Appendix E

Aesthetics Technical Report

VISUAL RESOURCES TECHNICAL REPORT

Ivanpah-Control Project
Transmission Line Rating Remediation Program (TLRR)

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and
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1. INTRODUCTION

This technical report examines visual resources in the area of the Proposed Ivanpah-Control Project (Project) to determine how it could affect the aesthetic character of the landscape. The report includes a description of existing visual conditions and an evaluation of potential visual impacts on aesthetic resources resulting from the construction, operation, and maintenance of the Southern California Edison (SCE) Ivanpah-Control 115 kV Project. The Project includes rebuilding approximately 358 miles of existing 115 kV subtransmission facilities within an existing utility right of way (ROW) between the existing Control Substation and the existing Ivanpah Substation located in southeastern California.

Visual or aesthetic resources are generally defined as the natural and built features of the landscape that can be seen. Landforms, water, and vegetation patterns are among the natural landscape features that define an area's visual character, whereas buildings, roads and other structures reflect human modifications to the landscape. These natural and built landscape features are considered visual resources that contribute to the public's experience and appreciation of the environment. This report analyzes whether the Project would alter the perceived visual character of the environment and cause visual impacts.

This study conforms to the California Public Utility Commission (CPUC) requirements concerning Proponent's Environmental Assessment (PEA) visual resources evaluation. It also addresses criteria for visual impact analysis set forth by the California Environmental Quality Act (CEQA). Included are systematic documentation of the visual setting and evaluation of visual change and potential aesthetic impact associated with the Project. The report text is followed by a set of figures including maps, representative photographs, and computer-generated visual simulations showing existing and post-project views as seen from key observation points (KOPs).

1.1 Project Background

The California Public Utility Commission's (CPUC) General Order 95, Rules for Overhead Electric Line Construction (GO 95), establishes "requirements for overhead line design, construction, and maintenance, the application of which will ensure adequate service and secure safety to persons engaged in the construction, maintenance, operation or use of overhead lines and to the public in general." GO 95 includes standards for electrical conductor clearances (e.g., the minimum allowable height-above-ground for conductor, the minimum horizontal separation between conductors or conductor and a structure, etc.).

To ensure compliance with GO 95, as well as address other North American Electric Reliability Corporation (NERC) requirements, SCE has initiated its Transmission Line Rating Remediation (TLRR) Program to identify and remediate conductor clearance discrepancies. The purpose of the IC Project is to ensure compliance with CPUC GO 95 by remediating discrepancies along the Project route identified through SCE's TLRR Program, including modification or replacement of existing structures address identified GO 95 clearance standard discrepancies (i.e., inadequate overhead clearance distances).

1.2 Project Overview

Located in southern California, the Project extends approximately 358 miles and crosses Inyo County, northeast Kern County, and northern San Bernardino County. The Project contains the following five distinct geographic Segments:

- **Segment 1.** Control Substation, located approximately 5 miles southwest of the City of Bishop near the intersection of California State Route 168 (SR-168) and East Bishop Creek Road in unincorporated Inyo County, defines the northern terminus of the Proposed Project and Segment 1. From Control Substation, the Proposed Project alignment runs south through the Owens River Valley to the Haiwee Substation and Coso Substation; both are located in unincorporated Inyo County approximately 1.5 and 3.5 miles, respectively, south of South Haiwee Reservoir. From Coso Substation, the Proposed Project alignment continues south to Inyokern Substation in unincorporated Kern County, which defines the southern terminus of Segment 1. Segment 1 includes the Control-Haiwee-Inyokern 115 kV Subtransmission Line and the Control-Coso-Haiwee-Inyokern 115 kV Subtransmission Line.

- **Segment 2.** The existing Inyokern Substation defines the northern/western terminus of Segment 2; Inyokern Substation is located approximately 6 miles west-northwest of the City of Ridgecrest at the intersection of US Highway 395 (US 395) and SR-178/West Inyokern Road in unincorporated Kern County. From Inyokern Substation, the Proposed Project alignment runs south-southeast through unincorporated Kern County to the existing Randsburg Substation (located adjacent to the Randsburg Cutoff Road, east of the unincorporated community of Randsburg) and then through unincorporated San Bernardino County to the existing Kramer Substation (located adjacent to the intersection of US 395 and SR-58/Barstow-Bakersfield Highway in unincorporated San Bernardino County). The existing Kramer Substation defines the southern terminus of Segment 2.

- **Segments 3N and 3S.** The existing Kramer Substation defines the western terminus of Segments 3N and 3S. From the existing Kramer Substation, the Proposed Project alignment splits into two west-east alignments. The northern alignment (Segment 3N) runs east through unincorporated San Bernardino County to the existing Coolwater Substation (located approximately 1.5 miles east of the unincorporated community of Daggett). The southern alignment (Segment 3S) runs east to the existing Tortilla Substation (located in the southcentral portion of the City of Barstow) and then to the existing Coolwater Substation. The Coolwater Substation defines the eastern terminus of both Segment 3N and Segment 3S.

- **Segment 4.** The existing Coolwater Substation defines the western terminus of Segment 4. From the existing Coolwater Substation, Segment 4 runs northeast, generally paralleling Interstate 15 (I-15) to its eastern terminus at the existing Ivanpah Substation, which is located in Ivanpah Valley approximately 2 miles west of the Primm Valley Golf Club. Between the existing Coolwater Substation and the existing Ivanpah Substation, the alignment in Segment 4 taps off into (from west to east) the existing Dunn Siding Substation (located approximately 0.15 miles south of I-15 midway between Exit 217 and Exit 221 (Afton Road); the existing Baker Substation (located at the intersection of SR-

127/Death Valley Road and Silver Lane in the unincorporated community of Baker); and the existing Mountain Pass Substation, located approximately 2 miles north of the unincorporated community of Mountain Pass.

In each Segment, existing lattice steel towers (LSTs), lattice steel H-frames, wood pole H-frames, wood poles, and tubular steel poles (TSPs) would be replaced with TSPs, lightweight steel (LWS) (or equivalent) poles, or LWS (or equivalent) H-frames. In all Segments, existing termination structures at substations will be reused. New conductor would be installed on the replacement, modified, and reused structures. Replaced structures and conductor would be removed. Section 3.2 contains additional description of the IC Project's physical characteristics.

1.3 Methodology

The visual analysis is based on site reconnaissance and review of technical data including maps and drawings provided by SCE as well as review of aerial and ground level photographs of the project area, review of public policy and planning documents, and computer-generated visual simulations that portray the project's appearance. Field observations were conducted in October 2017 to document existing visual conditions in the project vicinity, including potentially affected sensitive viewing locations.

The study process began with desktop review of project maps, geographic information system (GIS) data and regional atlas documents as well as review of federal, state, and local plans and policies. The *CH and ICKI Visual Resource Sensitivity Briefing Memos*, prepared by Environmental Vision contain general description of landscape character within the project area, representative photo-documentation, and initial recommendations on key sensitive viewing locations for potential visual simulation.

A set of visual simulations were prepared as part of this technical study to support the impact analysis and illustrate before-and-after visual conditions in the Project area as seen from 16 key sensitive public viewpoints, or KOPs. The set of KOPs were selected in consultation with SCE and represent views where the project would be most visible to the public from sensitive locations such as designated scenic roadway corridors, recreation facilities, areas in proximity to residences, or public land subject to scenic resource management policy.

This visual assessment employs methods based, in part, on those adopted by the U.S. Bureau of Land Management (BLM), the U.S. Department of Agriculture Forest Service (USFS), U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA), and other accepted visual analysis techniques. The impact analysis describes change to existing visual resources, and assesses viewer response to that change. Central to this assessment is an evaluation of key views from which the project will be visible to the public. The visual impact assessment is based on evaluation of the project-related changes to the existing visual resources that will result from construction and operation of the project; the changes were assessed, in part, by evaluating views of the Project provided by the computer-generated visual simulations and comparing them to the existing visual environment. Section 3.3.1:Visual Simulations and Visual Change, includes a description of the technical methods that were employed to prepare the visual simulations.

2. ENVIRONMENTAL SETTING

2.1 Visual Setting

2.1.1 Regional and Local Landscape Context

The Project is located in southeastern California, extending an overall length of approximately 358 miles through portions of Inyo, Kern and San Bernardino counties. Situated at the confluence of the Sierra Nevada mountains, Great Basin Desert and Mojave Desert, this region is characterized by abrupt changes in topography, with steep, relatively narrow mountain chains separated by flat, arid alluvial basins. Figure 1 shows the Project location within the regional landscape context.

The northern portion of the Project passes through the Owens Valley, an approximately 77 mile-long, 5 to 10 mile-wide high desert river basin that stretches from the Volcanic Tablelands near Bishop in the north to Owens Lake in the south. Visible against the backdrop of the eastern fault scarp of the Sierra Nevada mountains to the west, the White Mountains, Inyo Mountains to the east and Coso Range to the southeast, this part of the Project area consists of alluvial plains, punctuated by ancient lava fields and thermal hot springs, and includes riparian areas associated with the Owens River and adjacent thermal springs, as well as dry lakebeds or playas with arid expanses largely devoid of vegetation. South of the Owens Valley the Project enters the more open, increasingly arid landscape of the Mojave Desert, an approximately 47,900 square-mile area bounded on the west by the southern Sierra Nevada and Tehachapi Mountains, on the southwest by Southern California's Transverse Range and to the east by the lower Colorado River valley, and featuring broad shallow playas interspersed with isolated mountainous outcrops.

Reflecting the arid desert climate, relatively sparse, low-growing scrub vegetation with its characteristic grey-green color is found throughout the region, affording open views across the landscape. Limited areas of irrigated cropland can be found in the vicinity of the Owens River and Indian Wells Valley in the northern Project area, and in the vicinity of Barstow in the Mojave River valley to the south. Features in this landscape also include rugged terrain with large areas of exposed, multicolored rock and flat expanses of reflective alluvial deposits.

Elevations along the route in the Project area range from approximately 4,800 feet above sea level in the northern Owens Valley to approximately 3,500 feet above sea level at Owens Lake at the southern end of the valley, while surrounding mountain peaks reach up to 14,000 feet above sea level on either side of valley. South and east of the Owens Valley elevations along the Project corridor range from approximately 2,450 feet above sea level at Inyokern, within Indian Wells Valley, to as low as approximately 930 feet near the town of Baker east of Barstow. The route reaches its highest elevation of approximately 5,390 feet above sea level near the eastern terminus of the Project, in the Clark Mountains.

The majority of the Project area consists of undeveloped open space and is sparsely populated. Residential areas are concentrated in widely scattered population centers, located primarily in the northern and western portion of the Project area in close proximity to the major transportation corridors bisecting the region. From its northern terminus south to Kramer Junction the Project

generally parallels U.S. Highway 395 (US 395), the main north- south transportation artery through the region. This all-season highway provides access to the region's diverse, natural landscape scenery within the Owens Valley and the surrounding mountains, attracting visitors that include hikers, campers and winter recreational visitors. The resident population within the Owens Valley and areas to the south is highly localized along this highway corridor, and include the communities of Big Pine, Independence and Lone Pine, with a combined population of approximately 4,400. Smaller, scattered residential areas further south along the US 395 corridor include Olancha and the nearby community of Cartago, at the southern edge of Owens Lake, the area around Inyokern, within Indian Wells Valley, and the mining town of Randsburg.

East of Kramer Junction, from Barstow to the Project's eastern terminus in the Ivanpah Valley the Project closely parallels Interstate 15 (I-15), which constitutes the main east-west transportation link between Los Angeles and Las Vegas. Barstow and the surrounding Mojave Valley functions as a major highway and railroad hub where several regional highways converge, including I-15, I-40 and SR-58 and represents the largest concentration of population in the Project area, with approximately 24,000 residents. The I-15 corridor east of Barstow is for the most part sparsely inhabited, with residents generally limited to widely scattered service locales along the interstate, the most important being Yermo and Baker. Within those portions of the Project area removed from the major transportation arteries, access within the region is limited to widely dispersed secondary roadways such as SR-190 in the Owens Valley, SR-178 within Indian Wells Valley, and SR-127 east of Barstow. A network of unpaved roadways, generally restricted to OHV use, provides additional access within the Project vicinity.

Approximately half of the project alignment crosses federal land administered by the Bureau of Land Management (BLM). In addition, the alignment passes in close proximity to the Mojave National Preserve, the Mojave Trails National Monument, and U.S. Air Force, Marine Corps, and Navy facilities.

The Project's landscape setting is comprised of diverse natural scenery as well as a variety of built features that include infrastructure associated with regional highway, electrical utility and railway corridors. Established utility elements include wood utility poles supporting distribution and other overhead power lines, telecommunication towers, and substations. In addition, lattice structures supporting several unrelated power alignments pass through the Project area and cross or closely parallel the Project along much of its route.

2.1.2 Project Viewshed

The project viewshed is defined as the general area from which a project is visible. For purposes of describing a project's visual setting and assessing potential visual impacts, the viewshed can be broken down into foreground, middleground, and background zones. The foreground is defined as the zone within 0.25 to 0.5 mile from the viewer. The middleground is defined as the zone extending from the foreground to a maximum of 3 to 5 miles from the viewer; and the background zone that extends from the middleground to infinity (U.S. Department of Agriculture Forest Service 1995).

Viewing distance is a key factor that affects the potential degree of project visibility. Visual details generally become apparent to the viewer when they are observed in the foreground, at a distance of 0.25 to 0.5 mile or less. Analysis of the project primarily considers the potential effects of project elements on foreground viewshed conditions although consideration is also given to the potential effects on the middleground and background views.

2.1.3 Landscape Units and Representative Views

Five landscape units corresponding to the five Segments of the Project are utilized for purposes of documenting and describing existing visual conditions within the Project viewshed. These landscape units or subareas are based upon the physical and cultural landscape characteristics found along the Project's approximately 358 mile-long corridor. Table 1 summarizes the landscape units in terms of their location and approximate length. Figure 1 depicts the location of landscape units in relationship to the project alignment and photograph viewpoints.

Table 1: Summary of Landscape Units

Landscape Unit / Project Segment	Location	Approximate Length
1: Control Substation to Inyokern Substation / 1	Inyo County and Kern County	126 miles
2: Inyokern Substation to Kramer Substation / 2	Kern County and San Bernardino County	48 miles
3: Kramer Substation to Coolwater Substation / 3N	San Bernardino County	44 miles
4: Kramer Substation to Coolwater Substation / 3S	San Bernardino County	44 miles
5: Coolwater Substation to Ivanpah Substation / 4	San Bernardino County	96 miles

Figures 2a through 2y present a set of 50 photographs taken from representative locations along the alignment, within the Project viewshed. Table 2, a summary of the set of representative photographs, includes information on the viewpoint location, primary type of viewers, backdrop conditions, and approximate viewing distance to the Project. Table 2 also highlights a subset of the photographs that are KOPs. Taken together, these photographs convey a general sense of existing visual character of the landscape within the vicinity of the Project. The set of photographs also demonstrates that existing transmission, subtransmission and distribution facilities within the Project viewshed, including those of the Project, are established elements of the visual setting of the area.

Table 2: Summary of Representative and KOP Photographs

Photograph number and Location * denotes KOP	Primary Viewers	Viewing Distance	Predominant Backdrop for Project Structures
LANDSCAPE UNIT 1			
1. SR-168 near Control Substation	• Recreational Motorists • Local Motorists	0.5 mile	Landscape
2. Sunland Lane south of Bishop	• Residents	500 feet	Sky
*3. Gerkin Road south of Bishop	• Residents	600 feet	Sky

Photograph number and Location * denotes KOP	Primary Viewers	Viewing Distance	Predominant Backdrop for Project Structures
4. US 395 north of Big Pine at Big Pine Canal	• Regional Motorists	650 feet	Landscape and Sky
*5. Baker Creek Campground, Big Pine	• Recreationalists	500	Landscape and Sky
6. Cornell Street near Rossi Lane, Big Pine	• Residents	< 500 feet	Landscape
7. US 395 near Tinemaha Reservoir	• Regional Motorists	1,000 feet	Landscape
8. Division Creek Roadside Rest Area	• Regional Motorists	> 2 miles	Landscape
9. Manzanar Historic Site	• Recreationalists	1 mile	Landscape
*10. US 395 crossing north of Lone Pine	• Regional Motorists	500 feet	Sky and Landscape
11. Goodwin Road in Lone Pine Paiute-Shoshone Reservation	• Residents	0.5 mile	Landscape
12. Boulder Creek RV Resort, south of Lone Pine	• Residents • Recreationalists	0.5 mile	Landscape
13. Owens Lake visitor information center east of US 395/ Lubken Canyon Road Junction	• Recreationalists	1,000 feet	Landscape
*14. US 395 crossing near Owens Lake	• Regional Motorists	< 500 feet	Sky
*15. Whitney Street near Mojave Street Cartago	• Residents	1,100 feet	Landscape
*16. SR-190 crossing near Olancha	• Regional Motorists	< 500 feet	Landscape
17. Fall Road, Olancha	• Residents	600 feet	Landscape
18. North Haiwee Road near Haiwee Reservoir	• Recreational Motorists • Recreationalists	< 500 feet	Sky
19. Coso Junction Safety Roadside Rest Area	• Regional Motorists	0.45 miles	Landscape
*20. Fossil Falls Campground and Trail	• Recreationalists • Recreational Motorists	1,800 feet	Landscape
21. US 395 at Little Lake	• Regional Motorists	1,000 feet	Landscape and Sky
22. BLM OHV Road SE109	• Recreational motorists	500 feet	Sky
*23. Patrice Avenue, Inyokern	• Residents	< 500 feet	Sky
24. SR-178 looking toward Inyokern Substation	• Regional Motorists	1,200 feet	Landscape
LANDSCAPE UNIT 2			
*25. Sydnor Avenue at Mercury Street, Inyokern	• Residents	800 feet	Sky
26. US 395 near Inyokern	• Local and Regional Motorists	500 feet	Landscape and Sky
27. Garlock Road	• Local and Regional Motorists	1,000 feet	Landscape
*28. Lexington Avenue Randsburg	• Residents • Local motorists	< 500 feet	Sky and Landscape
29. Fremont Peak Road at US 395	• Regional motorists	500 feet	Sky

Photograph number and Location * denotes KOP	Primary Viewers	Viewing Distance	Predominant Backdrop for Project Structures
	• Recreationalists		
LANDSCAPE UNIT 3			
30. US 395 near Kramer Junction	• Regional motorists	1,000 feet	Sky
31. US 395 at Kramer Junction	• Regional motorists	500 feet	Sky
*32. Harper Dry Lake Wildlife Viewing Area	• Recreationalists	1.0 mile	Sky
33. Holstead Road near Hinkley Road	• Residents • Local motorists	600 feet	Landscape and Sky
34. Daggett-Yermo Road near Silver Valley High School	• Regional motorists	1,100 feet	Landscape
LANDSCAPE UNIT 4			
35. SR-58 near Barstow	• Regional motorists	600 feet	Landscape
*36. Bonanza Road near H Street, Barstow	• Residents • Local motorists	< 500 feet	Sky
37. SR-247 near Barstow	• Regional motorists • Recreational motorists	800 feet	Sky
*38. I-40 near Daggett	• Regional motorists	500 feet	Landscape and Sky
39. Route 66-National Trails Highway near Daggett	• Regional Motorists	650 feet	Landscape and Sky
LANDSCAPE UNIT 5			
*40. Carol Ann Drive at Crystal Lakes Estates east of Barstow	• Residents • Local motorists	700 feet	Sky
41. I-15 near Field Road	• Regional motorists	650 feet	Sky
*42. Clyde V. Kane Safety Roadside Rest Area on I-15	• Regional motorists at roadside rest area	600 feet	Sky
43. Afton Canyon Road	• Recreationalists	500 feet	Landscape and Sky
44. I-15 near Basin Road	• Regional motorists	700 feet	Landscape
*45. SR-127 at Junior High School, Baker	• Regional and local motorists • School visitors	900 feet	Sky
46. Halloran Springs Wash near Halloran Springs Road	• Recreationalists	1,500 feet	Landscape
47. I-15 west of Halloran Summit Road	• Regional motorists	800 feet	Landscape
48. Valley Wells Safety Roadside Rest Area on I-15 near Cima Road	• Regional motorists at roadside rest area	0.5 mile	Landscape
49. Excelsior Mine Road	• Recreationalists	1,200 feet	Sky
50. Clark Mountain Road near Mojave Preserve	• Recreationalists	800 feet	Landscape

Landscape Unit 1 (Photographs 1 through 24)

From the northern Project terminus at Control Substation, Landscape Unit 1 extends approximately 126 miles, traversing the length of the Owens Valley and continuing through Rose Valley to Inyokern Substation in Indian Wells Valley to the south. From Control Substation, situated approximately 3.5 miles west of Bishop, the Project alignment heads in a southeasterly direction across an open, gently sloping high desert landscape, passing near several isolated residential developments nestled against the adjacent eastern Sierra foothills. Approximately 9 miles south of Bishop, the route passes within less than 100 feet of the US 395 corridor, and then generally parallels this four-lane highway at varying distances from the roadway, crossing it multiple times as it runs through the valley. The Project alignment comes within close proximity to tribal land and other residential communities as it passes the western and eastern periphery of Big Pine and Lone Pine respectively. The route then skirts the western edge of the Owens Lake basin, where it crosses US 395 once again, passing to the east of the historic highway towns of Cartago and Olancha, and the Cartago Wildlife Area. The Project passes within approximately 700 feet west of Haiwee Reservoir, a series of open water storage facilities, and is routed through Haiwee Substation and Coso Substation, subsequently entering a largely uninhabited alluvial basin, approximately 8 miles south of the reservoir. Continuing along the east side of US 395, the alignment runs alongside a series of volcanic escarpments for approximately 10 miles, before crossing into Kern County where it enters the China Lake basin and Indian Wells Valley near the western boundary of the China Lake Naval Air Weapons Station and terminating at the Inyokern Substation at the northern edge of the Mojave Desert.

