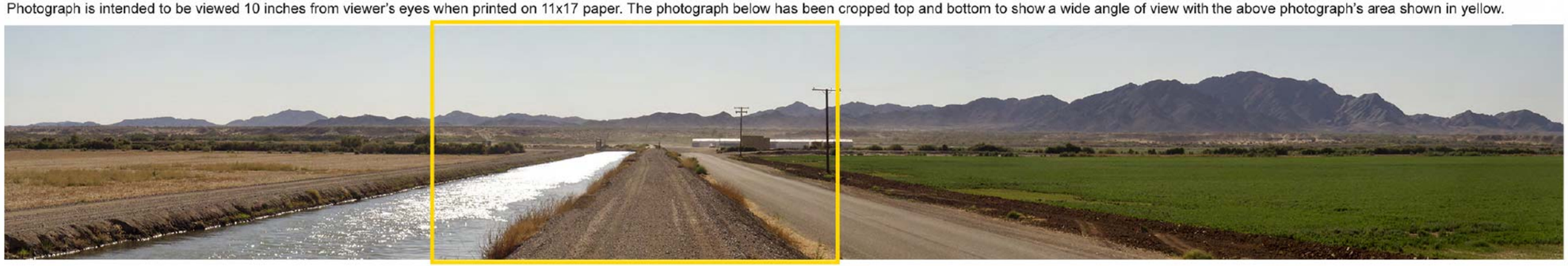
June 2012

RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

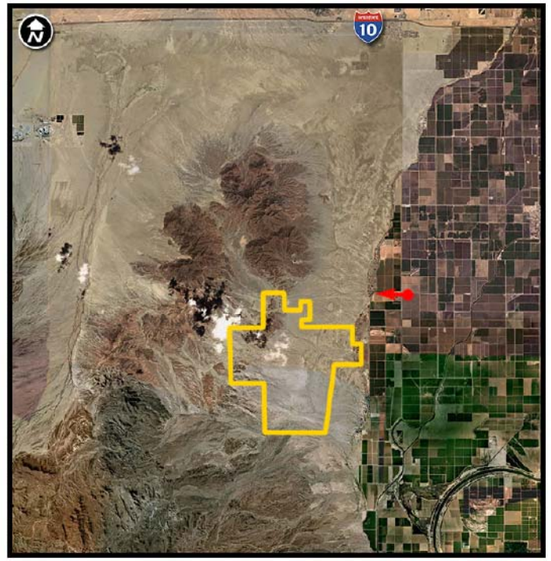
URS

FIGURE 5.13-14b (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.



OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	4:44:40 PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N NW to S SW
Latitude :	33° 29' 33.70" N
Longitude :	114° 43' 24.87" W