Photographs 1 through 24 show representative views of the Project and surrounding landscape character found within Landscape Unit 1. Eight of these views are KOPs selected to show the Project as seen from sensitive locations including viewpoints near the communities of Bishop, Big Pine, Olancha, Cartago, and Inyokern, as well as US 395, SR-190, and the Fossil Falls BLM recreation site (refer to Figures 1 and 2). Appendix A includes a detailed description of these representative photographs.

Landscape Unit 2 (Photographs 25 through 29)

Landscape Unit 2 extends approximately 48 miles from Inyokern Substation to Kramer Substation located at the junction of US 395 and SR-58. From Inyokern Substation, the Project route traverses the southern portion of Indian Wells Valley, crossing US 395 approximately 0.75 mile from the substation, passing an area of widely dispersed residences around the unincorporated community of Inyokern. The alignment traverses the El Paso Mountains where it reaches an elevation of approximately 4,500 feet above sea level. After descending into a comparatively narrow desert basin and crossing Garlock Road, a local roadway connecting US 395 to SR-14 on the west, the alignment enters the Rand Mountains, where it skirts the historic mining community of Randsburg and enters and exits the Randsburg Substation. Descending into the generally flat expanse of the western Mojave Desert southeast of Randsburg the alignment crosses into San Bernardino County, where for approximately the next 18 miles it closely parallels US 395 and crosses a railroad corridor approximately 0.75 mile north of Kramer Junction, and terminating at Kramer Substation.

Photographs 24 through 29 show representative existing views of the Project and surrounding landscape character found within Landscape Unit 2. Two of the views are KOPs selected to show

the Project as seen from locations near residences in Inyokern and Randsburg (refer to Figures 1 and 2, and Appendix A).

Landscape Unit 3 (Photographs 30 through 34)

At Kramer Junction, the Project turns in an easterly direction, and divides into two separate alignments that extend north and south of SR-58 for approximately 44 miles before merging at Coolwater Substation, located approximately 9.5 miles southeast of Barstow. From Kramer Substation the northern extension, identified as Landscape Unit 3 or Segment 3N, parallels US 395 for approximately 0.5 mile before turning east and paralleling SR-58 approximately 0.4 mile north of the highway for approximately 2.8 miles, at which point the roadway veers to the southeast and the alignment continues in an easterly direction, passing in close proximity to a large solar photovoltaic generation facility and skirting the south edge of Harper Dry Lake, a mostly arid playa with a seasonal wetland that includes a wildlife viewing area. At the eastern edge of Harper Dry Lake the Project alignment passes within a few hundred feet of several isolated rural residences, north of the town of Hinkley, as it traverses an otherwise unpopulated desert basin. Approximately 8 miles east of Harper Dry Lake, the alignment turns to the southeast, traversing and subsequently paralleling the northern edge of a series of granitic outcrops that extend north and east of Barstow. Entering the Mojave River Valley, the alignment veers south, crossing Interstate 15 (I-15) where it passes in close proximity to a school and RV park west of the community of Yermo before reaching Coolwater Substation, within a somewhat populated and developed area approximately 8 miles east of central Barstow.

Photographs 30 through 34 are representative existing views of the Project and surrounding landscape character found within Landscape Unit 3. One of these views is a KOPs selected to show the Project as seen from Harper Dry Lake, a BLM Area of Critical Environmental Concern (ACEC) and BLM Watchable Wildlife Site (refer to Figures 1 and 2, and Appendix A).

Landscape Unit 4 (Photographs 35 through 39)

Landscape Unit 4/Segment 3S, is the southern segment of the split alignment between Kramer Substation and Coolwater Substation extending southeast from Kramer Substation for approximately 10 miles, then east for approximately 9 miles as it passes the uninhabited southern edge of the Harper Dry Lake basin south of SR-58. Approximately 7 miles west of Barstow, the Project route enters Hinkley Valley, where it crosses an area of widely scattered rural residences and agricultural land located within the Mojave River floodplain. The Project parallels and subsequently crosses the Mojave River as it approaches Barstow's western outskirts, where it veers to the southeast, and within a distance of less than a mile the alignment crosses SR-58, the National Trails Highway (historic Route 66), and I-15 before turning east once again. Skirting Barstow's southern perimeter, the alignment traverses a residential subdivision, then crosses open desert, where it passes within 0.3 mile of a public park and recreation area, and crosses SR-247 at the northern edge of a BLM administered OHV area. For approximately the next 8.5 miles the Project traverses a largely uninhabited expanse of gently sloping terrain along the southern edge of the Mojave River Valley, enters and exits the Tortilla Substation, and crosses I-40 and the National Trails Highway less than a mile from Coolwater Substation, the end of this landscape unit.

Photographs 35 through 39 show representative existing views of the Project and surrounding landscape character found within Landscape Unit 4. Two KOP simulations show the Project from a viewpoint near residences in Barstow and from I-40, an Eligible State Scenic Highway and San Bernardino County scenic route (refer to Figures 1 and 2, and Appendix A).

Landscape Unit 5 (Photographs 40 through 50)

From Coolwater Substation, Landscape Unit 5 extends in a northeasterly direction for approximately 96 miles, largely following the I-15 corridor to the Project's terminus at Ivanpah Substation. In Landscape Unit 5, the subtransmission line is routed through Dunn Siding, Baker, and Mountain Pass substations between Coolwater Substation and Ivanpah Substation. In this landscape unit the alignment initially heads north as it crosses the Mojave River and the adjacent Union Pacific railroad before turning to the northeast where it follows the northern edge of the lower Mojave River basin, a flat expanse of open desert terrain with irrigated cropland parcels and widely scattered rural homesteads. Within this area the Project route passes in close proximity to several small residential developments northeast of the unincorporated community of Yermo and also crosses BLM administered land at several locations. The Project then continues northeast, traversing a predominantly uninhabited landscape comprised of narrow mountainous outcrops separating isolated dry lake basins or playas. The alignment crosses I-15 at several locations in this area and also passes the northern edge of the Mojave Trails National Monument near Afton Canyon, a recreation area managed by the BLM. It subsequently skirts the northern boundary of the Mojave National Preserve and the unincorporated desert community of Baker, where the route crosses SR-127, the principal southern access into Death Valley National Park. After traversing the Clark Mountain range, where surrounding peaks reach approximately 8,000 feet above sea level, the project alignment makes a steep descent into Ivanpah Valley, where it passes alongside solar thermal and photovoltaic power generating facilities before terminating at Ivanpah Substation.

Photographs 40 through 50 show representative views of the Project and surrounding landscape character found within Landscape Unit 5. Three of the views are KOPs selected to show the Project as seen from a residential area, a roadside safety rest area along I-15, and SR-127, an Eligible State Scenic Highway and San Bernardino County scenic route where the alignment is in proximity to a public school in the Town of Baker (Figures 16, 17, and 18). A description of the representative photographs is included in Appendix A.

2.1.4 Potentially Affected Viewers

Accepted visual assessment methods, including those adopted by the BLM and other federal agencies, establish sensitivity levels as a measure of public concern for changes to scenic quality. Viewer sensitivity, one of the criteria used to evaluate visual impact significance, can be divided into high, moderate, and low categories. Factors considered in assigning a sensitivity level include viewer activity, view duration, viewing distance, adjacent land use, and special management or planning designation. According to the BLM (1984), visual sensitivity will vary with the type of users. The primary viewer groups within the Project viewshed are described below.

2.1.4.1 Motorists

Motorists or roadway travelers are the largest viewer group in the project area. Included in this group are motorists traveling on the region's network of frequently used paved roadways with views of the Project. In Landscape Unit 1 the Project parallels US 395 and crosses it four times between Bishop and Inyokern; between Bishop and Big Pine the Project runs parallel to SR-168; and the alignment crosses SR-190. Less heavily used roadways in the Project vicinity include SR-136, which connects to SR-190 from US 395 south of Lone Pine, and Gherkin Road, crossed and paralleled by the Project, and used by residents south of Bishop.

The project parallels US 395 for most of Landscape Unit 2, and both Landscape Units 3 and 4 include crossings of I-15. In Landscape Unit 4 the Project crosses SR-58 and SR-247 near Barstow, and to the east crosses and parallels both I-40 and Route 66. In Barstow, the Project also follows and crosses residential streets. Within Landscape Unit 5, the Project largely follows I-15, both running parallel and crossing it, and also crossing SR-127 at the town of Baker.

Motorists include both local and regional travelers who are familiar with the visual setting and recreational travelers using area roadways on a less regular basis. Local travelers include those commuting to or residents of cities in the Project area, as well as drivers of commercial vehicles. Regional motorists include long distance truck drivers, and recreational visitors to the area as noted below. The duration of motorists' views is generally brief, and depending upon the travel route and type of roadway, could range from a few seconds to up to several minutes. Viewer sensitivity is considered low to moderate.

2.1.4.2 Recreationalists

Recreationalists including visitors to the Inyo National Forest, Mojave National Preserve, Mojave Trails National Monument, and BLM lands constitute another important viewer group. Activities include sightseeing, winter sports, fishing, on- and off-road vehicle touring, hiking, bird watching, wildlife viewing, photography, stargazing, camping, horseback riding, running, bicycling, and backpacking. Off-road vehicle users include those using unpaved BLM off-highway vehicle (OHV) recreation routes within Coso Range Wilderness, Olancha Dunes OHV Area, Stoddard Valley OHV Area, as well as users of other OHV routes located on BLM administered land. Although the total duration of views for much of this viewer group tends to be short, the general expectation of a natural-appearing landscape setting among some of these recreationalists raises the sensitivity to moderate to high.

2.1.4.3 Residents

As outlined above, most of the Project area is sparsely inhabited. Within Landscape Unit 1 residential populations are primarily concentrated in and immediately around Bishop, Big Pine and Lone Pine in the Owens Valley. Where residences border the Project corridor including at the western edge of Big Pine, the town of Cartago, and within Indian Wells Valley north of Inyokern, residential viewers experience close-range views of the Project. Landscape Unit 2 includes scattered residences in proximity to the Project south of Inyokern and residences in the community of Randsburg. In Landscape Unit 3 the project alignment passes near the community of Yermo and a limited number of residences in the valley near Harper Dry Lake. In Landscape Unit 4 the Project passes near residences in Hinkley west of Barstow and also crosses a

residential area within the city of Barstow; in both cases close-range residential views of the Project are available. Within Landscape Unit 5 a few small residential developments situated along I-15 east of Barstow and residences on the north side of the town of Baker are located in proximity to the Project alignment. Residential views tend to be long in duration, and the sensitivity of this viewer group is considered moderate to high.

2.1.5 Scenic Resources

Scenic resources are those natural and built landscape patterns and features that are considered visually or aesthetically pleasing, and therefore contribute positively to the definition of a distinct community or region. Scenic resources may include trees or other important vegetation; landform elements, such as hills or mountains, ridgelines or rock outcroppings; water features, such as rivers, bays, or reservoirs; and landmarks, important buildings, or historic sites and structures.

Dominant features of the landscape and scenic resources that are visible from many locations within the northern Project area include the Owens Valley, Eastern Sierra Escarpment, White Mountains, Owens Lake, and the Coso Volcanic Range to the south. East of Barstow the Mojave National Preserve and Mojave Trails National Monument are also scenic resources. In addition, built features such as the Manzanar National Historic Site and Rand Mining District State Historical Landmark are scenic resources in the Project area.

Various public roadways are recognized for providing visual access to scenic resources in the project vicinity. Scenic roadways in the project area are listed in Table 3 and shown on Figures 1a and 1b. The State Scenic Highway program is also discussed below in Section 2.2.2. In the Owens Valley near its northern terminus at Control Substation the project can be seen from SR-168 where this roadway is a designated State Scenic Highway. South of Bishop the Project parallels and crosses US 395 at several locations where this roadway is a designated State Scenic Highway, and crosses and parallels this highway where it is an eligible State Scenic Highway. US 395 from the vicinity of Little Lake north to the City of Bishop in the Project Area is also part of the Eastern Sierra Scenic Byway as designated by a coalition partnership of public agencies and recreation providers. Near Owens Lake the Project crosses SR-190, an eligible State Scenic Highway. Near Kramer Substation and again immediately west of Barstow, the Project crosses SR-58, an eligible State Scenic Highway. To the south and east of Barstow the route crosses SR-247, SR-127, and I-40, also eligible State Scenic Highways and county scenic routes. The Project also parallels and crosses I-15 where it is an eligible State Scenic Highway and county scenic route, and Route 66, a National Trails Highway and county scenic route.

Additionally, approximately 50 percent of the Project alignment crosses BLM-administered land. Section 2.2.1, Regulatory Setting and Tables 4 and 5 provide additional information regarding BLM administered land and scenic resources management classifications. Maps in Appendix B show BLM visual management classifications in the Project area.

Table 3: Summary of Scenic Roadways Within the Project Area

Roadway location	Designation	Relationship to Project	Representative Photograph and Viewpoint # (Figures 1 and 2)
SR-168 west of US 395	Designated State Scenic Highway	Near Control Substation	1
SR-168 East of and co-located with US 395	Eligible State Scenic Highway	Project runs parallel	4
US 395 Inyo County	Designated State Scenic Highway	Project crosses and runs parallel	7,8
US 395 Kern/Inyo County	Eligible State Scenic Highway; Eastern Sierra Scenic Byway	Project crosses and runs parallel	9, 10, 14, 19, 21
SR 190 Inyo County	Eligible State Scenic Highway; Eastern Sierra Scenic Byway	Project crosses	16
SR-58 Kern/San Bernardino County	Eligible State Scenic Highway; County Scenic Route	Project crosses	31, 35
SR-247 San Bernardino County	Eligible State Scenic Highway County Scenic Route	Project crosses	37
I-40 San Bernardino County	Eligible State Scenic Highway County Scenic Route	Project crosses	38
Route 66 San Bernardino County	National Trails Highway	Project crosses	39
I-15 San Bernardino County	Eligible State Scenic Highway; County Scenic Route	Project crosses and runs parallel	41, 42, 44
SR-127 San Bernardino County	Eligible State Scenic Highway	Project crosses	45
Cima Road San Bernardino County	County Scenic Route	0.75 mile away; Project visibility is minimal	Not needed due to viewing distance
Kelbaker Road San Bernardino County	County Scenic Route	1.0 mile away; Project visibility is minimal	Not needed due to viewing distance

2.2 Regulatory Setting

2.2.1 Federal

2.2.1.1 Federal Land Policy and Management Act of 1976

The Federal Land Policy and Management Act of 1976 (FLPMA) (43 United States Code [U.S.C.] 1701) and the U.S. Department of the Interior's (DOI) Bureau of Land Management (BLM) Land Use Planning Handbook (BLM 2005) both emphasize the importance of protecting the quality of scenic resources on public lands. FLPMA sections relevant to Project are:

Section 102(a): "The public lands [shall] be managed in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archaeological values."

Section 103(c): Identifies "scenic values" as resources for public management. Section 201(a): "The Secretary shall prepare and maintain on a continuing basis and inventory of all public lands and their resources and other values (including...scenic values)."

Section 505(a): "Each right-of-way shall contain terms and conditions which will...minimize damage to the scenic and esthetic values."

FLPMA's legal mandate to protect the quality of scenic resources on public lands is carried out by BLM and detailed in BLM's Visual Resource Management (VRM) system, described below.

2.2.1.2 US Department of Interior, Bureau of Land Management (BLM)

The Federal Land Policy and Management Act of 1976 requires BLM to protect the quality of scenic values on public lands (43 U.S.C. 1701). To this end, BLM has developed the Visual Resource Management (VRM) system to identify and maintain scenic values and visual quality. Under this system, BLM-administered lands are inventoried, analyzed, and assigned visual ratings or Management Classes. Class designations are derived from an analysis of scenic quality (rated by landform, vegetation, water, color, influence of adjacent scenery, scarcity, and cultural modification), a determination of viewer sensitivity levels (sensitivity of people to changes in the landscape), and distance zones. Management Classes describe the different degrees of modification allowed to the basic elements of the landscape (form, line, color, texture). Management classes and their corresponding goals are defined in Table 4 and discussed below.

Table 4: BLM Visual Management Classes and Goals

Management Class	Goals
Class I	To preserve the existing character of the landscape. The level of change to the characteristic landscape should be very low and must not attract attention.
Class II	To retain the existing character of the landscape. The level of change to the characteristic landscape should be low.
Class III	To partially retain the existing character of the landscape. The level of change to the characteristic landscape should be moderate.
Class IV	To provide for management activities that require major modification of the existing character of the landscape. The level of change to the characteristic landscape can be high.

Source: BLM

Approximately 50 percent of the project alignment crosses BLM-administered land. Table 5 shows the number of miles crossed by each Project Segment. As indicated on the maps in Appendix B showing the Project alignment with VRM classifications on BLM-administered land, the majority of this land is designated as VRM Class III. The BLM management goals in Class III areas call for partially retaining the existing landscape character and allow for a moderate level of change to existing landscape character. In these areas management activity may attract attention, but should not dominate the view of the casual observer.

In a limited area of approximately 4 miles located south of Big Pine, within Landscape Unit 1, the project crosses BLM administered land that is VRM Class II, where management goals allow for a low level of change to existing landscape character, and any changes must repeat the basic

elements of form, line, color, and texture found in the predominant natural features of the characteristic landscape. In Class II areas, management activities may be seen, but should not attract the attention of the casual observer. A total of approximately 10 miles of the project alignment within Segments 3N and 3S, and less than 0.5 miles of Segment 4 cross land designated as VRM Class IV, where BLM visual management goals allow for management activities that require major modification of the existing character of the landscape and the level of change to the characteristic landscape can be high. In these areas management activity may dominate the view, and may be a major focus of viewer attention.

Table 5: BLM Land Crossed by Project

Project Segment	Project Circuit	Number of Miles Crossed by Project
1	Control-Coso-Haiwee-Inyokern	34.7
2	Kramer-Inyokern-Randsburg	27
3N	Kramer-Coolwater	22.1
3S	Kramer-Tortilla-Coolwater	22.7
4	Ivanpah-Baker-Coolwater-Dunn Siding-Mountain Pass	65.9
Total		172.4

2.2.1.3 BLM Desert Renewable Energy Conservation Plan (DRECP) Record of Decision

Covering more than 20 million acres in seven California counties including Imperial, Inyo, Kern, Los Angeles, Riverside, San Bernardino, and San Diego County, the DRECP was developed as an interagency plan by the BLM, the U.S. Fish and Wildlife Service (USFWS), the California Energy Commission (CEC), and the California Department of Fish and Wildlife. The BLM manages approximately 10 million acres of the 22.5 million acres covered in the overall Plan area.

The DRECP landscape-scale planning effort was undertaken to achieve two sets of overarching goals, the first of which address Renewable Energy, and the plan identifies specific development focus areas with high- quality renewable energy potential and access to transmission in areas where environmental impacts can be managed and mitigated. To address Conservation, the second overarching goal, the plan specifies species, ecosystem and climate adaptation requirements for desert wildlife, as well as the protection of recreation, cultural, visual, and other desert resources. Through the DRECP Record of Decision (ROD) an approved Land Use Plan Amendment (LUPA) establishes a policy framework for BLM-managed land, including management and conservation of visual resources.

With the exception of a small area in the northern portion of Segment 1, all BLM-administered land crossed by the Project is within the area governed by the DRECP ROD. Appendix B includes two maps of the Project area showing the Project alignment with VRM classes on BLM-administered land.

2.2.1.4 BLM Bishop Resource Management Plan Record of Decision

The Bishop Resource Management Plan (RMP) provides land management guidance for Segment 1 north of Olancha. Area-wide visual resources policies of the Bishop RMP Record of Decision (1993) require use of non-specular wire for all power lines, and also calls for managing all activities to conform with Visual Resource Management (VRM) standards, stating that enforcement emphasis for Visual Resource Management (VRM) classes 2- 4 will be along key observation points. Outside key observation points, the Bureau will apply designated VRM class prescriptions but the Area Manager may allow development to exceed the VRM class for reasons such as technological infeasibility or low visitor use.

2.2.1.5 Best Management Practice for Reducing Visual Impacts of Renewable Energy Facilities on BLM-Administered Lands

Bureau of Land Management guidance is provided in this document in the form of 122 best management practices (BMPs) to avoid or reduce potential visual impacts associated with the siting, design, construction, operation, and decommissioning of utility-scale renewable energy generation facilities, including wind, solar, and geothermal facilities as well as ancillary components, such as electric transmission structures and access. (BLM 2015). Selection of structure types and selection of appropriate materials surface treatments are among the pertinent BMPs outlined in this document to minimize potential visual effects and contrast associated with transmission facilities.

2.2.1.6 Federal Aviation Administration

Generally, marking or lighting is recommended by the FAA for those spans or structures that exceed 200 feet in height above ground level (AGL); however, marking or lighting may be recommended for spans and structures that are less than 200 feet AGL, but located within close proximity to an airport or other high-density aviation environment.

2.2.2 State

2.2.2.1 California Department of Transportation: Scenic Highway Program

The State Scenic Highway Program—a provision of Sections 260 through 263 of the Streets and Highways Code—was established by the Legislature in 1963 to preserve and enhance the natural beauty of California. The State Scenic Highway System includes highways that are either eligible for designation as scenic highways or have been designated as such. The status of a State Scenic Highway changes from "eligible" to "officially designated" when the local jurisdiction adopts a scenic corridor protection program, applies to the California Department of Transportation (Caltrans) for scenic highway approval, and receives the designation from Caltrans. A city or county may propose adding routes with outstanding scenic elements to the list of eligible highways. However, State legislation is required.

In the Project area, there are two designated State Scenic Highways. From the City of Bishop west to Lake Sabrina SR-168 is a designated State Scenic Highway; the Project begins near this roadway at Control Substation. In addition the Project crosses and runs parallel to a portion of US 395 that is a designated State Scenic Highway. The Project also runs parallel or crosses portions of SR-168 and US 395 that are eligible State Scenic Highways. The Project alignment

also crosses or runs near several other eligible State Scenic Highways including near Owens Lake where the Project crosses SR-190, and near Kramer Substation and again immediately west of Barstow, where the Project crosses SR-58. To the south and east of Barstow the route crosses SR-247 and I-40, as well as parallels and crosses I-15. Table 3 in Section 2.1.5 contains a summary of designated scenic routes in the project area, including designated and eligible State Scenic Highways, and Figures 1a and b depicts the location of the Project alignment in relationship to these roadways.

2.2.2.2 California State Parks Office of Historic Preservation (OHP) California Landmarks and Points of Historic Interest

The OHP is responsible for administering federally and state mandated historic preservation programs to further the identification, evaluation, registration, and protection of California's historic resources including California Historic Landmarks and Points of Historic Interest. These resources are buildings, sites, features, or events that are of statewide significance and have anthropological, cultural, military, political, architectural, economic, scientific or technical, religious, experimental, or other historical value. Description of the Project's visual setting includes two such resources.

Listed on the National Registry of Historic Places and located nine miles north of Lone Pine, Manzanar is a California Historic Landmark commemorating the approximately 800-acre site where Japanese American citizens and resident Japanese aliens were incarcerated during World War II, when in 1942, the United States government detained more than 110,000 men, women, and children in remote, military-style camps. The Project alignment passes within approximately one mile from Manzanar, which is managed by the NPS and open to the public. Photograph 9 (Figure 2e) is a view toward the Project from Manzanar.

Situated near US 395 in Kern County, the Rand Mining District is a California Historic Landmark commemorating discovery of Rand mine in 1895, along with the town of Randsburg and several other nearby sites that developed in conjunction with mining activity in the late 1800s and early 1900s within the Mojave Desert, The Project alignment crosses this state Historic Landmark site near US 395 and Randsburg; Photograph 28 (Figure 2n) is a view toward the Project taken near residences in Randsburg and Figure 12 shows a view of the Project from this KOP.

2.2.3 Local

The California Public Utilities Commission (CPUC) has sole and exclusive state jurisdiction over the siting and design of the Project. Pursuant to CPUC General Order 131-D (G.O. 131-D), Section XIV.B, "Local jurisdictions acting pursuant to local authority are preempted from regulating electric power line projects, distribution lines, substations, or electric facilities constructed by public utilities subject to the CPUC's jurisdiction. However, in locating such projects, the public utilities shall consult with local agencies regarding land use matters." Consequently, public utilities are directed to consider local regulations and consult with local agencies, but the county and cities' regulations are not applicable as the county and cities do not have jurisdiction over the Project. Accordingly, the following discussion of local land use regulations is provided for informational purposes only.

2.2.3.1 Inyo County General Plan

The Goals and Policy Report for the Inyo County General Plan calls for maintaining a system of scenic routes and protecting the natural qualities of designated scenic routes (2001). Additionally, a goal of the Conservation/Open Space Element is to preserve and protect resources throughout the County that contribute to a unique visual experience for visitors and quality of life for County residents.

2.2.3.2 Kern County General Plan

A limited portion of the northern part of the project route to the north and south of Inyokern Substation (in Segment 1) is located in unincorporated Kern County. The Kern County General Plan recognizes the importance of aesthetic resources and has developed policies to protect visually sensitive areas while minimizing impacts from the light and glare of new development projects in the Kern County General Plan (Kern County, 2009). The Scenic Highways section of the Circulation Element recognizes several Caltrans-designated "Eligible State Scenic Highways" within the county including portions of US 395 and SR-58 (refer to Table 3 in Section 2.1.5 Scenic Resources. In addition, the Land Use, Open Space, and Conservation Element addresses visual resources and aesthetics primarily in commercial and industrial settings, outdoor storage, and landscaping. It also includes general policies for the protection of oak woodlands and the conservation of open space (Kern County 2009).

2.2.3.4 San Bernardino County General Plan

The eastern portion of the Project, including part of Segment 2 and Segments 3N, 3S, and 4, is located in San Bernardino County. The San Bernardino County General Plan focuses on protecting large undeveloped land areas with significant scenic features. The General Plan states that these lands are under threat from both urban development and increasing outdoor recreational activities. It emphasizes the importance of protecting these resources by preserving their aesthetic values. General Plan policies include (1) protecting scenic vistas by minimizing invasive ridgeline development; (2) requiring that future land development practices be compatible with existing topography and scenic vistas; (3) protecting natural vegetation; (4) protecting the scenic and open space qualities of cinder cones and lava flows; (5) maintaining and enhancing the visual character of scenic routes in the county; and (6) requiring that development along scenic corridors demonstrate, through visual analysis, that proposed improvements are compatible with present scenic qualities (San Bernardino County 2007

Additionally, the Open Space Element of the General Plan indicates that county scenic routes in the Project area include US 395, SR-247, I-40, Route 66, and I-15 as well as Cima Road and Kelbaker Road. Information regarding these designated scenic routes is included on Table 3 and on Figure 1.

2.2.3.5 City of Barstow General Plan

In Segment 3S, a small part of the project alignment crosses an area within the City of Barstow. The City of Barstow General Plan Land Use Element includes Goal 2, which states "The City seeks to ensure an aesthetically pleasing appearance to the community that will maintain and enhance property values throughout the planning area." (LU-12). Additionally, Strategy 7.A1 of

the Resource and Open Space Element indicates the City should “Work with the utility companies owning large "cross-town" easements to ensure that these areas remain as open space for recreation, circulation, etc.”

3. IMPACTS

3.1 Significance Criteria

To determine the significance of the anticipated visual changes, the project’s effects were evaluated according to criteria provided in Appendix G of the CEQA Guidelines, which indicates that a project will have a significant effect on the environment if it will:

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

3.2 Physical Characteristics of the Project

The Project consists of mitigating existing GO 95 discrepancies by rebuilding each of the subtransmission lines. The Project includes approximately 358 miles of existing 115 kV subtransmission alignment, using a combination of TSPs and LWS poles. Appendix C includes typical elevation drawings of the replacement structures. Table 6 provides a summary description of the replacement structures with their typical dimensions.

Table 6: Summary of Replacement Subtransmission Structures

Segment	Category	Number of Structures	Structure Type	Minimum Height (feet)	Maximum Height (feet)	Average Height (feet)
1	Existing	1,077	LST	55	94	70
1	Proposed	573	LWS	57	125	90
1	Proposed	312	TSP	60	134	93
2	Existing	393	LST	28	122	70
2	Proposed	347	LWS	61	97	69
2	Proposed	39	TSP	60	105	74
3N	Existing	301	Wood H-Frame	50	106	64
3N	Proposed	268	LWS	61	102	68
3N	Proposed	30	TSP	65	100	75
3S	Existing	321	Wood H-Frame	36	106	63

3S	Proposed	280	LWS	56	106	67
3S	Proposed	37	TSP	50	105	71
4	Existing	696	Steel Lattice H-Frame	41	106	56
4	Proposed	605	LWS	52	88	65
4	Proposed	80	TSP	50	106	74

Source: SCE 2018

3.2.1 Subtransmission and Additional Poles

• In 126-mile long Segment 1, approximately 1,077 existing LSTs and wood poles would be removed and replaced with approximately 312 TSPs and 573 LWS poles.
• In 48-mile long Segment 2, approximately 393 existing double-circuited LSTs would be removed and replaced with 39 TSPs and 347 LWS poles. Additionally, four new LWS distribution poles would replace three existing distribution poles in Segment 2.
• In 44-mile long Segment 3N, approximately 301 existing single-circuited structures would be removed and replaced with 30 TSPs and 268 LWS poles.
• In 44-mile long Segment 3S, approximately 321 existing single-circuited structures would be removed and replaced with 37 TSPs and 280 LWS poles.
• In 96-mile long Segment 4, approximately 696 existing single-circuited structures would be removed and replaced with 80 TSPs and 605 LWS poles.

In addition, new telecommunications cable and appurtenances (e.g., splice boxes) will be installed along the length of each Segment and at each of the existing substations, and an approximately 2.5-mile long tap (consisting of 66 new LWS or equivalent poles) would be installed in Segment 1 from the project alignment to an amplifier installed in an existing facility in the community of Independence.

Lighting
No permanent lighting is proposed as part of the Project. It is noted, as outlined in Section 2.2.1, SCE would consult with the FAA and implement recommendations for safety lighting, to the extent feasible.

Marker Balls
SCE would consult with the FAA and may implement recommendations for the installation of marker balls to the extent feasible.

Conductor
Conductor span lengths would vary depending upon topography, engineering, and site considerations. Spans would range from approximately 50 feet to 1,430 feet. Replacement conductor will be non-specular, and will have a diameter of approximately 0.93 inches.

3.2.2 Temporary Construction Areas and Post-Construction Restoration

Staging Yards

Construction of the Project would require the establishment of temporary staging yards. Staging yards would be used as a reporting location for workers, vehicle and equipment parking, material storage, and may also be used to support helicopter operations. The yard may also have construction trailers for supervisory and clerical personnel. Staging yards may be lit for staging and security. Typically, each yard would be approximately 1 to 5 acres in size, depending on land availability and intended use. Preparation of the staging yard would include temporary perimeter fencing and depending on existing ground conditions at the site, grubbing and/or minor grading may be required to provide a plane and dense surface for the application of gravel or crushed rock.

Access Roads and/or Spur Roads

Subtransmission line roads are classified into two groups; access roads and spur roads. Access roads are through roads that run between tower sites along a ROW and serve as the main transportation route along line ROWs. Spur roads are roads that lead from access roads and terminate at one or more structure sites. Construction and operation and maintenance crews would employ a network of existing roads. The typical subtransmission access road consists of a network of dirt roads accessed from paved public and private roads. No new access roads, and few new permanent spur roads, will be developed as part of the Project.

Cleanup and Post Construction Restoration

SCE would clean up all areas that would be temporarily disturbed by construction of the Project (which may include the staging yards, construction work areas, and stringing sites, among others) to as close to pre-construction conditions as feasible, or to the conditions agreed upon between the landowner and SCE following the completion of construction of the Project. If restoration and/or revegetation occurs within sensitive habitats, a habitat restoration and/or revegetation plan(s) would be developed by SCE with the appropriate resource agencies and implemented after construction is complete.

3.3. Impact Evaluation

3.3.1 Visual Simulations and Visual Change

This section includes description of the project-related change and qualitative evaluation of potential visual effects on key public views, primarily as represented by the set of 16 KOP visual simulations. The qualitative evaluation considered factors such as the extent of change to the visibility of existing power lines, the degree to which the various project elements will contrast with or be integrated into the existing landscape, the extent of change in the landscape's composition and character; the number and sensitivity of viewers, and general project consistency with respective BLM visual management goals as outlined in Section 2.21.

The set of visual simulations, presented on Figures 3 through 18, documents the Project-related visual change that would occur at 16 KOPs as a result of the Project, and provides the basis for evaluating potential visual effects associated with the Project. Systematic site photography and computer modeling methods, and digital rendering techniques were employed to prepare the

simulations. Photographs were taken using a digital single-lens reflex (SLR) camera with standard 50-millimeter lens equivalent, which represents an approximately 40-degree horizontal view angle. Photography viewpoint locations were documented in the field using photo log sheet notation, global positioning system (GPS) recording, and basemap annotation. Digital aerial photographs and project design information supplied by SCE and Arcadis provided the basis for developing three–dimensional computer modeling of the new project components. For each simulation viewpoint, viewer location was input from global positioning system data using 5 feet as the assumed eye level. Computer "wireframe" perspective plots were overlaid on the simulation photographs to verify scale and viewpoint location. Digital visual simulation images were then produced based on computer renderings of the three-dimensional modeling combined with selected digital site photographs. The simulations presented on Figures 3 through 18 consist of two full-page images designated "a" and "b," with the existing views shown in the "a" figure and the visual simulations in the "b" figure.

Table 7: Summary of Visual Effects at Key Viewpoints presents an overview including viewpoint location with corresponding visual sensitivity factor(s); approximate viewing distance; and summary of visible change and potential effect that would occur each KOP location. As summarized in Table 7 and detailed under discussion of the five landscape units, the visual change associated with Project modifications would not substantially alter existing visual conditions in the project area.

Table 7: Summary of Visual Change at KOPs

Photograph number and Location *(Figure number)*	**Visual Sensitivity Factor(s)**	**Viewing Distance**	**Visual Change and Effect**
LANDSCAPE UNIT 1			
3. Gerkin Road south of Bishop *(Figure 3)*	• Proximity to residences	600 feet	• Taller steel poles replace existing lattice towers; the closest lattice tower is permanently removed. • Reduction in number of transmission structures in vicinity of residences. • Increased height of replacement pole represents an incremental change that would not substantially affect visual character of landscape experienced in this area.
5. Baker Creek Campground in Big Pine *(Figure 4)*	• Proximity to recreational facility	500 feet	• Taller steel pole replaces existing lattice tower. • Minor shift in location of new structure within existing alignment; existing vegetation partially screens replacement pole. • Narrower profile of replacement pole less noticeable against backdrop. • Increased height of replacement pole does not affect views of White Mountains in backdrop, and overall change would not substantially affect existing view.
10. US 395 crossing north of Lone Pine *(Figure 5)*	• Eligible State Scenic Highway • Eastern Sierra Scenic Byway	500 feet	• Taller steel poles replace existing lattice towers • Replacement poles visible in distance somewhat more noticeable. • Permanent removal of one lattice tower and wood guy poles.

Photograph number and Location *(Figure number)*	Visual Sensitivity Factor(s)	Viewing Distance	Visual Change and Effect
			• Project modifications result in more uniform appearance of built elements in the landscape. • Incremental visual change would not adversely affect views of the landscape including the nearby hills.
14. US 395 crossing near Owens Lake *(Figure 6)*	• Eligible State Scenic Highway • Eastern Sierra Scenic Byway	< 500 feet	• Somewhat taller steel poles replace two existing lattice towers. • Permanent removal of two existing lattice towers. • Similarity of form and color to adjacent transmission structures results in more uniform appearance of utility structures seen at this location. • Overall change would not substantially affect existing view from roadway.
15. Whitney Street near Mojave Street in Cartago *(Figure 7)*	• Proximity to residences • Recreational motorists	1,100 feet	• Two taller steel poles replace existing lattice tower and pair of wood poles; one existing lattice tower and pair of wood poles permanently removed. • Vertical form of replacement poles more closely resembles adjacent utility structures, resulting in more unified appearance of built elements in the landscape. • Incremental increase in height of replacement poles does not adversely affect views of the landscape backdrop and overall change would not substantially affect existing view at this location.
16. SR-190 crossing near Olancha *(Figure 8)*	• Eligible State Scenic Highway	< 500 feet	• Taller steel pole replaces existing lattice tower. • Replacement pole location is further from the highway. • Vertical forms of replacement pole more closely resembles adjacent utility structures, resulting in more unified appearance of built elements seen in the landscape. • Incremental increase in height of replacement poles does not adversely affect views of the landscape backdrop and overall change would not substantially affect existing motorists' view.
20. Fossil Falls Campground and Trail *(Figure 9)*	• Proximity to BLM recreational facilities • Proximity to BLM designated ACEC	1,800 feet	• Taller steel poles replace two existing lattice towers; two wood poles permanently removed. • Increased height of replacement poles not particularly noticeable against dominant landscape backdrop. • Reduction in number of visible utility structures seen in landscape. • Overall change would not adversely affect existing view experienced by recreational visitors.
23. Patrice Avenue, Inyokern *(Figure 10)*	• Proximity to residences	<500 feet	• Slightly taller steel poles replace existing lattice towers. • Narrower vertical profile of replacement poles more closely resembles form of nearby utility structures, resulting in more uniform appearance of built elements seen in the landscape. • Three orange FAA marker balls visible against sky.