View from Bradshaw Trail Rd
Existing Conditions

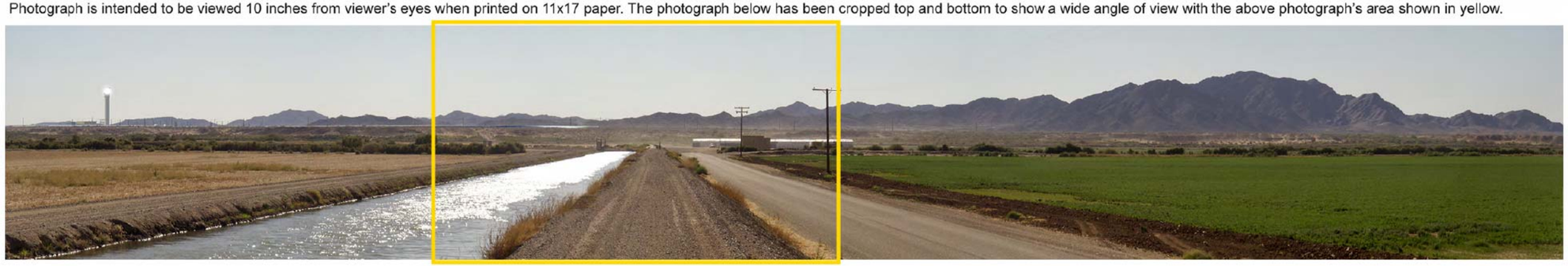
June 2012

RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

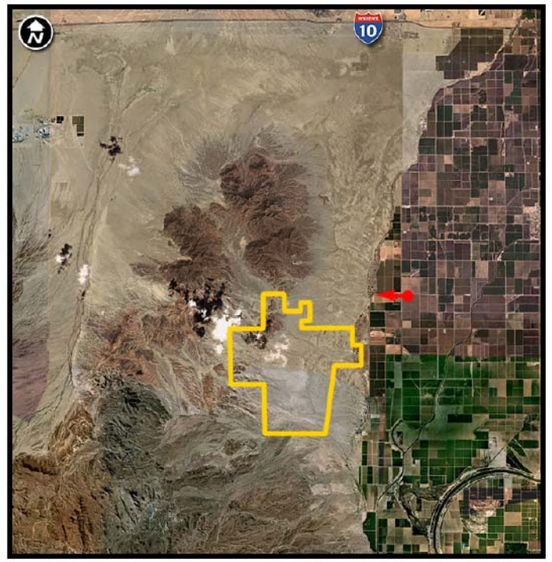
URS

FIGURE 5.13-15a (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.



OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	4:44:40 PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N NW to S SW
Latitude :	33° 29' 33.70" N
Longitude :	114° 43' 24.87" W

View from Bradshaw Trail Rd
Proposed Facility

June 2012

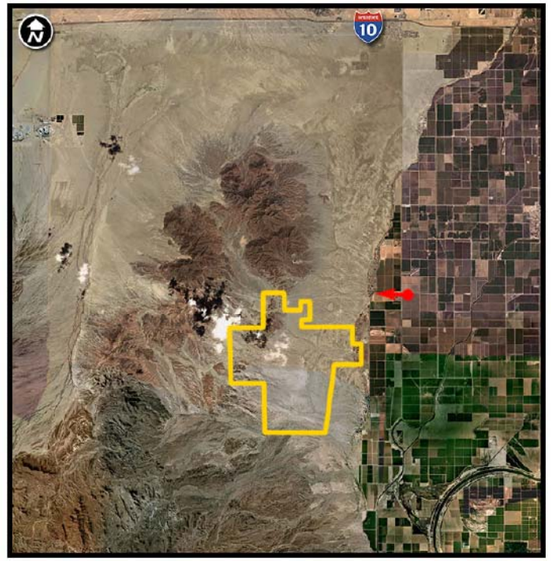
RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

URS

FIGURE 5.13-15b (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	4:44:40 PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N NW to S SW
Latitude :	33° 29' 33.70" N
Longitude :	114° 43' 24.87" W

View from Bradshaw Trail Rd
Existing Conditions

June 2012

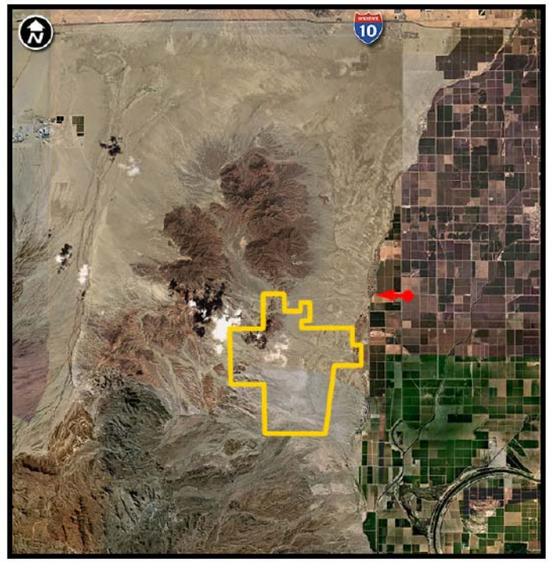
RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