Photograph number and Location *(Figure number)*	**Visual Sensitivity Factor(s)**	**Viewing Distance**	**Visual Change and Effect**
			• Overall change would not have a substantially effect on existing view from this location.
LANDSCAPE UNIT 2			
25. Sydnor Avenue at Mercury Street in Inyokern *(Figure 11)*	• Proximity to residences	800 feet	• Slightly shorter steel poles replace two existing lattice towers, and pole of equal height replaces one existing lattice tower. • Although color is similar, the form of replacement poles could contrast with adjacent existing lattice towers, resulting in new poles being more noticeable. • Incremental visual change could be noticeable; however, given presence of existing prominent utility structures seen in this location, the project would not substantially affect existing visual character of residential area.
28. Lexington Avenue in Randsburg *(Figure 12)*	• Location is within Rand Mining District State Historical Landmark • Proximity to residences	<500 feet	• Somewhat shorter steel poles replace two existing lattice towers. • Replacement pole visible along ridge top against sky less noticeable due to narrower profile; increased visibility of replacement TSP at base of hill due to contrast with backdrop. • Modification represents incremental change that would not adversely affect visual quality of the landscape given presence of utility structures and mining facilities.
LANDSCAPE UNIT 3			
32. Harper Dry Lake Wildlife Viewing Area *(Figure 13)*	• BLM ACEC and • BLM Watchable Wildlife Site	1 mile	• Slightly taller steel poles replace existing wood H-frame structures. • Visual change nearly imperceptible due to viewing distance and presence of substantially larger transmission structures adjacent to Project. • Effect would not affect visual character of landscape experienced in this recreational area.
LANDSCAPE UNIT 4			
36. Bonanza Road near H Street, Barstow *(Figure 14)*	• Proximity to residences	< 500 feet	• Somewhat taller steel poles replace existing wood H-frame structures. • Lighter color and more slender profile of replacement poles make them less noticeable. • Increased height of replacement poles not readily apparent when seen against backdrop. • Replacement poles more closely resemble existing nearby utility structures, resulting in a more uniform appearance of built elements seen in the landscape. • Overall change would not substantially affect existing view from residential area and could be considered a visual improvement.

Photograph number and Location *(Figure number)*	Visual Sensitivity Factor(s)	Viewing Distance	Visual Change and Effect
38. I-40, near Daggett *(Figure 15)*	• Project route crossing of Eligible State Scenic Highway and • San Bernardino County scenic route	500 feet	• Somewhat taller steel poles replace existing wood H-frame structures. • Color of replacement poles blends more effectively with light-colored backdrop making them less noticeable. • Replacement of H-frame structures with single pole structures results in incremental reduction in visibility of built components in the landscape. • FAA marker balls visible against the sky in distance. • Overall change would not substantially affect existing motorist view.
LANDSCAPE UNIT 5			
40. Carol Ann Drive at Crystal Lakes Estates, east of Barstow *(Figure 16)*	• Proximity to residences • VRM Class III	700 feet	• Similar color, slightly taller steel poles replace existing lattice H-frame structures. • Replacement poles have narrower, tapered vertical profile and simplified form compared with existing structures • Visual change is incremental and would not adversely affect views of the landscape setting; could be considered a visual improvement.
42. Clyde V. Kane Safety Roadside Rest Area on I-15 *(Figure 17)*	• Eligible State Scenic Highway • San Bernardino County scenic route	600 feet	• Somewhat taller steel poles replace two existing H-frame structures; slightly shorter TSP replaces existing lattice tower. • Replacement poles have simpler profile compared with existing structures. • Form of replacement poles more closely resemble nearby existing utility structures, resulting in a more uniform appearance of built elements seen in the landscape. • Visual change is incremental and would not adversely affect views of the landscape setting; could be considered a visual improvement.
45. SR-127 at Baker Junior High School *(Figure 18)*	• Proximity to public school • Project route crossing of Eligible State Scenic Highway and •San Bernardino County scenic route	900 feet	• Somewhat taller H-frame structure replaces existing lattice H-frame structure; steel pole and new H-frame structure replace existing H-frame structure and lattice tower. • Replacement structures slightly more visible against backdrop than existing lattice structures; new poles represent noticeable new elements in the landscape • Increased height of replacement structures would not substantially alter degree of Project visibility in relation to backdrop, while visual effect resulting from change in location of two new Project structures would be attenuated by removal of existing visually complex and dissimilar structures. • Predominant vertical form of new and replacement poles consistent with majority of numerous adjacent utility elements, resulting in a more uniform appearance of built elements in the landscape.

Photograph number and Location *(Figure number)*	Visual Sensitivity Factor(s)	Viewing Distance	Visual Change and Effect
			• Overall change is incremental and would not adversely affect views of the landscape setting; could be considered a visual improvement

3.3.1.1 Landscape Unit 1

In Landscape Unit 1, close-range views of the Project are seen from near the communities of Bishop, Big Pine, Olancha, Cartago, and Inyokern and from scattered rural residences within Owens Valley, as well as from the Fossil Falls BLM recreation site and along US 395 and SR-190, which the alignment crosses.

Figure 3: Visual Simulation: Gerkin Road, south of Bishop (VP 3)
Looking north from Gerkin Road, Figure 3 represents a close-range view of the Project from the edge of a residential community approximately 4.5 miles south of Bishop. The Project alignment crosses the roadway, approximately 900 feet from the viewpoint, and can be seen by motorists as well as nearby residents. To the left and right of the roadway, Figure 3a shows two prominent existing Project lattice towers, partially silhouetted against the sky in the foreground. On the left side of the roadway, additional towers recede into the distance, as their visibility decreases against a backdrop of similar colored mountains. In this open view of the northern Owens Valley basin, multiple transmission towers in two adjacent power alignments are also visible in the backdrop east of the roadway. As seen from the nearby residence in the immediate foreground on the right, views toward the alignment are partially screened by landscaping out of the view to the right.

The Figure 3b simulation shows the replacement of Project towers left of the roadway with taller steel poles, and the permanent removal of the nearest Project structure in the foreground to the right of the roadway. Compared to the existing structures being replaced, the new poles are noticeably taller; however, their overall form with a considerably narrower profile is simpler than the complex form of existing lattice towers. The closest replacement structure seen in the visual simulation is approximately 0.25 mile from the viewpoint, whereas Figure 3a shows a noticeably closer existing Project tower that is only approximately 750 feet away. A comparison of Figures 3a and 3b demonstrates that the increased height of the new poles would not substantially alter the overall visibility of the Project in relation to the landscape backdrop. Additionally, as shown in the Figure 3b visual simulation, the removal of the closest Project structure would represent an incremental improvement to the visual setting that includes numerous transmission structures of varied design. The introduction of the new poles thus represents an incremental effect that would not result in a substantial change in the existing landscape character.

Figure 4: Visual Simulation: Baker Creek Campground in Big Pine (VP 5)
The Figure 4 photograph is a view looking east from Baker Creek Campground, a public recreation area located northwest of the town of Big Pine in Owens Valley. From this location the Project structures are visible against a backdrop comprised of sky as well as the distant White Mountains. In the immediate foreground a restroom building and a darker colored trash receptacle can be seen partially screened by vegetation. Part of an unpaved campsite access road

is also visible near the left edge of the view, and the Project lattice tower situated approximately 500 feet away is a vertical element seen on the right. In addition to the built campground features seen in the foreground, the Project structure is a noticeable built element within the predominantly natural appearing landscape setting.

The Figure 4b simulation shows a taller steel pole has replaced the existing Project tower. The replacement pole is noticeably taller; the additional height is required because an existing lattice tower located at the campground situated to the left of this view would be removed and not replaced. Vegetation along the roadway partially screens the lower portion of the new structure. A comparison of the existing view and simulation indicates that the existing and replacement structures are similar in color and the horizontal cross arms at the top of both structures are similar in appearance. Due to its narrower profile the new pole is less noticeable than the existing lattice tower, particularly as seen against the mountain and sky backdrop. The visual simulation demonstrates that taken together the project-related change represents a minor, incremental effect that would not significantly alter the overall composition or visual character of the existing landscape experienced by recreational visitors at this location.

Figure 5: Visual Simulation: US 395 crossing north of Lone Pine (VP 10)
Figure 5 is a motorist's view of the Project alignment from US 395, approximately 2 miles north of Lone Pine. This KOP location represents a close-range view of the Project crossing as seen along an eligible State Scenic Highway, and also along the Eastern Sierra Scenic Byway. This northbound motorist view shows the roadway gradually descending a high-desert alluvial plain, flanked by the Alabama Hills on the left. On the right, the Inyo Mountains border the east side of the Owens Valley, and multiple Project lattice structures, along with adjacent wood guy poles, are visible on both sides of the roadway. In the immediate foreground on the right, a prominent lattice structure is visible primarily against the sky while the closest wood pole and the next lattice structure are seen against a backdrop composed of landscape and sky. Beyond the highway crossing, Project structures become progressively less evident where their contrast against the darker color and varied texture of the mountain backdrop is weak. Near the center of this view several Project towers are barely visible silhouetted against the sky, on the low distant horizon.

The Figure 5b visual simulation shows steel poles have replaced the two closest existing lattice towers and an existing tower on the left side of the highway has been removed and not replaced. Additional less visible lattice towers in the distance are also replaced with steel poles. The simulation also portrays the removal of the wood guy pole and cables supporting the closest Project structure on the right side of the road. The new poles are somewhat taller than the existing towers being replaced. As seen at this location the most noticeable change relates to the design of the new structures being a more simplified vertical form compared to the form and appearance of existing towers. To a degree the vertical form of the new structures would contrast with the predominantly horizontal form seen within the surrounding landscape; however, this effect would be less apparent where the structures recede into the background. The color of the new poles would also tend to blend in against the light-colored backdrop. Additionally, the Project would result in a more uniform appearance of built features seen within the landscape and the permanent removal of the lattice tower and wood pole would result in a decreased number of visible structures seen at this location. A comparison of the Figures 5a existing view

and the 5b visual simulation demonstrates that while the visual change could be somewhat noticeable, taken together the project-related modifications represent an incremental effect that would not substantially alter motorist views of the landscape experienced along this part of an eligible State Scenic Highway and the Eastern Sierra Scenic Byway.

Figure 6: Visual Simulation: US 395 crossing near Owens Lake (VP 14)
The Project alignment crosses US 395 again at the northwest edge of the Owens Lake Basin. Taken from northbound US 395, Figure 6a shows Project towers on both sides of the highway near this crossing, and represents the view from an eligible scenic highway and a portion of the Eastern Sierra Scenic Byway. In this area the roadway climbs a low summit along the former lake shoreline, and the Project alignment traverses open, desert terrain bordering the lake basin. Project structures are seen primarily against the sky on both sides of the highway and an adjacent parallel power line supported by smaller steel poles is also visible approximately 300 feet to the west of the Project.

The Figure 6b visual simulation shows two replacement poles; the new structures are somewhat taller than the existing structures being replaced; however, the visual simulation also shows that a more distant existing tower seen to the right of the blue colored roadway sign has been removed but not replaced. Additionally, another existing Project tower situated to the left of the highway, and outside the left edge of the view shown in Figure 6 is also permanently removed. A comparison of the existing view and visual simulation indicates that although taller, the replacement poles are similar in form and color to existing poles supporting the adjacent power alignment, thus Project-related change would result in greater overall uniformity in the appearance of built elements seen within the landscape. Together with the decrease in the number of structures visible at the highway crossing, these changes would not substantially alter the existing visual character of the landscape setting in this location.

Figure 7: Visual Simulation: Whitney Street near Mojave Street in Cartago (VP 15)
Looking southeast across the southern tip of the Owens Lake basin from the northeast corner of Cartago, Figure 7 represents the KOP view from a residential community within the southern Owens Valley as well as the view from a roadway providing access to the Cartago Wildlife Area. situated at the edge of Owens Lake. In this view a variety of wood and steel utility structures are discernible, including two Project lattice towers located approximately 0.25 mile away that can be seen beyond the roadway intersection in the immediate foreground. Also visible are a pair of wood Project poles, situated midway between the two Project towers. In addition, another pair of wood Project poles can be seen near the right edge of this view. In the immediate foreground more prominent vertical elements include wood H-frame structures supporting an adjacent power line that passes within approximately 300 feet of residences located along Cartago's eastern perimeter, as well as a wood utility pole near the left edge of the view, that supports a variety of power and telecommunication lines.

The Figure 7b simulation shows the existing wood poles and the lattice tower in the center of the view have been removed and not replaced. The Project lattice tower on the left has been replaced by a taller steel pole, as has the pair of wood poles near the right edge of the view. Where the top of the new taller pole on the left projects above the mountain horizon, and is seen against the sky, it is somewhat more noticeable compared to the existing lattice tower it has replaced. At the

same time, the removal of existing Project elements in the center of the view results in a decrease in the number of utility structures seen from this KOP and thus represents an incremental improvement to the overall setting. At this location where numerous existing transmission elements are currently seen, the overall visual change is incremental and the effect would not substantially alter the composition or quality of the landscape as seen by community residents or motorists.

Figure 8: Visual Simulation: SR-190 crossing near Olancha (VP 16)
The view shown in Figure 8 depicts the Project from SR-190, an eligible State Scenic Highway that skirts the southern perimeter of the Owens Lake Basin and serves as the principal western gateway for travelers to Death Valley. This two-lane highway also provides access to Olancha Dunes, a nearby OHV recreation area. Figure 8a shows a Project lattice structure supporting multiple overhead conductors in the immediate foreground, at a distance of approximately 400 feet from where the alignment crosses the roadway. This prominent vertical element is seen just to the right of the roadside primarily against a backdrop of the Sierra Nevada mountains, although the upper part is silhouetted against the sky. Multiple wood utility poles and conductors are also visible in the foreground along both sides of the roadway as well as in the distance, where numerous poles are discernible in the vicinity of the town of Olancha, located approximately 0.8 miles away and partially visible near the center of this view.

The Figure 8b simulation shows a new steel pole that replaces the lattice tower that has been removed. A comparison of Figure 8a and 8b indicates that the new structure is somewhat taller. Similar to the existing lattice structure, most of the replacement pole is visible against the mountain backdrop and the upper portion can be seen against the sky. When compared with the existing lattice structure, the design of the new structure is a more streamlined vertical form that more closely resembles the form of existing wood utility structures seen along the roadside at this KOP location. Overall, the new Project structure would not substantially alter the composition or character of the existing landscape seen at view this location, and the change brought about by the Project would result in a more uniform appearance of built elements seen in the landscape. In addition, an existing Project lattice structure to the right approximately 650 feet, and beyond the view captured in the Figure 8 photograph, would be removed and would not be replaced. Given this project-related change, there would be a decrease in the number of visible Project structures seen in the vicinity of the highway crossing which would represent an incremental visual improvement. In light of the changes described above, the effect would not substantially alter the existing composition or visual character of the landscape seen in this location.

Figure 9: Visual Simulation: Fossil Falls Campground and Trail (VP 20)
Figure 9 is a KOP view showing the Project alignment where it passes near a BLM managed recreational site including a campground. This area is located on an elevated terrace approximately 0.5 mile east of US 395. Looking southwest from the parking area of the recreational facility, Figure 9a shows existing Project lattice towers and wood interset poles approximately 0.35 mile away, visible against the large-scale backdrop of the distant Sierra Nevada mountains. These structures are seen beyond an expanse of dark colored basalt covered landscape. Although visible, the structures are not particularly noticeable given the dominant

backdrop and presence of visual elements in the foreground landscape, including the informational kiosk structure and exposed basalt formation.

The Figure 9b simulation shows the two existing lattice towers replaced by two somewhat taller steel poles, while the two wood interset poles have been removed, and not replaced. A comparison of the existing and simulation views indicates that the height difference between the new poles and the existing lattice structures is not particularly noticeable given the viewing distance and landscape context of the dominant mountain backdrop. Combined with the removal of the existing wood poles, the Project represents a minor, incremental change that does not substantially alter or degrade the existing landscape character seen from this BLM-managed recreation area.

Figure 10: Visual Simulation: Patrice Avenue in Inyokern (VP 23)
A view toward the Project from within the community of Inyokern is shown in Figure 10, which represents a close-range view of the Project as seen by residents in the rural desert landscape setting characteristic of the area near Inyokern Substation in Indian Wells Valley. Figure 10a shows a single story house, assorted outbuildings, vehicles and fencing, interspersed with clusters of small trees and large shrubs on a rural residential property in the foreground, and on the left a prominent Project tower is silhouetted against the sky. The top of a second Project tower appears against the sky near the right edge of the view. Additionally, a variety of wood utility pole structures supporting several nearby power lines including single pole and H-frame structures can be seen at this KOP location.

The Figure 10b visual simulation shows a replacement steel pole in the foreground situated proximate to the existing lattice tower that has been removed. Small trees screen the bottom part of this new structure. Near the right edge of the view the upper portion of a second replacement Project pole can be seen beyond the building. The new structure is in location that is similar to where the existing lattice structure was situated. Although slightly taller than the existing lattice structures being replaced, the horizontal arms at the top of the new poles are similar in appearance to the cross arms of the lattice towers that have been removed. Compared with the more complex trapezoidal form of the existing lattice structures, the narrower vertical profile of the new steel poles is similar to the form of nearby existing wood poles and therefore the Project would result in a slightly more uniform overall appearance with respect to the utility structures seen at this location. The simulation also shows three orange FAA marker balls silhouetted against the sky between the replacement poles. Although their bright color could be somewhat noticeable, the size of the marker balls is relatively small and their color is not be dissimilar to the reddish color of the outbuilding seen nearby, on the left. Taken together, the visual changes would not result in substantial alteration or degradation of the landscape setting.

3.3.1.2 Landscape Unit 2
Within Landscape Unit 2, the alignment crosses largely unoccupied, desert terrain. Open views of the Project can be seen by passing motorists where the alignment closely parallels US 395 within flat terrain of the northern Mojave Desert, south of Indian Wells Valley. Close-range views of the Project are generally limited, and include a small number of scattered residents in the area immediately south of Inyokern Substation in addition to a small number of residents at

Randsburg, an historic mining community located in mountainous terrain that separates Indian Wells Valley from the Mojave Desert basin.

Figure 11: Visual Simulation: Sydnor Avenue at Mercury Street in Inyokern (VP 25)
Taken near the US 395/SR-178 junction approximately 0.8 mile south of Inyokern Substation, Figure 11 represents a close-range view of the Project at a KOP within this low-density suburban residential area. Looking southeast from this location, Figure 11a shows multiple transmission structures including three Project lattice towers as well as lattice towers, wood H- frame structures and wood utility poles that support three parallel power lines. These noticeable vertical elements are seen primarily against a backdrop of sky, and extending toward the low hills seen along the horizon on the right. On the left, the closest and most prominent lattice tower supports an adjacent line, while the closest of the three Project towers is to its right and situated approximately 450 feet beyond the residence. Although situated less than 200 feet to the east, the US 395 corridor is generally screened from view by vegetation surrounding the residence.

The Figure 11b visual simulation shows that three new single circuit Project poles have replaced the three double circuit lattice towers. The height of the new poles is comparable to the height of the existing structures being replaced. Although the color of the new pole is similar to the color of the adjacent lattice towers, the form of the replacement structures is somewhat dissimilar and thus could be seen to contrast with the form of these towers and other landscape elements. At the same time, the new poles would not be dissimilar to the vertical form of some of the existing wood power poles. Given the presence of existing prominent utility structures seen in this location, together with other visible built elements in the landscape, the project represents a noticeable but incremental change that would not affect the composition of the landscape or existing visual character of this area.

Figure 12: Visual Simulation: Lexington Avenue in Randsburg (VP 28)
As it crosses the historic mining community of Randsburg, the Project passes within 300 feet of residences located at the town's northeastern perimeter. Figure 12 represents a view taken from a residential street in this area. Houses and a church as well as utility structures and various mining facilities are located within the immediate vicinity. Figure 12a shows a Project lattice structure, and to its right a taller tower supports an adjacent line. Both structures are seen silhouetted against the sky on the ridge, beyond the houses in the foreground. A second Project tower, seen against the mottled hillside backdrop near the right edge of the view, is barely visible. Also in the foreground, a telecommunication line is a noticeable horizontal feature.

The Figure 12b simulation shows two steel poles that are slightly taller than the two lattice towers they replace. The replacement pole on the left has a more-slender form that would contrast with the broader, trapezoidal shape of the existing lattice tower while the steel replacement Project structure on the right would be somewhat more noticeable against the hillside backdrop compared with the existing tower that is removed. At the same time, the new pole is partially screened by the residence seen in the foreground. It is also noted that that existing utility structures located nearby, although not visible in this view, more closely resemble the new poles in terms of their form. In this respect the change would be less noteworthy. Additionally, because the visual juxtaposition of older and newer built elements such as relic mining equipment and transmission structures is a characteristic feature of this landscape, and

given the presence of existing utility structures and mining facilities within this vicinity, the visual effect of Project modifications represents an incremental change that would not substantially affect the visual character or quality of the landscape in this location.

3.3.1.3 Landscape Unit 3

Located primarily away from regional transportation corridors, Landscape Unit 3 is the most isolated of the five landscape units. Throughout the length of this landscape unit, the Project closely parallels one or more existing transmission alignments. Few close-range public views of the Project alignment are available and overall, visual change would not be particularly discernible.

Figure 13: Visual Simulation: Harper Dry Lake Wildlife Viewing Area (VP 32)
Looking south from a BLM-managed Watchable Wildlife Site located at Harper Dry Lake, Figure 13 represents a view of the Project from a BLM Area of Critical Environmental Concern (ACEC) approximately 14 miles east of Kramer Junction. Built features seen in the immediate foreground of this view include an information kiosk and fencing that encloses the wildlife viewing area, separating it from the unpaved access road beyond. Figure 13a shows Project H-frame structures barely visible against the light-colored sky and backdrop of distant low hills, when seen beyond the flat playa landscape and alongside taller lattice towers of two adjacent transmission tower alignments from a distance of approximately one mile away.

The Figure 13b simulation shows the replacement of Project wood H-frame structures with slightly taller steel poles. Compared to the structures being replaced, the increased height of the replacement poles is not discernible at this viewing distance, and because the view direction is perpendicular to the alignment, the difference between the broad profile of the existing H-frame and the narrower, more vertical form of the replacement poles is not readily apparent. A comparison of the existing and simulation views demonstrates that the visual change is minor and incremental. Given the viewing distance of approximately one mile, and the landscape context with adjacent transmission structures of varied height and design, the visual change would be nearly imperceptible and would not affect landscape views experienced by visitors to the wildlife viewing area.

3.3.1.4 Landscape Unit 4

Within Landscape Unit 4 the Project alignment generally parallels, and in several locations crosses, local and regional roadway corridors. A small portion passes in close proximity to and through residential areas in the city of Barstow. As shown on Figures 14a through 15b, some of these public views are within a few hundred feet of project elements.

Figure 14: Visual Simulation: Bonanza Road near H Street in Barstow (VP 36)
Figure 14 is a close-range view of the Project taken from a residential street within a subdivision located southwest of central Barstow. In the foreground of this view, residences are set back from both sides of the road and dark wood Project H-frame structures, the nearest situated approximately 475 feet from the viewpoint, are prominent against the sky along the right side of the road. Utility poles and numerous overhead conductors of nearby power lines are also noticeable in the backdrop, partially screened by primarily low growing, relatively sparse vegetation.

The Figure 14b simulation shows taller, gray colored steel poles replacing the dark wood H-frame structures. The simulation illustrates that the increased height between the replacement poles and existing structures would be most noticeable in the case of the closest pole with the difference decreasing in the case of the more distant poles. A comparison of the existing and simulation view indicates that, although somewhat taller, the replacement poles would be less noticeable than the existing dark- colored H-frame structures, due to their more slender profile, together with their lighter color, which is less visible against the sky. In addition, as the replacement structures recede toward the distant horizon, their increased height would not be particularly noticeable when seen within the context of the predominant sky backdrop. Moreover, the form of the replacement poles more closely resembles that of existing utility structures seen in the surrounding environment. Taken together, the Project-related change would result in a slight decrease in visual presence of utility components and a greater overall uniformity in appearance of built elements within the landscape. Therefore, the Project's incremental visual effect would not substantially affect the visual quality of the landscape within this residential area, and could be considered an incremental improvement.

Figure 15: Visual Simulation: I-40, (VP 38)
Figure 15, a view from I-40, approximately 6.5 miles southeast of Barstow near the community of Daggett, represents a close-range motorist's view of the Project crossing an eligible State Scenic Highway and San Bernardino County scenic route. Figure 15a shows two noticeable Project H-frame structures seen to the right of the highway in the foreground against a backdrop of mountains and sky. Due to the oblique angle of the alignment crossing, multiple Project structures can be seen receding into the distance on the left side of the highway where they are less noticeable against the light-colored backdrop as viewing distance increases. Beyond the Project alignment and somewhat visible in the distance is an array of lattice towers supporting multiple nearby transmission alignments.

In the Figure 15b visual simulation steel poles have replaced the H-frame structures on both sides of the highway. The replacement structures are somewhat taller; however, compared with the double pole configuration of the existing structures, the form of the new poles would result in an overall reduction of vertical built elements seen within the broadly horizontal landscape setting. A comparison of the existing and simulation view also indicates the lighter color of the replacement poles would be less noticeable when seen at close-range in the foreground and would also more effectively blend in with the light-colored sky backdrop. On the left side of I-40, the simulation also shows new FAA marker balls along overhead spans between the replacement poles that can be seen receding into the distance. Despite their orange color, these spherical markers would not be not particularly noticeable against the sky, given the viewing distance, and brief duration of the view. Taken together, the change and overall visual effect is an incremental reduction of built components in a location that includes numerous existing utility structures. As a result, the Project would not significantly degrade the visual quality of the landscape setting as seen by motorists.

3.3.1.5 Landscape Unit 5

Within Landscape Unit 5 the Project mostly parallels I-15 for much of its length, passing within approximately 0.5 and 2 miles of the highway corridor through a sparsely inhabited landscape characterized by broad flat basins and rugged mountainous outcrops. Due to viewing distance and landscape backdrop conditions, the Project components are not readily discernible along large portions of this landscape unit, and close-range public views of the Project are generally limited to locations at or near highway crossings, and from a few widely dispersed residential and service centers located along the highway.

Figure 16: Visual Simulation: Carol Ann Drive at Crystal Lakes Estates, east of Barstow (VP 40)

Figure 16, taken from the edge of a residential development located adjacent to I-15 and within the Mojave Valley, represents a view of the Project where the alignment passes in close proximity to residences while crossing BLM land that has VRM Class III and IV designations The perimeter roadway visible in the immediate foreground is a residential perimeter road for the adjacent private development, where homes are oriented inward toward an artificial lagoon and away from the surrounding Mojave Valley landscape. Several residential properties with houses, storage buildings, fencing and sparse landscaping are visible in the foreground on the left. Starting at the right edge of the view, Project lattice H-frame structures can be seen receding against a backdrop of sky and mountains. Situated approximately 300 feet from the nearest residence, the closest structure in the foreground is a noticeable vertical element; more distant Project structures are less visible where they blend in with the similar colored backdrop at the horizon.

The Figure 16b simulation shows slightly taller steel replacement poles in approximately the same location as the lattice H-frame structures that have been removed. A comparison of the existing view and visual simulation indicates that the color of the replacement poles is similar to the color of the existing structures, which tend to blend in with the light-colored backdrop. Although the new poles are slightly taller than the existing H-frame structures, the increased height difference would not be particularly noticeable due to the more slender, somewhat tapered profile of the replacement structures. The visual simulation demonstrates that taken together the project-related change represents a minor, incremental effect that would not substantially alter the overall visual character or quality of the existing landscape experienced by nearby residents as well as recreational visitors to this area, and could be considered to represent a visual improvement.

Figure 17: Visual Simulation: Clyde V. Kane Safety Roadside Rest Area on I-15 (VP 42)

Figure 17 represents a close-range public view of the Project alignment as seen from the Clyde V. Kane Safety Roadside Rest Area along 1-15, an Eligible State Scenic Highway and San Bernardino County scenic route. Figure 17a shows existing Project structures, including a wood H-frame on the left, and a lattice tower near the center-right, seen from distances of approximately 600 feet and 770 feet respectively. These structures are conspicuous built features situated near the entry to the rest area facility. Near the right edge of this view a more distant Project lattice H-frame is somewhat less noticeable. Other prominent built elements in the immediate foreground include light-colored metal light standards and a wood utility pole

supporting a nearby power line. In the distance on the horizon several lattice towers supporting another transmission line can also be seen near the center of this view.

In the Figure 17b simulation, somewhat taller steel poles have replaced the two existing H-frame structures, and a new steel pole replaces the existing lattice tower that was slightly taller. Compared to the structures being replaced, the poles would have a narrower profile and simpler overall form, not unlike the existing utility pole seen in the center of the view. Additionally, the replacement structures would be similar in form, color and apparent height to the numerous light standards seen along the highway and at the entrance to the rest area. A comparison of the existing and simulation view indicates the introduction of the Project replacement poles would results in an increase in visual uniformity amongst built elements seen within the landscape. The visual simulation demonstrates that the Project-related change represents an incremental effect that would not significantly alter the overall character or degrade the visual quality of the existing landscape experienced by motorists along an Eligible State Scenic Highway and San Bernardino County scenic route. The Project's effect could be considered an incremental visual improvement at this location.

Figure 18: Visual Simulation: SR-127 at Baker Junior High School (VP 45)
Figure 18 represents a view from the town of Baker, where the Project alignment can be seen crossing SR-127, an Eligible State Scenic Highway and San Bernardino County scenic route as well as the southern gateway to Death Valley National Park from I-15. Taken near the entrance to a junior high school campus seen in the immediate foreground, Figure 18a shows a flat desert playa against a backdrop of distant mountains and sky at the town's northern edge with Project structures seen on both sides of the roadway at distances ranging between approximately 900 and 1,400 feet. On the left, a tubular steel H-frame and a lattice tower are silhouetted against the sky. On the right, the dark steel framework of the existing Baker Substation stands out against the lighter colored terrain in the backdrop, and to the right of the substation facility, a Project lattice H-frame structure blends in with the backdrop and is less noticeable. Adjacent utility components that are unrelated to the Project include a prominent lattice tower with overhead conductors at the right edge of the roadway in the foreground, multiple wood power poles near the substation, and an array of wood utility poles along the left side of the roadway.

The Figure18b visual simulation shows that three existing Project structures on the left are replaced with three new structures. On the left side of the highway the two lattice H-frame structures are replaced with a steel pole on the far left, and the second with a steel H-frame that is relocated to the right side of the roadway near the substation. At the far right side, adjacent to the substation, a TSP H-frame has replaced the existing lattice H-frame. Compared to the existing structure being replaced, the new structure on the right side is somewhat taller and slightly more noticeable against the backdrop. Although the replacement H-frame structure at the right edge of the roadway and the new steel pole near the left edge of the view are noticeable new built landscape elements, their predominantly vertical form is not inconsistent with the form of most of the numerous utility structures seen in the landscape at this location. A comparison of Figures 18a and 18b further demonstrates that the relocation and increased height of the replacement structure would not substantially change the overall visibility of the Project in this landscape setting. Taken together, the modifications to the Project alignment at the SR-127 crossing represents a minor, incremental effect that would not result in a substantial change in the existing

landscape character or quality as seen by motorists as well as by school campus attendees within the town of Baker. At this location, the Project's effect could be considered to represent an incremental visual improvement.

3.3.2 CEQA

Would the Project:	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Measures	Less-Than-Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway?	☐	☐	☑	☐
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☑	☐
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	☐	☐	☑	☐

3.3.2.1 Question 4.4a- Scenic Vista Effects - No Impact

Construction – No Impact

For the purpose of this evaluation, a scenic vista is defined as a distant public view along or through an opening or corridor that is recognized and valued for its scenic quality. By this definition, there are no scenic vistas in the area from which the Project will be visible. Therefore the Project would not result in effects on a scenic vista.

Operation – No Impact

For the purpose of this evaluation, a scenic vista is defined as a distant public view along or through an opening or corridor that is recognized and valued for its scenic quality. By this definition, there are no scenic vistas in the area from which the Project will be visible. Therefore the Project would not result in effects on a scenic vista.

3.3.2.2 Question 4.4b– Scenic Resource Damage within a State Scenic Highway- Less than Significant Impact

Construction – Less than Significant Impact

As documented in Section 2.2.2 and on Table 3, there are two designated State Scenic Highways in the Project area including SR-168 and a portion of US 395. Impacts to scenic resources within these roadway corridors would be less than significant.

Photograph 1 is a view from SR-168 looking south toward the Project and Control Substation. From this location the substation and Project lattice towers that extend along the base of the hills approximately 0.45 miles away are barely discernable against the desert landscape backdrop. To a degree, the new steel poles may be more visible than the lattice structures at this distance; however, it is expected that visual change associated with replacing existing steel structures with fewer new taller steel poles would not be readily noticeable given the viewing distance and background conditions. Photographs 7 and 8 are views taken from the portion of US 395 that is a designated State Scenic Highway (Figure 2d). Photograph 7 shows a close-range view of the Project crossing where steel poles have replaced older structures more typical of those seen along the Project corridor. At this location the existing steel Project poles would be replaced by slightly shorter steel poles. It is therefore expected that there would not be an effect on motorists' views from the designated State Scenic Highway portion of US 395. Photograph 8 is a view from the Division Creek Safety Roadside Rest Area along US 395, looking east. In this view, lattice towers of two adjacent transmission lines located approximately 1.8 miles east of the highway, are barely visible against the mottled landscape backdrop. Because the smaller Project structures located approximately 2.2 miles away are generally imperceptible, the change associated with replacement Project structures would not be evident as seen from this location along US 395. In light of the change described above, the Project would not result in damage to scenic resources within a designated State Scenic Highway.

As noted on Table 3 in Section 2.1.5, the Project would also be visible from portions of the two roadways discussed above where they are eligible State Scenic Highways. As discussed in Section 3.3, the Figure 5 and 6 visual simulations demonstrate the Project would result in a minor incremental change that would not substantially affect scenic resources or views from this portion of US 395. Table 3 notes that portions of the project will also be visible from several other eligible State Scenic Highways- SR-190, SR-58, I-15, SR-247, and I-40. The evaluation presented in Section 3.3 and outlined in Table 7 describes visual change associated with the Project at KOPs along these roadway corridors. The Figure 8 visual simulation indicates the Project would not substantially affect motorist views along SR-190. Similarly, the Figure 15, 17, and 18 visual simulations respectively demonstrate the Project-related change would not substantially affect existing scenic resources or views along I-40, I-15, or SR-127. Additionally, in a view where the route crosses SR-58, Photograph 35 shows that steel poles have already replaced older Project structures while Photograph 37, taken from SR-247 near Barstow illustrates a similar condition and also shows that where Project components are seen within a landscape context that includes utility structures supporting adjacent power lines, the overall visibility of the Project alignment is diminished (Figures 2r and 2s). Taken together, the incremental effects described above would not result in damage to existing scenic resources along a State Scenic Highway. Therefore, the impact is less than significant.

Operations – No Impact

Operation and Maintenance (O&M) activities required for the rebuilt power lines will not change from those currently required for the existing system; thus, no operation-related impacts to existing scenic resources within a State Scenic Highway corridor would occur.

3.3.2.3 Question 4.4c– Visual Character Degradation

Construction – Less-than-Significant Impact

Construction-related visual impacts resulting from the temporary presence of equipment, materials, and work crews along the Project alignment, temporary staging and work areas, and stringing sites would not substantially degrade existing visual character of the landscape. To varying degrees, construction activity will be noticeable to local residents, motorists, and recreational visitors. Construction activities will take place over an approximately 41-month period, but this will be considerably shorter in duration at any one location.

Trees or portions of trees that encroach on existing access and spur roads may be removed to facilitate the safe movement of construction equipment. Similarly, trees or portions of trees within or adjacent to stringing sites, construction laydown areas, construction work areas, staging yards, and helicopter landing zones may be trimmed or removed to permit the safe operation of construction equipment; however, these areas will be preferentially selected to minimize the trimming or removal of trees. With these noted exceptions, Project construction is not anticipated to require removal of trees, and effects on existing vegetation will be limited to tree trimming and some removal of shrubs and desert scrub. If restoration and/or revegetation occurs within sensitive habitats, a habitat restoration and/or revegetation plan(s) would be developed by SCE with the appropriate resource agencies and implemented after construction is complete. In general, the visual effects of vegetation removal will be minor and not noticeable to the public and the impact would be less than significant. During construction, migration of fugitive dust from the construction sites would be limited by control measures set forth by regional agencies such as the Mojave Desert Air Quality Management District. These measures may include the use of water trucks and other dust control measures.

Minor disturbance of land within and along the project alignments will occur as a result of activity required for installing replacement poles and removing existing structures. In addition, minor land disturbance may occur at some of the temporary staging and work areas that will be established as part of the project construction; these areas will generally be located on disturbed land located near or on existing project alignments. It is expected that the effect could be most noticeable at staging or work areas located in close proximity to residents in Lone Pine, and Inyokern, and in close proximity to major roadways such as US 395. A limited degree of visual contrast could occur as a result land disturbance activity such as creation of newly exposed soil areas; however, because SCE would restore all areas that would be temporarily disturbed by construction , staging yards, construction work areas, and stringing sites, among others to as close to pre-construction conditions as feasible, or to the conditions agreed upon between the landowner and SCE following the completion of construction of the Project, the effect would be minimized so that these disturbed areas will blend in with the surrounding landscape setting, thus reducing visual contrast and potential visibility of these areas. Additionally, at locations in close proximity to residences, construction sites will be maintained in a neat and orderly state and any

trash from the Project area would be deposited in closed trash containers. Trash containers would be removed from the Project area as required and would not be permitted to overfill. As a result, any visual character degradation resulting from construction of the project will be less than significant.

The Project would result in permanent incremental visual change that would not substantially alter or degrade existing visual character in the area. The Project includes rebuilding approximately 358 miles of existing 115 kV subtransmission facilities within and immediately proximate to an existing utility right of way (ROW) using a combination of single TSPs, 3-pole TSP arrays, LWS (and equivalent) H-frames, and LWS (and equivalent) poles between the existing Control Substation and the existing Ivanpah Substation located in rural, sparely populated portions of Inyo, Kern and San Bernardino counties. Replacement structures would be dulled galvanized steel, and existing conductor would be replaced with new non-specular conductor. Marker balls may be installed on overhead groundwire at locations visible from two KOPs, as shown on Figures 10b and 15b. To varying degrees, Project replacement components will be visible from locations along public roadways as well as publicly accessible unpaved off-road tracks. In addition, Project components will be seen from limited residential and public recreation areas. At some locations intervening landforms, vegetation and structures partially or fully screen Project elements for all but a small number of viewers. In addition, in many areas of the Project, surrounding or backdrop landforms and vegetation, combined with the effect of distance would diminish the visibility of project components.

In Landscape Unit 1 (Project Segment 1), approximately 126 miles of the existing alignment would be rebuilt. A portion of the Project passes within less than 100 feet of the US 395 and also comes within close proximity to tribal land and other residential communities as it passes the western and eastern periphery of Big Pine and Lone Pine. Figures 3 through 10 showing existing and post-Project views as seen from eight KOPs within this landscape unit portray views from sensitive locations in proximity to residences and recreational facilities as well as from scenic roadways. As discussed in Section 3.3.1 and outlined on Table 7, the simulations demonstrate that the incremental change associated with the Project would not substantially alter or degrade existing landscape or visual character in the area.

In Landscape Unit 2 (Project Segment 2), approximately 48 miles of existing alignment would be replaced. Within this landscape unit, the alignment crosses largely unoccupied, desert terrain. Open views of the Project can be seen by passing motorists where the alignment closely parallels US 395, south of Indian Wells Valley, and close-range views of the Project are generally limited to a small number of scattered residents in the area immediately south of Inyokern Substation and a small number of residents at Randsburg, an historic mining community. Figures 11 and 12 are before and after views from KOPs in proximity to residences that show the Project's incremental visual change would not substantially affect or degrade existing visual character at these or similar areas.

Approximately 44 miles of existing alignment would be replaced in Landscape Unit 3 (Project Segment 3N), the most isolated of the five landscape units, and where few close-range public views of the Project are available. Throughout the length of this unit, the Project closely parallels one or more existing transmission alignments and visual change would not be particularly

discernable, as demonstrated by The Figure 13 visual simulation showing the Project from the BLM managed Harper Dry Lake Wildlife Viewing Area, a BLM demonstrates the minor incremental change associated with the Project.

In Landscape Unit 4 (Project Segment 3S), approximately 44 miles of existing alignment would be rebuilt. Within this unit the alignment generally parallels, and in several locations crosses, various roadway corridors, and a small portion are in close proximity to residential areas in the city of Barstow. Both the Figure 14 simulation from a KOP in proximity to residences and the Figure 15 simulation from a KOP along an Eligible State Scenic Highway and San Bernardino County scenic route demonstrate that the Project's incremental visual change would not substantially affect or degrade existing visual character at these or similar key viewing locations.