URS

FIGURE 5.13-15c (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	4:44:40 PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N NW to S SW
Latitude :	33° 29' 33.70" N
Longitude :	114° 43' 24.87" W

View from Bradshaw Trail Rd
Proposed Facility

June 2012

RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

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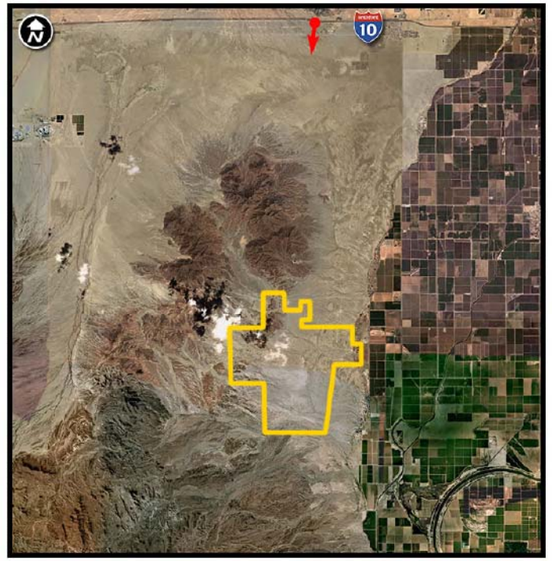
FIGURE 5.13-15d (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	12:54:33 PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	South
Latitude :	33° 36' 30.68" N
Longitude :	114° 46' 10.65" W

View from I-10 Bridge
Existing Conditions

June 2012

RIO MESA SOLAR
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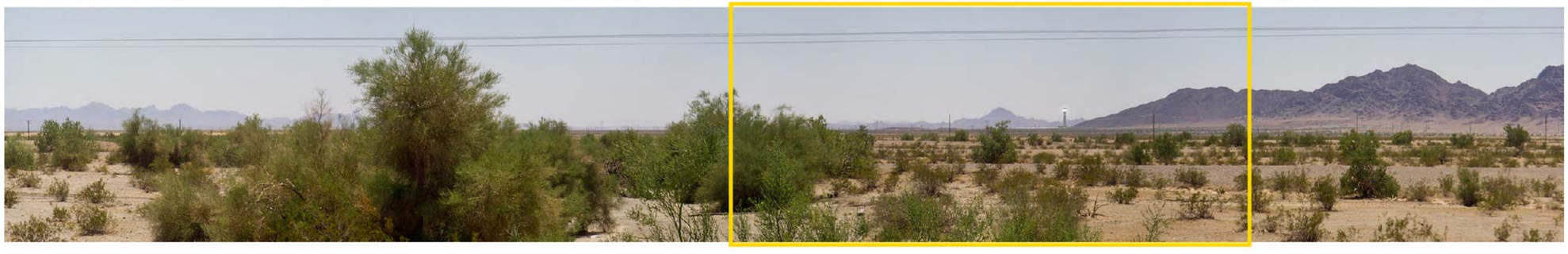
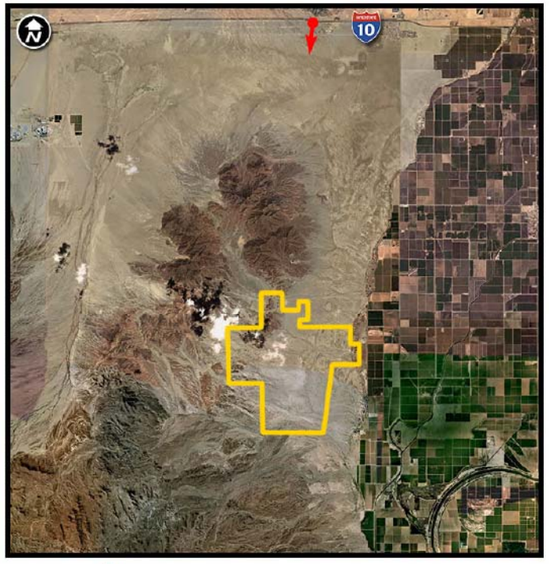
FIGURE 5.13-16a (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.



OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	12:54:33 PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	South
Latitude :	33° 36' 30.68" N
Longitude :	114° 46' 10.65" W

View from I-10 Bridge
Proposed Facility

June 2012

RIO MESA SOLAR
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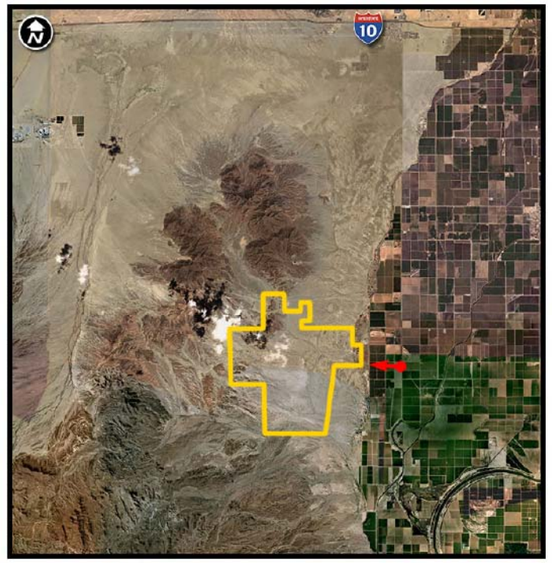
FIGURE 5.13-16b (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	5:03PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N/W - S/W
Latitude :	33° 27' 46.98" N
Longitude :	114° 43' 50.4" W

View from 34th Street
Existing Conditions

June 2012

RIO MESA SOLAR
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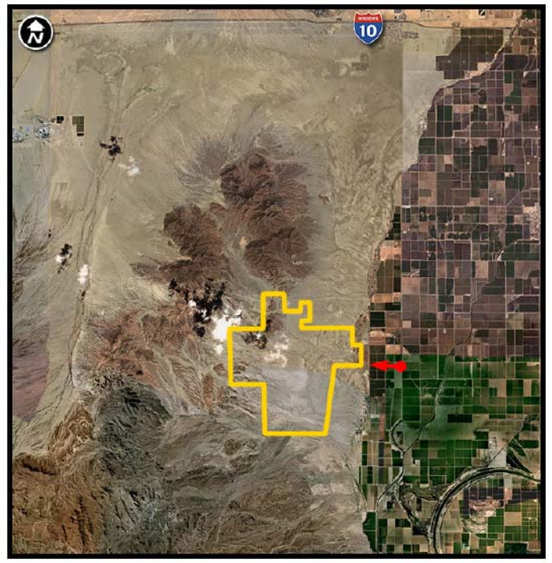
FIGURE 5.13-17a (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	5:03PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N/W - S/W
Latitude :	33° 27' 46.98" N
Longitude :	114° 43' 50.4" W

View from 34th Street
Proposed Facility

June 2012

RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

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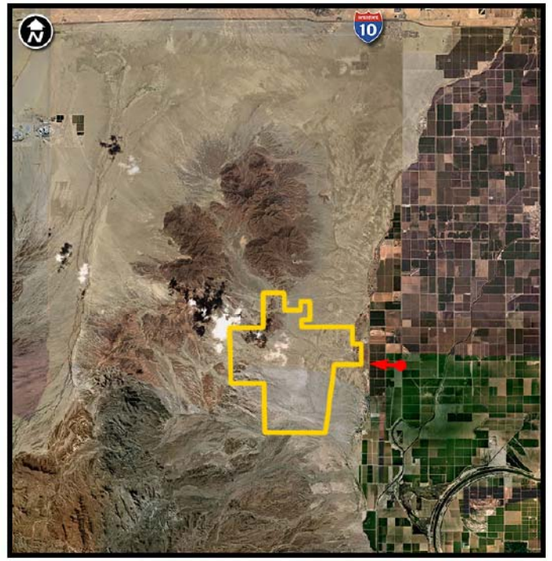
FIGURE 5.13-17b (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	5:03PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N/W - S/W
Latitude :	33° 27' 46.98" N
Longitude :	114° 43' 50.4" W