Approximately 96 miles of existing alignment would be replaced in Landscape Unit 5 (Project Segment 4), an area where the crosses a sparsely inhabited area and landscape characterized by flat basins and rugged mountainous outcrops. Project components are not readily discernible along large portions of this unit due to the viewing distance and landscape backdrop conditions. Close-range public views of the Project are generally limited to locations near highway crossings, and a few dispersed residential or service centers located along the highway. Figure 16 shows the Project from a KOP located on BLM administered land in proximity to residences and Figures 17 and 18 respectively show KOP views from along an eligible State Scenic Highway. Taken together these simulations illustrate that the incremental visual change associated with the Project would not substantially alter or degrade existing visual character of the landscape.

As outlined above and summarized in Table 7 as well as demonstrated by the set of visual simulations from 16 KOPs presented on Figures 3 through 18, the Project would result in incremental visual change that will not substantially alter or degrade existing visual character or quality in the area. Therefore the impact would be less than significant.

Operations – Less than significant Impact

Operation activities required for the rebuilt power lines will not change from those currently required for the existing system; thus, no operation-related impacts to aesthetic conditions would occur.

3.3.2.4 Question 4.4d) New Light or Glare

Construction – Less-than-Significant Impact

Most construction will take place during daylight hours; however, at limited times some construction along the project alignment may be required or finished at night, and these activities will require lighting for safety. Any required lighting would be limited to an individual work area and would be temporary in nature. Staging yards may be lit for staging and security; this lighting would be directed on site and away from potentially sensitive receptors. Non-specular conductors and galvanized steel poles with a dulled finish will replace existing components, thus reducing potential glare. Therefore, the Project will not result in a substantial light or glare effect and the impact would be less than significant.

Operations – Less than significant Impact

No new permanent lighting is proposed for the Project. Operation activities required for the rebuilt power lines will not change from those currently required for the existing system; thus, no operation-related impacts to day or nighttime conditions would occur.

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APPENDIX A
Description of Existing Views presented on Figure 2: Representative Photographs

Looking south from SR-168, **Photograph 1** shows the Project alignment in the vicinity of Control Substation. Dark colored wood poles and H-frame structures supporting multiple power alignments connecting to the substation can be seen in the foreground against a landscape backdrop of ancient glacial deposits that define the eastern edge of the Owens Valley. Near the center left of this view and located approximately 0.45 mile away, the substation and Project lattice structures that extend along the base of the hills to the left are barely discernible because these light-colored steel elements blend in with the mottled desert landscape backdrop.

Photograph 2, taken approximately 4.25 miles southeast of Control Substation, shows a close-range view looking southeast toward a rural residence with outbuildings, wood and as well as chain link fencing, seen in the foreground against a backdrop of mature trees, and a boulder-strewn moraine. On each side of the residence, a wood utility pole is also visible. Near the center of this view, two Project lattice towers can be seen silhouetted against the sky, from a distance of approximately 0.25 mile. At the right edge of this view intervening vegetation substantially screens a third Project tower, situated approximately 550 feet away.

Photograph 3 is a view looking north from Gerkin Road at the edge of Wilkerson, a residential community located approximately 4.5 miles south of Bishop. The Project alignment is visible at a distance of approximately 900 feet, and the alignment can be seen crossing Gerkin Road, one of two paved access roads that connect this community with US 395, located approximately 0.75 mile to the east. In the immediate foreground two Project towers extend above the distant mountain horizon, while additional Project towers recede into the distance to the left of the roadway. In this open view towers from two adjacent transmission alignments are visible on the right (east) of the roadway. This viewpoint is a KOP selected for visual simulation to show a close-range view of the Project where it passes in close proximity to a residential community (refer to Figure 3a and 3b).

From Wilkerson the Project alignment continues southeast, crossing gently sloping terrain comprised of alluvial deposits and ancient lava flows, and passing 0.6 mile east of Keogh Hot Springs, a small private resort with some permanent residents that is situated approximately 0.8 mile west of US 395 and attracts both local and regional visitors. The Project alignment is approximately 0.25 mile from the highway and can be seen by motorists at this location; however, the visibility of Project components is somewhat constrained when viewed against the mottled texture and light-colored backdrop of the mountainous terrain to the west. The visibility of Project components becomes more pronounced approximately 2 miles to the south as the highway gradually veers toward the alignment, passing within less than 100 feet of several Project towers near the Big Pine Canal crossing. **Photograph 4,** a northbound US 395 motorist's perspective at the canal crossing, shows multiple lattice structures, partially silhouetted against the sky along the left (west) side of the highway. The closest tower is approximately 450 feet from this viewpoint. In the immediate foreground, overhead conductors can be seen above the roadside tree line to the left.

South of the Big Pine Canal crossing, the project alignment gradually diverges from US 395 and Project towers become less prominent in views from the roadway, for approximately 5 miles, at which point the highway passes through the center of Big Pine. The Project corridor skirts the town's perimeter, approximately 0.7 mile to the west, crossing Baker Creek Campground, a county recreation facility northwest of the town center, and Glacier Lodge Road, a roadway used by regional recreationalists to access the eastern Sierra backcountry. **Photograph 5** is a view from Baker Creek Campground looking east showing the Project alignment against a backdrop that includes both the sky and the distant White Mountains which overlook the eastern perimeter of the Owens Valley. A Project tower and overhead conductors located approximately 250 feet from the campground perimeter road can be seen to the right of a restroom facility visible in the foreground. This viewpoint is a KOP, and a visual simulation showing a close-range view of the Project from this County recreational facility is discussed in Section 3.3.1 (refer to Figure 4). **Photograph 6,** taken in Big Pine, is a view from near a residence showing a Project tower approximately 220 feet away partially visible on the left. As in the previous viewpoint location, dense vegetation screens the lower portion of the tower, and with the exception of the very top portion that is seen against the sky, the steel lattice structure is not particularly noticeable because it blends in with the mottled grey of the exposed rock surface of the mountain backdrop. A wood utility pole and overhead conductors are prominent foreground elements in this view.

South of Big Pine the Project alignment continues southeastward, and for approximately eight miles, it runs parallel to US 395, between approximately 0.5 and 0.75 mile to the west, traversing increasingly undulating alluvial terrain and volcanic outcrops. For approximately 1.75 miles the alignment comes within approximately 150 feet of the two transmission lines, and bypasses an area of irrigated cropland and the adjacent Fish Springs Fish Hatchery before veering gradually east toward US 395 and crossing the highway where the terrain becomes more rugged immediately west of Tinemaha Reservoir. **Photograph 7,** taken from northbound US 395 approximately 1,000 feet south of the highway crossing, represents a view of the Project alignment where steel monopoles have replaced older structures more typical of those seen along the Project corridor. This relatively close-range view shows the color of the gray steel Project pole visible in the foreground on the right resembles the color of the highway surface, while it contrasts against the darker tone of the hillside backdrop. The more distant array of poles seen on the left side of the highway are less noticeable where they are seen against a more mottled gray backdrop of the distant hillside.

After crossing the highway the Project turns south, and closely parallels the east side of US 395 for approximately 0.8 mile, subsequently veering to the southeast again. It crosses the Owens River twice and then largely parallels the west bank of the river along the center of the Owens Valley. In this area, the Project alignment and the US 395 corridor are gradually farther apart, and for approximately the next 26 miles the roadway is west of the Project, at distances of up to approximately 3.5 miles. **Photograph 8** is a view from the Division Creek Safety Roadside Rest Area along US 395, looking east across the valley landscape, toward the Owens River, which runs along the base of the Inyo Mountains, visible in the background. In this view, lattice towers of two adjacent transmission lines are barely visible against the mottled landscape backdrop where they traverse the valley floor approximately 1.8 miles east of the highway, and smaller Project structures located approximately 2.2 miles from the viewpoint are generally imperceptible. From a location approximately 16 miles south, **Photograph 9**, taken from the

Manzanar National Historic Site along US 395, shows Project towers are somewhat more visible where the alignment passes approximately 1.0 mile to the east. Looking east from near the entrance to the facility, this view shows a portion of the entry plaza and parking area in the foreground with prominent vertical foreground elements including a flag pole, light standards, information kiosks and several small trees, with an expansive view of the Owens Valley and Inyo Mountains in the background. In this slightly elevated perspective, Project towers are not particularly noticeable, yet can be seen faintly, beyond the roadway in the middle distance.

The Project alignment and US 395 converge once again, approximately 4.5 miles south of Manzanar where they extend through a narrow pass between the Alabama Hills, a 1,500 foot high rock formation situated west of the Owens Valley floor and a wetland area bordering the Owens River to the east. In this area the north and southbound lanes of US 395 are separated for approximately 2 miles and the Project alignment crosses the northbound lanes and passes between the two travel directions, before crossing the northbound lanes once again as the Project veers away from the highway corridor where the alignment bypasses the eastern perimeter of Lone Pine, approximately 2.3 miles to the south. **Photograph 10** is a view of the Project alignment from northbound US 395, approximately 0.25 mile south of the second highway crossing showing the roadway gradually ascending, flanked by the Alabama Hills on the left. The Inyo Mountains, which border the east side of the Owens Valley, can be seen at the right edge of this view, and multiple Project lattice structures, interspersed with wood utility poles, are visible on both sides of the roadway. The lattice structures in the immediate foreground on the right are prominent elements seen against the light-colored sky backdrop, as is the closest wood pole. Beyond the highway crossing, Project structures become progressively less evident where the contrast against the darker color and varied texture of the mountain backdrop is weak. In the distance, approximately 2.5 miles away, several Project towers are barely visible in the center of the photograph where they silhouette against the sky. This location is a KOP; Section 3.3.1 includes discussion of the visual simulation showing a close-range view of the Project crossing as seen from this eligible State Scenic Highway part of the Eastern Sierra Scenic Byway (refer to Figure 5a and 5b).

Where the Project bypasses Lone Pine approximately 0.6 mile from residential areas, it is generally screened by intervening landscaping and structures. Southeast of the town center the alignment comes within approximately 0.45 mile of scattered residences within the Lone Pine Paiute-Shoshone Reservation. Taken from the north edge of the reservation, **Photograph 11** shows two Project towers beyond a distant stand of trees that are seen against the backdrop of the Inyo Mountains approximately 3.5 miles to the east. From this location, these structures are not particularly noticeable within the context of more prominent elements in the foreground including a portion of a Tribal community center building as well as a wood power pole supporting overhead conductors, and a stand of mature trees.

After crossing SR-136 at the south end of Lone Pine, the Project alignment enters the broad, open landscape of Owens Lake basin, at the southern end of the Owens Valley. In a view looking east toward the Inyo Mountains, **Photograph 12** is a view from Boulder Creek RV Resort, a private recreational vehicle facility located along US 395 approximately 2.5 miles south of Lone Pine that shows the Project alignment traversing the flat, arid landscape north of the lake. This partially open view from the facility's parking area is framed by mature trees and wood rail

fencing in the immediate foreground. A wood power pole supporting overhead conductors is visible in the foreground against the mountain backdrop, while in the distance, multiple sets of lattice towers including Project structures as well as taller towers of two nearby transmission lines are discernable through a layer of atmospheric haze. **Photograph 13** is a view toward the three transmission alignments from the site of an interpretive informational kiosk located along the unpaved roadway that extends east into the lake basin. Project towers are approximately 0.25 mile from this viewpoint location and can barely be seen to the immediate left of the interpretive structure in the foreground kiosk, as well as at the left edge of the view, whereas noticeably larger, more prominent structures of the two parallel transmission lines, are visible within the landscape plain. The more distant Sierra Nevada mountains frame the backdrop.

At the north end of Owens Lake the Project alignment crosses US 395, and for approximately the next 11 miles it then parallels the highway corridor approximately 500 feet to the west, where it follows the western perimeter of the mostly dry lake bed. **Photograph 14**, taken from northbound US 395, shows Project towers on both sides of the highway as the roadway climbs a low summit along the former lake shore. Project structures are seen primarily against the sky, and also visible is an adjacent power alignment, supported by smaller steel monopoles, paralleling the Project approximately 300 feet to the west. This viewpoint is a KOP selected for visual simulation to show a motorist's view of the Project as seen from an eligible State Scenic Highway and part of the Eastern Sierra Scenic Byway where the alignment crosses and passes in close proximity to the roadway (refer to Figures 6a and 6b).

Photograph 15 is a view looking southeast across the southern tip of the Owens Lake basin from the northeast corner of Cartago, a community of approximately 90 residents. This view shows a variety of wood and steel utility structures including two Project lattice towers located approximately 0.25 mile away, seen through a layer of atmospheric haze, to the right and left sides of the roadway, as well two wood interset Project poles situated midway between the two towers. In this area, an adjacent power alignment passes within approximately 300 feet of residences located along Cartago's eastern perimeter. In the foreground, overhead conductors of nearby power lines are discernible on either side of this local roadway. This viewpoint is a KOP selected for a visual simulation to show a view of the Project where from the Cartago residential community (refer to Section 3.3.1 and Figures 7a and 7b).

The Project crosses SR-190, a two-lane paved roadway that skirts the southeastern perimeter of the Owens Lake basin. **Photograph 16**, a close-range motorist's view of the Project crossing from a distance of approximately 400 feet shows overhead conductors along with a prominent lattice structure in the foreground on the right side of the roadway seen against a backdrop of the Sierra Nevada mountains and sky. Multiple wood poles and conductors are seen, including several that are prominent in the foreground along both sides of the roadway in the foreground. These power lines converge toward the town of Olancha, located approximately 0.8 mile away at the junction of SR-190 and US 395. Portions of the town are visible near the center of this view, where reflective rooftops can be seen amid stands of mature tree. The location of a spring water bottling facility, Olancha serves as a gateway to Olancha Dunes, an OHV recreation area located at the southern perimeter of the Owens Lake basin, and for visitors from locations to the south, traveling to Death Valley via SR-190. The town's population generally inhabit scattered residences situated south of the SR-190 junction on both sides of US 395. The Project alignment

comes within between approximately 100 and 200 feet of several residential properties east of US 395. This viewpoint is a KOP selected for visual simulation to show a close-range motorist's view of the Project as seen from SR-190, an eligible State Scenic Highway, where the alignment crosses and structures are in close proximity to the roadway (refer to Figure 8). **Photograph 17** is a view from Fall Road, an unpaved roadway in Olancha that provides access to the Coso Range Wilderness. In the foreground of this view a single story wood house, recreational vehicles with various outbuildings, and several mature trees are visible within the open desert landscape. Vertical elements including a Project lattice tower and several wood poles supporting nearby power lines, along with the trees situated near the residence, are noticeable against a backdrop characterized by the horizontal expanse of the Olancha Dunes seen beyond the Project alignment, and the more distant Coso Range to the right.

From North Haiwee Road, an unpaved roadway leading to North Haiwee Reservoir from US 395, the Project alignment can be seen at close-range where it crosses the road approximately 0.25 mile east of the highway. **Photograph18** is a view looking across a shallow ridge within an open landscape punctuated by Joshua trees showing an array of Project structures including lattice towers and wood interset poles, paralleled by wood utility poles from a nearby parallel line. The structures are seen receding into the distance against a sky backdrop. Clouds and atmospheric haze decrease visibility of structures that are beyond the first tower seen in the immediate foreground. The reservoir is currently closed to the public; however, numerous OHV routes, many branching from North Haiwee Road, provide access in this area.

Entering the relatively broad expanse of Rose Valley south of North Haiwee Road, the alignment roughly parallels US 395 at distances ranging from approximately 0.4 to 0.8 mile. **Photograph 19** is a view looking east from Coso Junction Roadside Safety Rest Area, situated along US 395 roughly midway through the approximately 18 mile-long, three to six mile-wide arid basin. Near the center of this view, a Project tower can be seen at a distance of approximately 0.45 mile, and at this distance, the structure is less prominent than the structures and trees seen in the foreground. Nonetheless, where not screened by trees that border the rest stop facility, an individual Project structure is a noticeable vertical element seen in the landscape and against the more dominant mountainous backdrop. Photograph 19 indicates that at times, views toward the Project from this location are partially obscured by dust in the atmosphere.

Approximately 4 miles south of the rest area, the broad alluvial valley landscape transitions to an area where lava flows associated with the Coso Volcanic Field to the east have resulted in the formation of an approximately 10 mile-long basalt escarpment, and a narrowing of the valley floor. For approximately 6 miles along this area the Project alignment and the US 395 corridor are less than 1,000 feet apart. **Photograph 20** illustrates the view looking southwest from Fossil Falls, a BLM-administered recreation facility, located approximately 0.5 mile east of US 395. With access via an unpaved roadway, this recreational site of geologic interest for unique basalt formations includes a campground and trail complex that is situated on an elevated terrace overlooking the valley. Although Project towers and wood poles are visible beyond an expanse of dark colored basalt covered landscape and against the large-scale backdrop of distant Sierra Nevada mountains, these structures are not particularly noticeable given the overall landscape context including a dominant backdrop and foreground landscape elements such as the informational kiosk structure and exposed basalt formation. This location is a KOP selected for

visual simulation to show a view of the Project from this public recreational trail and campground facility managed by the BLM, where it passes in close proximity to a BLM Area of Critical Environmental Concern (ACEC) (refer to Section 3.3.1 and Figure 9).

Photograph 21, is a view from northbound US 395 approximately 2 miles south of Fossil Falls showing an array of Project structures where the Project alignment passes within 300 feet of the highway. Project towers are visible along the right side of the roadway along with a portion of Little Lake near the edge of the roadway in the foreground and the dark colored basalt of the escarpment approximately 0.7 mile beyond. For northbound motorists the distant volcanic cone is a prominent landscape feature in the backdrop of this view. **Photograph 22** is a view from a BLM administered OHV roadway located approximately 0.25 mile east of US 395, and approximately 3 miles south of the previous viewpoint location. Both of the photographs demonstrate that the transmission structures tend to blend in where they are seen against the varied texture and dark color of rocky or basalt covered landscape whereas the structures are more visible when seen against the light-colored sky.

As the alignment continues south and approaches Inyokern substation, the visual setting transitions from the high desert's topographically varied landscape to the more open expansive flat terrain of the Mojave Desert. **Photograph 23,** taken from a local unpaved road in Indian Wells Valley, illustrates the transition in landscape character and shows a close-range view of the project in the vicinity of the Inyokern community approximately 4 miles north of Inyokern Substation. This view shows open sand-covered areas with a rural residential property including a single story house, with outbuildings, vehicles, fencing and clusters of small trees and large shrubs in the foreground. A prominent Project tower is also silhouetted against the sky on the left in the foreground. On the right the top of a second Project tower is also visible against the sky and various structures supporting several nearby power lines including single wood poles and H-frames can also be seen on the left and near the center of this view. This location is a KOP selected for visual simulation to show a close-range view of the Project where it passes in close proximity to residences near the community of Inyokern (refer to discussion in Section 3.3.1 and Figure 10). **Photograph 24,** taken from SR-178, is a view looking toward Inyokern substation. Seen against the distant backdrop of the Sierra Nevada mountains, and backlit by the afternoon sun, numerous power poles and overhead conductors support several converging power alignments including the Project. These structures as well as those of the substation facility are prominent foreground elements in this view from the road.

Photograph 25 is a close-range view toward a residential property taken from local road in an area of scattered residences at Inyokern's rural eastern edge, approximately 0.8 mile south of Inyokern Substation. Seen beyond the single story residence fencing, and vegetation in the foreground, multiple steel lattice towers along with wood H-frame transmission structures are visible primarily against a sky backdrop. The structures support three parallel alignments receding toward the low hills seen along the horizon on the right. The nearest Project tower is approximately 450 feet from the residence and is just to the right of the tower that appears tallest in this view. Trees situated adjacent to the residence on the left screen the US 395 corridor that lies beyond the residence. This location is a KOP selected for visual simulation to show a close-range view of the Project where it passes in close proximity to residences in the community of Inyokern (refer to discussion in Section 3.3.1 and Figures 11a and 11b).

Photograph 26 is a view showing the Project and two adjacent alignments near where they cross the US 395 corridor. In this northbound motorist's view, a variety of utility poles and towers are seen along both sides of the roadway against a backdrop comprised predominantly of the Sierra Nevada mountains. Near the left edge, in the foreground, a Project tower is seen partially silhouetted against the sky and sets of overhead conductors can be seen spanning the highway. At the right edge of the view, Project structures as well as structures supporting the two parallel alignments can be seen to varying degrees against the textures and grey colors of the mountain background. Set back from the left side of the highway are several residences, partially screened by vegetation.