View from 34th Street
Existing Conditions

June 2012

RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

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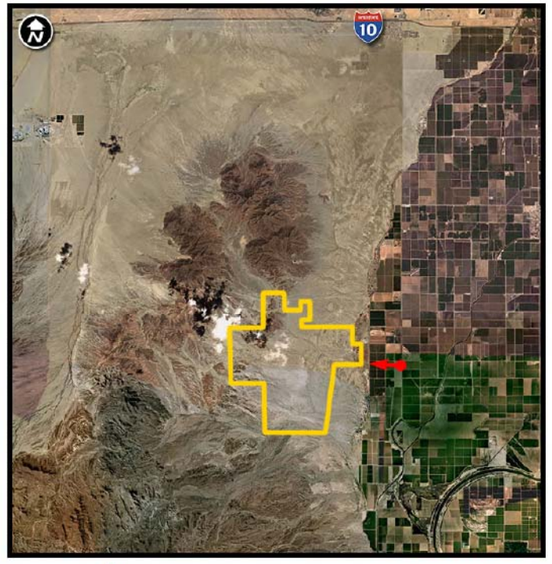
FIGURE 5.13-17c (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	5:03PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N/W - S/W
Latitude :	33° 27' 46.98" N
Longitude :	114° 43' 50.4" W

View from 34th Street
Proposed Facility

June 2012

RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

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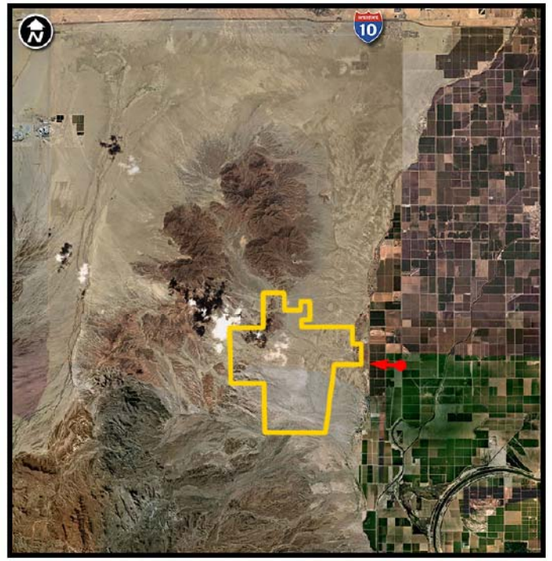
FIGURE 5.13-17d (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	5:03PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N/W - S/W
Latitude :	33° 27' 46.98" N
Longitude :	114° 43' 50.4" W

View from 34th Street
Existing Conditions

June 2012

RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

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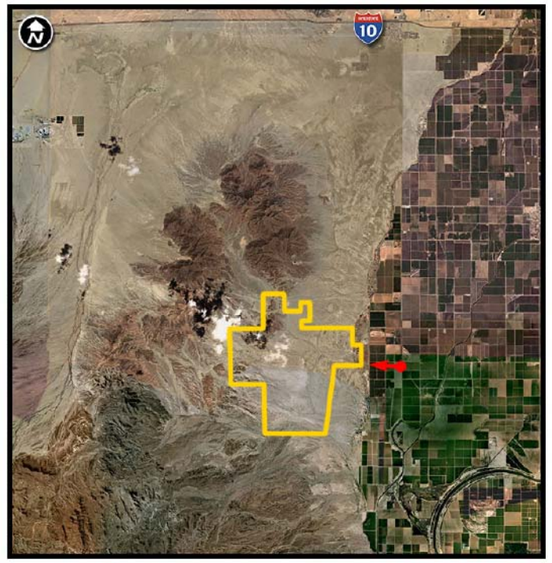
FIGURE 5.13-17e (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	5:03PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N/W - S/W
Latitude :	33° 27' 46.98" N
Longitude :	114° 43' 50.4" W