Photograph 27 is a view from Garlock Road, approximately 1.4 miles west of US 395. The strong linear form of the roadway in the foreground bisects this open view across the desert landscape toward the multi-hued El Paso Mountains seen in the background. Lattice towers visible to the left of the highway include a Project structure in the distance, partly discernible against the dark mountain and valley backdrop, whereas a taller more noticeable tower of an adjacent line is partially silhouetted against the sky in in the foreground. Lattice towers including several Project structures are also visible on the right side of the roadway; however, these structures are not particularly noticeable because in addition to being partially screened by roadside shrubs in the foreground, the towers blend with the varied texture of the sloping terrain.

Photograph 28, a view from Lexington Avenue, shows the Project where it passes within 300 feet of residences in the community of Randsburg. The preserved elements such as fencing, a vehicle as well as buildings seen in the immediate foreground reflect the town's cultural history and historical landmark designation. In this close-range view, two lattice towers including a Project structure to the left of a taller tower supporting an adjacent line are visible side by side silhouetted against the sky on the ridge beyond the houses in the foreground. A second Project tower, seen against the mottled hillside backdrop near the right edge of the view, is barely visible. Also in the foreground, a telecommunication line is a noticeable horizontal feature. As discussed in Section 3.3, this viewpoint is a KOP selected for visual simulation to show a view of the Project as seen from the Rand Mining District State Historical Landmark where the alignment passes in close proximity to residences in the Town of Randsburg (refer to Figures 12a and 12b).

Photograph 29 is a view looking south along the power line corridor approximately 13 miles north of Kramer Junction, where the highway intersects Fremont Peak Road, an unpaved roadway providing access to BLM OHV recreation areas along both sides of US 395. Silhouetted against the sky within the broad expanse of Mojave Desert landscape, Project structures can be seen to the left and alongside taller lattice structures of an adjacent alignment, where the Project passes within approximately 60 feet west of US 395.

Along most its route within Landscape Unit 3 the Project alignment closely parallels several unrelated power alignments. **Photograph 30**, a view looking east from US 395, approximately 0.6 mile north of Kramer Junction, shows Project structures amid steel lattice towers, wood monopoles and other H-frames supporting four adjacent power lines. Wood Project H-frame

structures can be seen in the center-right foreground, receding between taller lattice structures into the distance.

Photograph 31 is a motorist's view from northbound US 395 near Kramer Substation, approximately 800 feet south of the SR-58 and US 395 intersection at Kramer Junction. Built elements seen at this location include a variety of vertical utility poles and towers as well as other commercial structures that are visible primarily against the sky. In the foreground are two deadend TSPs and multiple overhead conductors where the Project leaves the substation. Additional Project steel structures recede in the distance along the highway. On the left, wood utility poles, cobra-style light standards, along with various storage facilities, and on the right, roadway and commercial signage, along with vehicles on the roadway, largely obstruct more distant views of the surrounding desert landscape.

Looking south from the entry kiosk of the wildlife viewing area at Harper Dry Lake approximately 15 miles east of US 395, **Photograph 32** shows the Project alignment together with steel lattice towers that support two adjacent power lines from a distance of approximately 1 mile. While faintly visible against the light-colored sky and backdrop of distant low hills, the Project is not particularly noticeable when viewed beyond the flat playa landscape, and alongside the taller structures of the adjacent alignments. This location is a visual simulation KOP selected to show a view of the Project from a BLM Area of Critical Environmental Concern (ACEC) and BLM Watchable Wildlife Site (refer to Figures 13a and 13b and discussion in Section 3.3.1).

A close-range view of the Project is shown in **Photograph 33**, taken near an isolated rural residential property along Holstead Road, north of the community of Hinkley. Prominent foreground elements in this view include a steel lattice tower and multiple overhead conductors of two adjacent power lines that parallel the Project in this location, together with adjacent wood utility poles. Seen from a distance of approximately 650 feet, a wood Project H-frame structure is visible in the foreground beyond the dark wood fence to the left of the residence; however, the Project structure is barely noticeable in front of the taller, more prominent lattice tower seen in the center of the view.

Photograph 34, a view from Daggett-Yermo Road, approximately 0.75 mile south of I-15, shows the Project alignment against a backdrop of low hills. In this view from a distance of approximately 0.25 mile, houses and adjacent power lines, including several lattice towers and wood utility poles, are noticeable elements in the foreground while the dark wood Project H-frame structures are not particularly noticeable in the foreground because they blend in with the similar-colored hillside backdrop. Near the right edge of the view, several Project structures can be seen in the distance; however, these structures are barely visible against the lighter colored hills and sky.

For the majority of the 44-mile long Segment 3S, the Project alignment is supported by wood H-frame structures; however, as shown in **Photograph 35**, where the route crosses SR-58 the Project is supported by TSPs. This northbound motorist's view shows conductors spanning the roadway and a gray TSP, partially silhouetted against the sky, to the left of the roadside. The landscape in the backdrop includes an arid expanse of the Mojave River channel, irrigated cropland and low hills. Highway infrastructure elements such as asphalt paving, galvanized

guardrails, and a prominent highway sign, dominate the foreground of this view. Similar to the Project pole, the color and texture of these roadway elements generally blend in with the surrounding light-colored desert terrain.

Photograph 36 is a close-range view of the Project taken from a residential street within a subdivision located southwest of central Barstow. In the foreground of this view, residences are set back from both sides of the road and dark wood Project H-frame structures are prominent against the sky along the right side. Utility poles and overhead conductors of nearby power lines are also noticeable in this view where horizontal characteristics of the flat landscape include the low-pitch building roofs in the foreground, low fences and comparatively sparse, low growing vegetation that are seen against a backdrop pattern with numerous overhead conductors. As discussed in Section 3.3, this viewpoint is a KOP selected for visual simulation to show a close-range view of the Project where it passes in close proximity to residences located in Barstow (refer to Figures 14a and 14b).

South and east of Barstow, the alignment traverses open desert terrain and is mainly seen by motorists traveling along area roadways. In this area, as with other portions of the alignment, the visibility of Project elements varies depending on backdrop conditions. **Photograph 37** is a northbound motorist's view from SR-247 toward the Project crossing. On the left, a dark wood Project H-frame structure is noticeable against the sky at the top of a low ridge, approximately 800 feet from this viewpoint location, and near the right edge of the view, a second Project structure is somewhat less noticeable against a backdrop comprised primarily of mountains. Among the additional vertical elements seen in the landscape are multiple wood utility poles supporting nearby or adjacent power lines, including a line crossing the roadway in the foreground and another that parallels the left side of the roadway in the distance. **Photograph 38** is a view looking east along I-40, where the alignment crosses the highway at an oblique angle. At this location, multiple structures including those of the Project can be seen along both sides of the highway. The nearest Project structure in the foreground to the right of the roadway, approximately 525 feet from the viewpoint, stands out clearly against the lighter backdrop of mountains and sky. To the left of the roadway, the closest structure, seen at a distance of approximately 1,800 feet, is less noticeable against the light sky backdrop; as the alignment diverges from the roadway, the visibility of structures diminishes with distance, an effect accentuated by atmospheric haze. Near the center and discernable in the distance, lattice structures support a nearby power line. This viewpoint is a KOP, selected for visual simulation to show a motorist's view of the Project as seen from I-40, an Eligible State Scenic Highway and San Bernardino County scenic route where the alignment crosses and structures are in close proximity to the roadway (refer to Figures 15a and 15b).

After crossing I-40, the alignment turns to the north, and crosses National Trails Highway (Route 66), approximately 0.4 mile from Coolwater Substation. **Photograph 39,** a view looking west, approximately 0.25 mile from the alignment crossing, shows a Project H-frame structure on the right side of the roadway, faintly silhouetted against the light-colored hills and sky in the background while closer to the roadway edge an array of dark colored wood utility poles supporting a nearby power line recede toward hills seen in the distance. The community of Daggett is also visible among the trees seen in the distance near the center of the view, and beyond, the eastern edge of Barstow is barely discernable. At the left edge of this view, the dark

outline of a Project H-frame structure is visible and several more distant Project structures are barely seen against the low hills, while several wood poles supporting another line extend above the near horizon to the left of the roadway.

Photograph 40 is a KOP view toward the Project alignment taken from a perimeter road at the edge of Crystal Lake Estates, a residential development with homes oriented inward toward an artificial lake and away from the surrounding Mojave Valley landscape. Several earth tone residential structures including houses with garages, storage buildings, fencing and sparse landscaping are visible in the foreground on the left, and Project lattice H-frame structures can be seen receding against a backdrop of sky and mountains starting at the right edge of the view. The structure in the foreground, situated approximately 300 feet from the nearest residence, is a noticeable vertical element; however, the more distant Project structures are less visible where they blend in with the similar colored backdrop at the horizon. As discussed in Section 3.3, this viewpoint is selected for visual simulation to show a close-range view of the Project where it crosses BLM land that has a VRM Class III designation and passes in close proximity to residences (refer to Figures 16a and 16b).

In the Mojave Valley, the Project alignment runs parallel to I-15 at distances of between approximately 0.6 and 1.25 miles, and in general Project structures are not particularly noticeable from the roadway due to variation in topography and viewing distance. **Photographs 41** and **42** are two views at locations where the Project alignment crosses I-15, as the alignment leaves the Mojave River basin. Along a relatively short segment of roadway near a crossing, individual structures become readily apparent where the alignment comes in closer proximity to the highway. For example, **Photograph 41**, an eastbound motorist's view from I-15, taken from a distance of approximately 625 feet, a Project lattice H-frame structure is clearly visible against the sky on the right, although the further Project structure seen on the left is less noticeable where its gray color blends in against the sky. After closely paralleling the north side of I-15 for approximately 4.5 miles, the alignment again crosses I-15. In this area, a close-range public view of Project structures can be seen from the Clyde V. Kane Safety Roadside Rest Area, as shown in **Photograph 42**, taken near the rest area entry. Two Project structures, including a wood H-frame on the left, and a lattice tower near the center-right of the view, can be seen from distances of approximately 600 feet and 770 feet respectively. Additionally, a more distant Project lattice H-frame is less noticeable near the right edge of this view, particularly in comparison to prominent built elements in the immediate foreground such as the light standards and wood utility pole supporting a nearby power line. Near the center of this view several lattice towers supporting another transmission line can also be seen in the distance on the horizon. This viewpoint is a KOP selected for visual simulation to show a close-range view of the Project from a roadside safety rest area along I-15, an Eligible State Scenic Highway and San Bernardino County scenic route (refer to Figures 17a and 17b and Section 3.3.1).

East of the highway crossing, the Project alignment veers away from the I-15 corridor and skirts the upper reaches of Afton Canyon approximately 1.5 miles south of highway, crossing an area of rugged sparsely vegetated terrain. In this area public access is provided by Afton Canyon Road, an unpaved roadway that is crossed by the Project, as depicted in **Photograph 43,** taken near the entrance to Afton Canyon recreation area. In this northeast facing view, a dark wood Project H-frame is visible on the left; however, the Project's gray lattice H-frame structures are

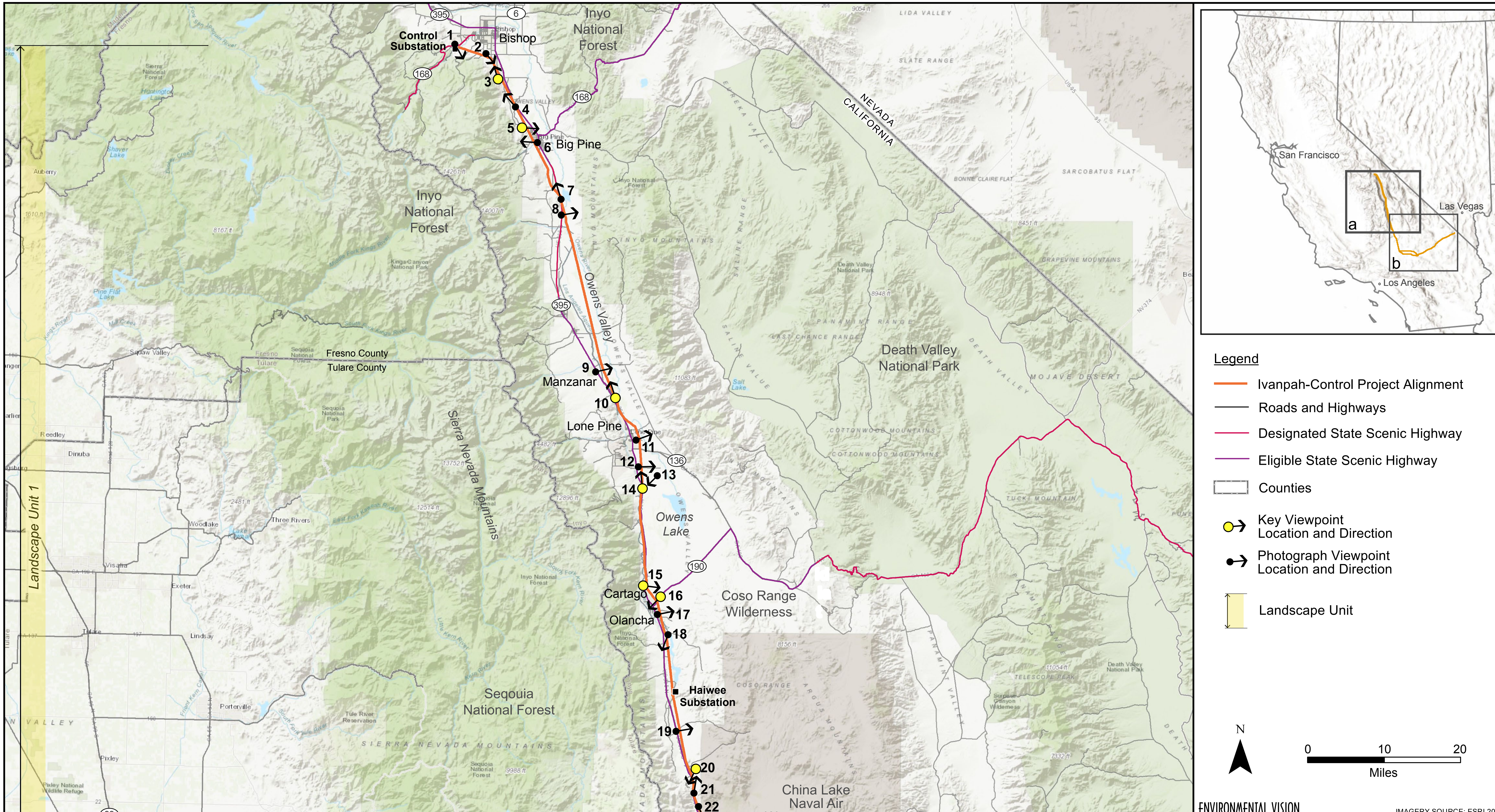
barely perceptible alongside larger lattice towers that support a nearby transmission line. Similarly, **Photograph 44**, taken from a location further east along I-15 where the Project once again crosses the highway, shows a sweeping vista across the arid basin landscape and mountain backdrop in an elevated view toward a broad arid basin. While the Project lattice H-frame structure, situated approximately 700 feet away near the right edge of the view is discernable, more distant Project structures are barely perceptible against the textured mottled landscape.

The Project route continues on the north side of the I-15 corridor for the next approximately 59 miles to its terminus at Ivanpah Substation. Five photographs show representative views in this area where the Project mostly crosses federal land managed by the BLM. Visibility of Project structures from the highway varies with distance from the roadway and is affected by the varied backdrop that characterizes the landscape within this portion of the route. At the town of Baker, the Project crosses SR-127. **Photograph 45,** taken near the entrance to a junior high school campus, shows a view looking north from SR-127 across a flat desert plain against a backdrop of distant mountains and sky with a variety of Project structures seen on both sides of the roadway at distances ranging between approximately 900 and 1,400 feet. These include, on the left and silhouetted against the sky, a tubular steel H-frame and a shorter lattice tower. On the right side of the roadway, the dark steel framework of the existing Baker Substation stands out against the lighter colored backdrop terrain, while a Project lattice H-frame structure to the right of the substation facility blends in with the backdrop and is less noticeable. Additional more noticeable structures supporting nearby power lines include a prominent lattice tower with overhead conductors at the right edge of the roadway in the foreground, multiple wood poles near the substation, and an array of wood utility poles along the roadway on the left side of the road. As discussed in Section 3.3, this viewpoint is a KOP selected for a visual simulation to show a view of the Project as seen from along SR-127, an Eligible State Scenic Highway and San Bernardino County scenic route where the alignment is in proximity to a public school in the Town of Baker (refer to Figures 18a and 18b).

Photograph 46 is a view taken from the Halloran Wash, a BLM Area of Critical Environmental Concern (ACEC) near I-15 a few miles to the east of Baker**,** where the highway borders the northern edge of the Mojave National Preserve. From this location the Project lattice H-frame structures blend in with the backdrop of desert scrub vegetation, light-colored alluvium and darker colored rock outcrops. Seen from a distance of approximately 0.25 mile, Project elements are visible, but do not particularly stand out. With increasing elevation within the mountainous terrain traversed by the Project, the vegetation pattern changes and denser, darker green vegetation replaces sparse, grey desert scrub, a change that alters backdrop conditions and visibility of the Project. **Photograph 47,** taken approximately 3.5 miles northeast of the previous viewpoint, is a view from I-15 near Halloran Summit Road. Passing within approximately 800 feet of I-15, the Project is somewhat noticeable at this location partly as a result of the contrast between the light-colored lattice structures and the darker green vegetation in the backdrop. Less noticeable in the center of this view is a larger steel lattice tower supporting a nearby transmission line, located further from the roadway where it is viewed against the lighter colored, mottled terrain. The upper portion of another tower from this alignment appears more prominently against the sky on the right edge of this view.

Photograph 48 is a view toward the Project from a roadside rest area along westbound I-15 showing that Project structures generally blend in with the light-colored, textured backdrop of scrub-covered dunes at the edge of a dry lake basin and are barely evident. In contrast the larger lattice towers of a nearby transmission line that parallels the Project are more noticeable, particularly where part of these structures can be seen silhouetted against the sky above the horizon. Approximately 1.6 miles to the northeast of the previous viewpoint, **Photograph 49** is a close-range view of the Project alignment immediately north of the I-15/Cima Road junction where it crosses Excelsior Mine Road. This paved roadway borders the western edge of the portion of the Mojave National Preserve that extends north of I-15 in this area, and lattice H-frame structures can be seen on both sides of the roadway against the comparatively darker mountainous backdrop and more noticeably where the top part of the structures is seen against the sky. More prominent is the closer and taller transmission structure supporting a nearby transmission line seen silhouetted against the sky near the center of the view. **Photograph 50** is a view where the Project approaches Mountain Pass Substation as seen from Clark Mountain Road, which borders the northern segment Mojave National Preserve to the east and is in the Clark Mountain BLM Area of Critical Environmental Concern (ACEC). Looking northeast from this location, Project structures are visible to the left in front of the substation near the top of the ridge, and lattice towers of a nearby transmission alignment appear on the right, partly silhouetted against the sky.