View from 34th Street
Proposed Facility

June 2012

RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

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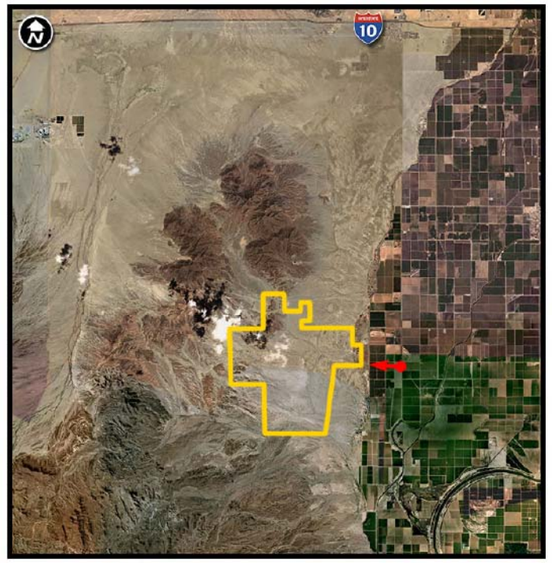
FIGURE 5.13-17f (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	5:03PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N/W - S/W
Latitude :	33° 27' 46.98" N
Longitude :	114° 43' 50.4" W

View from 34th Street
Existing Conditions

June 2012

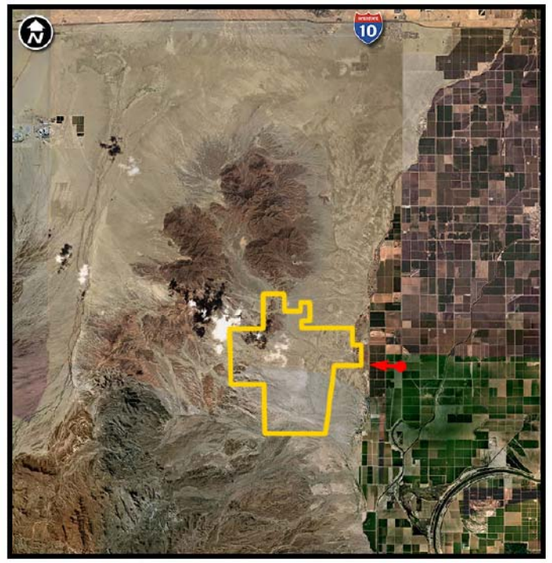
RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

URS

FIGURE 5.13-17g (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	5:03PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N/W - S/W
Latitude :	33° 27' 46.98" N
Longitude :	114° 43' 50.4" W

View from 34th Street
Proposed Facility

June 2012

RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

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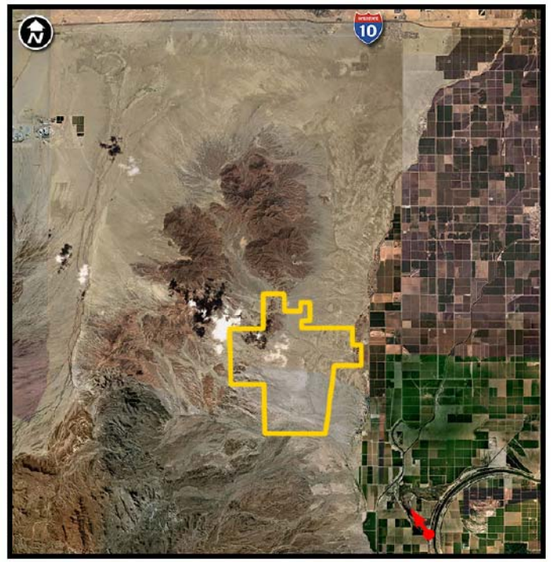
FIGURE 5.13-17h (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	1:14PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N - N/W
Latitude :	33° 23' 32.08" N
Longitude :	114° 42' 46.17" W

View from Cibola Wildlife Refuge
Existing Conditions

June 2012

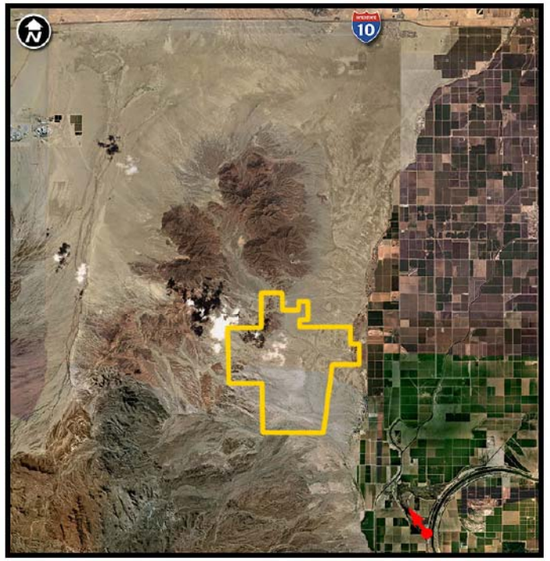
RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

URS

FIGURE 5.13-18a (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	1:14PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N - N/W
Latitude :	33° 23' 32.08" N
Longitude :	114° 42' 46.17" W

View from Cibola Wildlife Refuge
Proposed Facility

June 2012

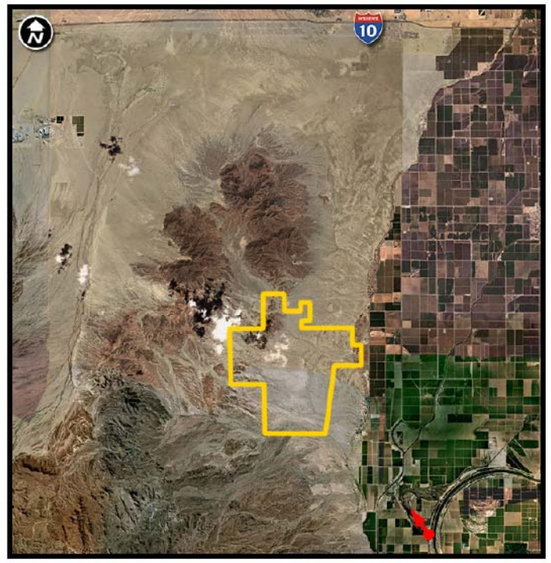
RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

URS

FIGURE 5.13-18a (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	1:14PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N - N/W
Latitude :	33° 23' 32.08" N
Longitude :	114° 42' 46.17" W

View from Cibola Wildlife Refuge
Existing Conditions

June 2012

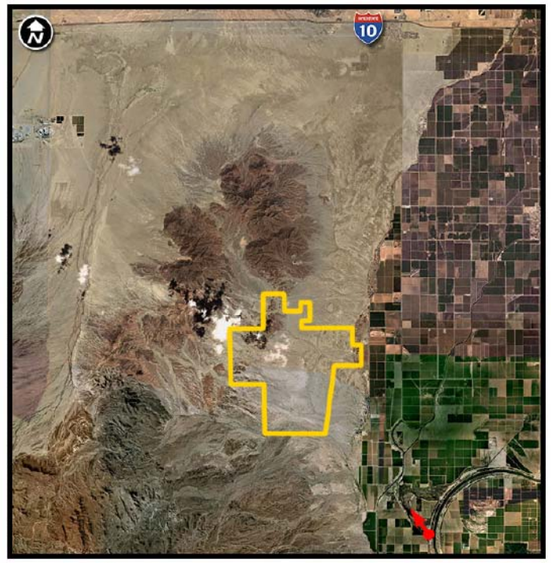
RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

URS

FIGURE 5.13-18b (REV)

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	1:14PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	N - N/W
Latitude :	33° 23' 32.08" N
Longitude :	114° 42' 46.17" W

View from Cibola Wildlife Refuge
Proposed Facility

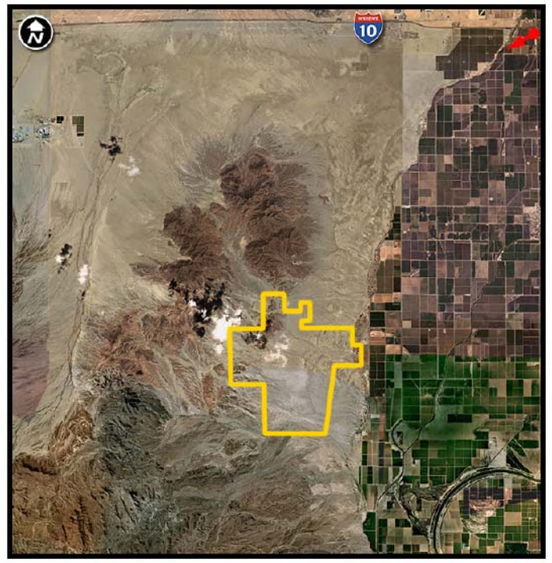
June 2012

RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

URS

FIGURE 5.13-18b (REV)

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	1:15:12 PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	S SW
Latitude :	33° 36' 20.07" N
Longitude :	114° 39' 28.03" W

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

View from neighbors road ramp to I-10 Near S.R.78
Existing Conditions

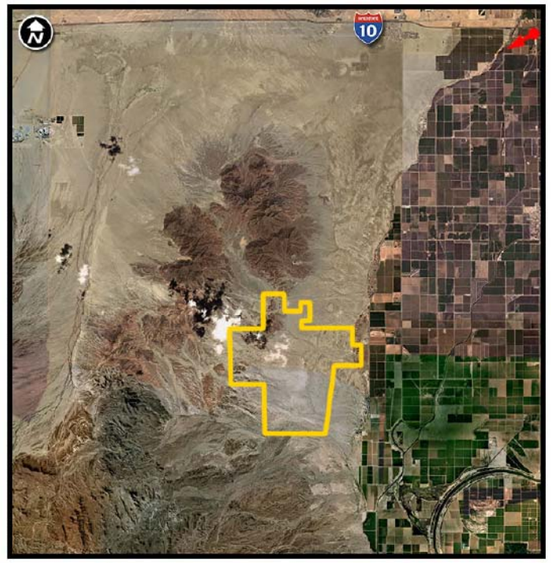
June 2012

RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

URS

FIGURE 5.13-19a (REV)

OVERVIEW MAP



Key Observation Point

Photograph Information

Time of photograph :	1:15:12 PM
Date of photograph :	8/4/2011
Weather condition :	Clear
Viewing direction :	S SW
Latitude :	33° 36' 20.07" N
Longitude :	114° 39' 28.03" W

Photograph is intended to be viewed 10 inches from viewer's eyes when printed on 11x17 paper. The photograph below has been cropped top and bottom to show a wide angle of view with the above photograph's area shown in yellow.

View from neighbors road ramp to I-10 Near S.R.78
Proposed Facility

June 2012

RIO MESA SOLAR
ELECTRIC GENERATING FACILITY

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FIGURE 5.13-19b (REV)