APPENDIX B
Figures



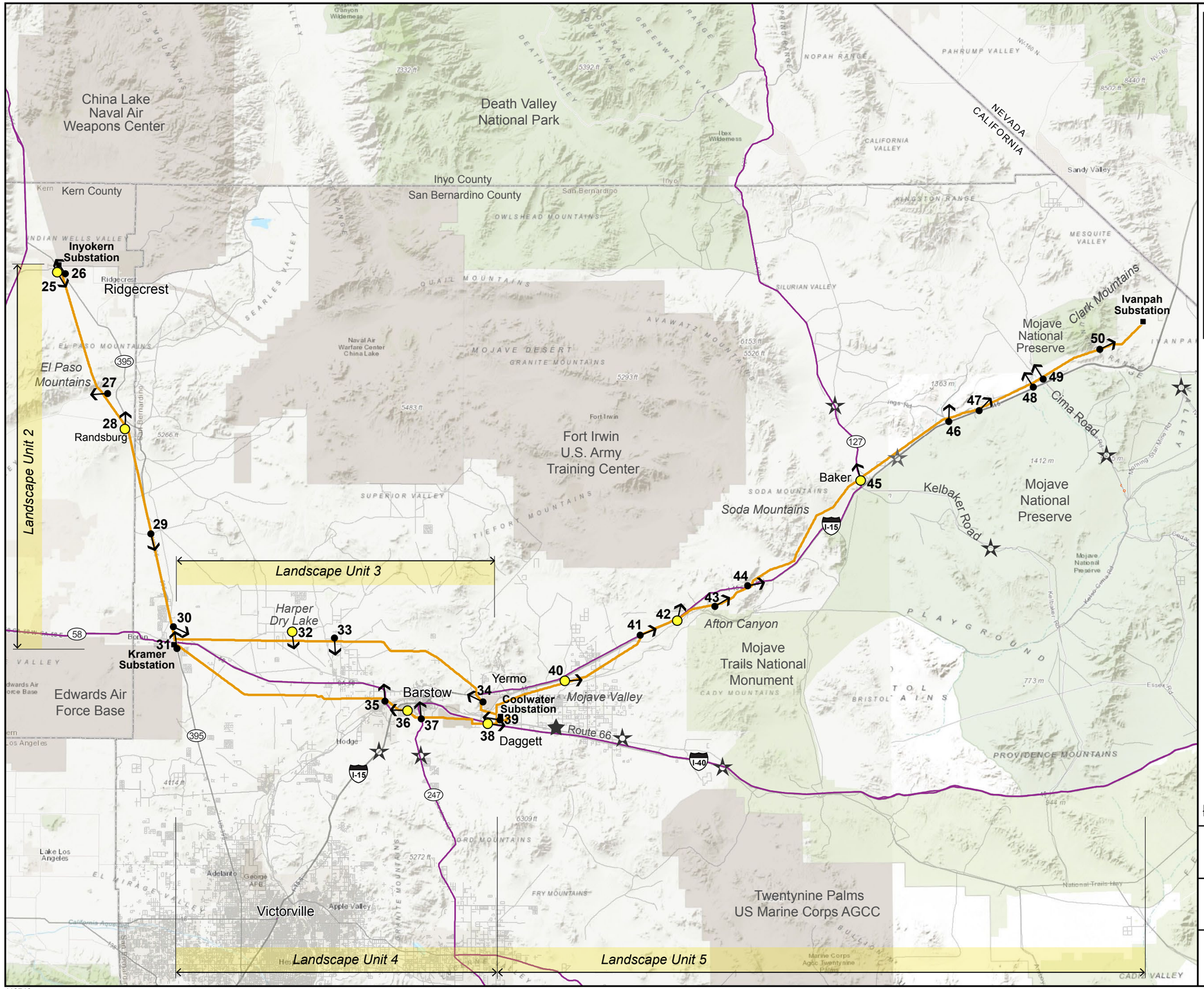
Transmission Line
Rating Remediation

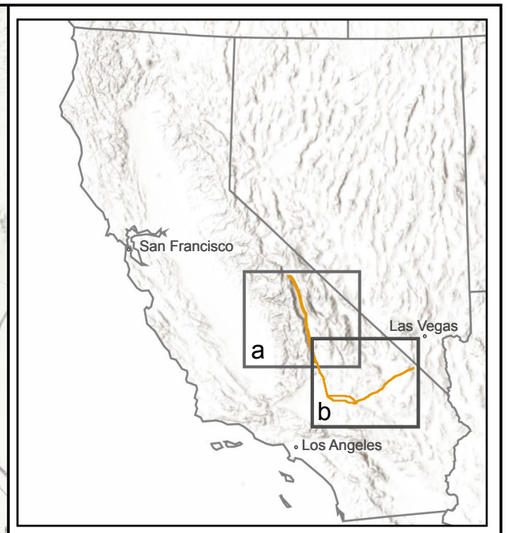
Ivanpah-Control Project
Photograph Viewpoint Locations

ARCADIS SOUTHERN CALIFORNIA EDISON An EDISON INTERNATIONAL Company

FIGURE
1a

112718





Legend

- Ivanpah-Control Project Alignment
- Counties
- Roads and Highways
- Eligible State Scenic Highway
- San Bernardino County Scenic Route
- National Trails Highway
- Key Viewpoint Location and Direction
- Photograph Viewpoint Location and Direction
- Landscape Unit

N

0 10 20
Miles

ENVIRONMENTAL VISION

IMAGERY SOURCE: ESRI 2018

Transmission Line
Rating Remediation

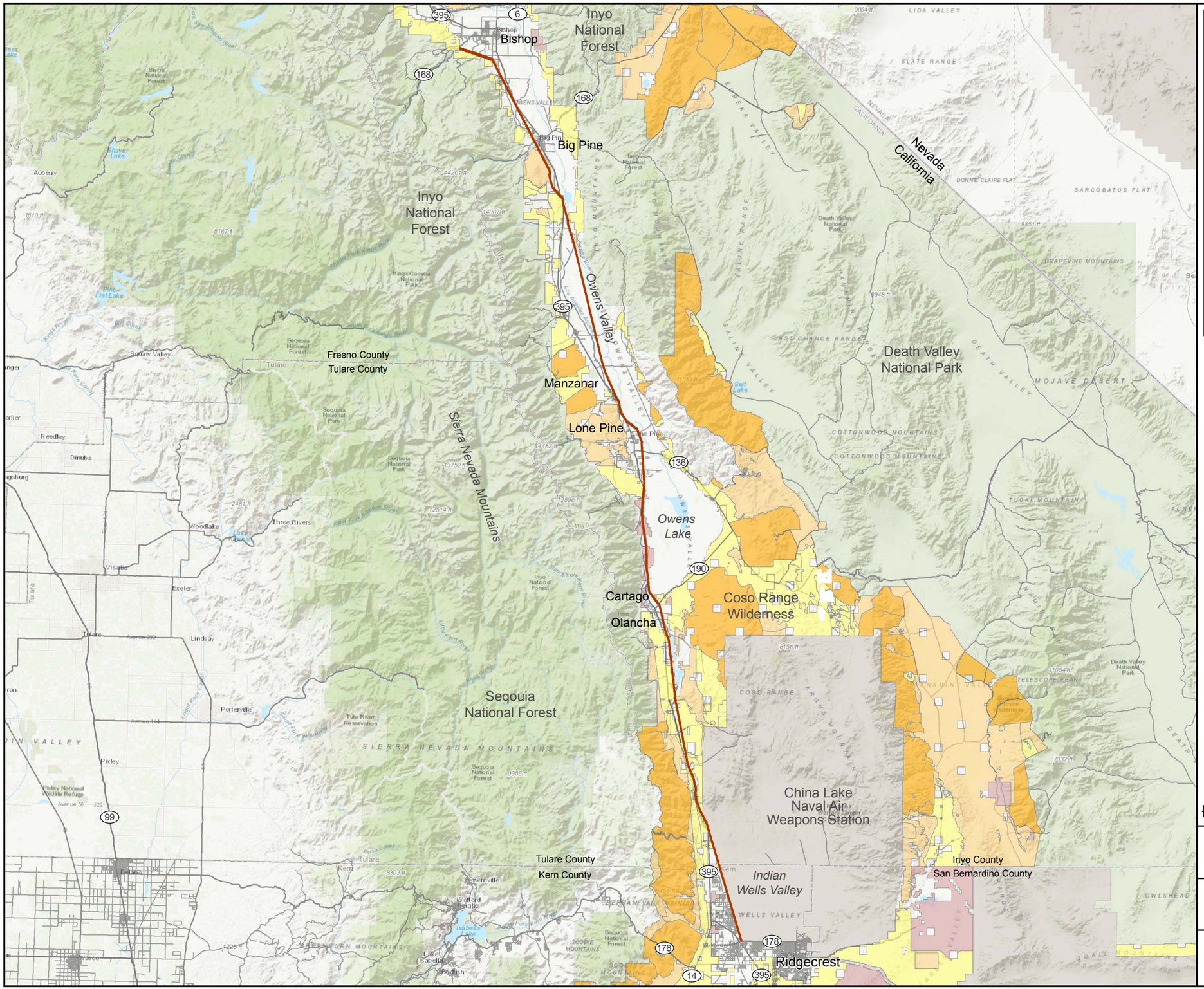
Ivanpah-Control Project
Photograph Viewpoint Locations

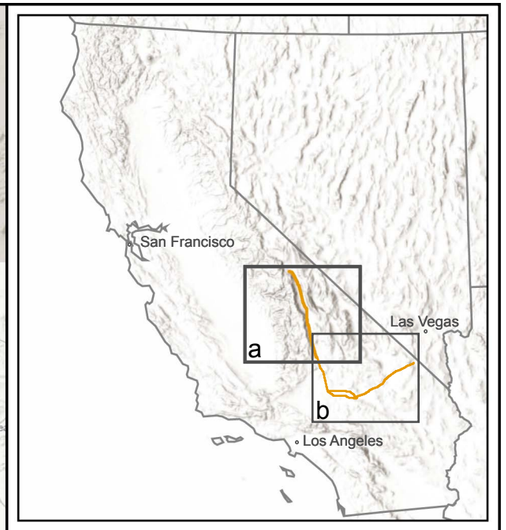
ARCADIS

SOUTHERN CALIFORNIA EDISON
An EDISON INTERNATIONAL Company

FIGURE
1b

112718





Legend

Ivanpah-Control Project Alignment

BLM VRM Classifications

- Class I
- Class II
- Class III
- Class IV

N

0 10 20

Miles

ENVIRONMENTAL VISION

VRM data source: BLM 2016, 1993
Imagery source: Esri 2018

Transmission Line
Rating Remediation

Ivanpah-Control Project
BLM VRM Classifications

ARCADIS

SOUTHERN CALIFORNIA EDISON
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FIGURE
1c

082418

China Lake Naval Air Weapons Center

Death Valley National Park

Kern County

Inyo County

San Bernardino County

NEVADA

CALIFORNIA

Ridgecrest

El Paso Mountains

Randsburg

Fort Irwin U.S. Army Training Center

Mojave National Preserve

Clark Mountains

Cima Road

Baker

Soda Mountains

Kelbaker Road

Harper Dry Lake

Boron

Edwards Air Force Base

Yermo

Barstow

Mojave Valley

Daggett

Route 66

Afton Canyon

Mojave Trails National Monument

Victorville

Twentynine Palms US Marine Corps AGCC

PAHRUMP VALLEY

Sandy Valley

INDIAN WELLS VALLEY

OWLSHEAD MOUNTAINS

QUAIL MOUNTAINS

AVAWATZ MOUNTAINS

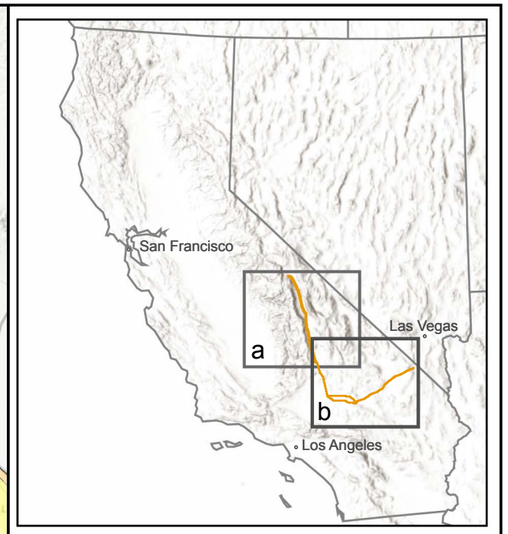
MOJAVE DESERT

GRANITE MOUNTAINS

TIEFORT MOUNTAINS

PLAYGROUND

PROVIDENCE MOUNTAINS



Legend

Ivanpah-Control Project Alignment

BLM VRM Classifications

Class I

Class II

Class III

Class IV

N

0 10 20

Miles

ENVIRONMENTAL VISION

VRM data source: BLM 2016, 1993
Imagery source: Esri 2018

Transmission Line Rating Remediation

Ivanpah-Control Project BLM VRM Classifications

ARCADIS

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FIGURE
1d

082418

1. SR-168 looking southeast toward Control Substation

2. Sunland Lane looking southeast

Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2a
Representative Photographs - Section 1
Ivanpah-Control Project

*3. Gerkin Road looking north

4. US-395 at Big Pine Canal looking northwest

* Key viewpoint; see Figure 3 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

Figure 2b
Representative Photographs - Section 1
Ivanpah-Control Project

ENVIRONMENTAL VISION
082418

*5. Baker Creek Campground in Big Pine looking east

6. Cornell Street at Rossi Lane in Big Pine looking west

* Key viewpoint; see Figure 4 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2c
Representative Photographs - Section 1
Ivanpah-Control Project

7. US-395 near Tinemaha Reservoir looking north

8. Division Creek Safety Roadside Rest Area looking east

Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2d
Representative Photographs - Section 1
Ivanpah-Control Project

9. Manzanar National Historic Site looking east

*10. US-395 north of Lone Pine looking north

* Key viewpoint; see Figure 5 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2e
Representative Photographs - Section 1
Ivanpah-Control Project

11. Goodwin Road at Substation Road in Lone Pine Paiute-Shoshone Reservation looking northeast

12. Boulder Creek RV Resort looking east

Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2f
Representative Photographs - Section 1
Ivanpah-Control Project

13. Owens Lake visitor information center looking southwest

*14. US-395 near Owens Lake looking north

* Key viewpoint; see Figure 6 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2g
Representative Photographs - Section 1
Ivanpah-Control Project

*15. Whitney Street near Mojave Street in Cartago looking southeast

*16. SR-190 near Olancha looking southwest

* Key viewpoint; see Figures 7 and 8 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2h
Representative Photographs - Section 1
Ivanpah-Control Project

17. Fall Road in Olancha looking northeast

18. North Haiwee Road near Haiwee Reservoir looking southwest

Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2i
Representative Photographs - Section 1
Ivanpah-Control Project

19. Coso Junction Safety Roadside Rest Area looking east

*20. Fossil Falls Trailhead looking southwest

* Key viewpoint; see Figure 9 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

Figure 2j
Representative Photographs - Section 1
Ivanpah-Control Project

ENVIRONMENTAL VISION
082418

21. US-395 at Little Lake looking north

22. BLM OHV Road SE109 looking south

Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2k
Representative Photographs - Section 1
Ivanpah-Control Project

*23. Patrice Avenue in Inyokern looking southeast

24. SR-178 looking northwest towards Inyokern Substation

* Key viewpoint; see Figure 10 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

Figure 2I
Representative Photographs - Section 1
Ivanpah-Control Project

ENVIRONMENTAL VISION
082418

*25. Syndor Avenue at Mercury Street in Inyokern looking southeast

26. US-395 near Inyokern looking northwest

* Key viewpoint; see Figure 11 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2m
Representative Photographs - Section 2
Ivanpah-Control Project

27. Garlock Road looking west

*28. Lexington Avenue in Randsburg looking north

* Key viewpoint; see Figure 12 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

Figure 2n
Representative Photographs - Section 2
Ivanpah-Control Project

ENVIRONMENTAL VISION
082418

29. Fremont Peak Road near US-395 looking south

30. US-395 near Kramer Junction looking southeast

Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2o
Representative Photographs - Section 2
Ivanpah-Control Project

31. US-395 at Kramer Junction looking north


*32. Harper Dry Lake Wildlife Viewing Area looking south

* Key viewpoint; see Figure 13 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

Figure 2p
Representative Photographs - Section 3
Ivanpah-Control Project

ENVIRONMENTAL VISION
082418

33. Holstead Road near Hinkley Road looking south

34. Daggett-Yermo Road near Silver Valley High School looking northwest

Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2q
Representative Photographs - Section 3
Ivanpah-Control Project

35. SR-58 near Barstow looking north

*36. Bonanza Road near H Street in Barstow looking west

* Key viewpoint; see Figure 14 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2r
Representative Photographs - Section 3
Ivanpah-Control Project

37. SR-247 near Barstow looking north

*38. I-40 near Daggett looking east

* Key viewpoint; see Figure 15 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2s
Representative Photographs - Section 3
Ivanpah-Control Project

39. Route 66 - National Trails Highway near Daggett looking west

*40. Carol Ann Drive at Crystal Lakes Estates, east of Barstow looking east

* Key viewpoint; see Figure 16 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

ENVIRONMENTAL VISION
082418

Figure 2t
Representative Photographs - Section 4
Ivanpah-Control Project

41. I-15 near Field Road looking northeast

*42. Clyde V. Kane Safety Roadside Rest Area on I-15 looking north

* Key viewpoint; see Figure 17 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

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Figure 2u
Representative Photographs - Section 4
Ivanpah-Control Project

43. Afton Canyon Road looking northeast

44. I-15 near Basin Road looking east

Refer to Figure 1 for photograph viewpoint locations

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Figure 2v
Representative Photographs - Section 4
Ivanpah-Control Project

*45. SR-127 at Baker Junior High School looking north

46. Halloran Wash near Halloran Springs Road looking north

* Key viewpoint; see Figure 18 for visual simulation
Refer to Figure 1 for photograph viewpoint locations

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Figure 2w
Representative Photographs - Section 4
Ivanpah-Control Project

47. I-15 west of Halloran Summit Road looking northeast

48. Valley Wells Safety Roadside Rest Area on I-15 near Cima Road looking northwest

Refer to Figure 1 for photograph viewpoint locations

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Figure 2x
Representative Photographs - Section 4
Ivanpah-Control Project

49. Excelsior Mine Road looking northwest

50. Clark Mountain Road near Mojave Preserve looking northeast

Refer to Figure 1 for photograph viewpoint locations

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Figure 2y
Representative Photographs - Section 4
Ivanpah-Control Project

Existing View from Gerkin Road, south of Bishop (VP 3)

Refer to Figure 1 for photograph viewpoint locations

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Figure 3a
Existing View: Gerkin Road
Ivanpah-Control Project

Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 3b
Visual Simulation: Gerkin Road
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Existing View from Baker Creek Campground in Big Pine (VP 5)

Refer to Figure 1 for photograph viewpoint locations

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Figure 4a
Existing View: Baker Creek Campground
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Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 4b
Visual Simulation: Baker Creek Campground
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Existing View from US-395 north of Lone Pine (VP 10)

Refer to Figure 1 for photograph viewpoint locations

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Figure 5a
Existing View: US-395 North of Lone Pine
Ivanpah-Control Project

Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 5b
Visual Simulation: US-395 north of Lone Pine
Ivanpah-Control Project

Existing View from US-395 near Owens Lake (VP 14)

Refer to Figure 1 for photograph viewpoint locations

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Figure 6a
Existing View: US-395 near Owens Lake
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Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 6b
Visual Simulation: US-395 near Owens Lake
Ivanpah-Control Project

Existing View from Whitney Street near Mojave Street in Cartago (VP 15)

Refer to Figure 1 for photograph viewpoint locations

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Figure 7a
Existing View: Whitney Street
Ivanpah-Control Project

Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 7b
Visual Simulation: Whitney Street
Ivanpah-Control Project

Existing View from SR-190 near Olancha (VP 16)

Refer to Figure 1 for photograph viewpoint locations

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Figure 8a
Existing View: SR-190 near Olancha
Ivanpah-Control Project

Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 8b
Visual Simulation: SR-190 near Olancha
Ivanpah-Control Project

Existing View from Fossil Falls Trailhead (VP 20)

Refer to Figure 1 for photograph viewpoint locations

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Figure 9a
Existing View: Fossil Falls
Ivanpah-Control Project

Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 9b
Visual Simulation: Fossil Falls
Ivanpah-Control Project

Existing View from Patrice Avenue in Inyokern (VP 23)

Refer to Figure 1 for photograph viewpoint locations

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Figure 10a
Existing View: Patrice Avenue
Ivanpah-Control Project

Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 10b
Visual Simulation: Patrice Avenue
Ivanpah-Control Project

Existing View from Syndor Avenue at Mercury Street in Inyokern (VP 25)

Refer to Figure 1 for photograph viewpoint locations

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Figure 11a
Existing View: Syndor Avenue
Ivanpah-Control Project

Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 11b
Visual Simulation: Syndor Avenue
Ivanpah-Control Project

Existing View from Lexington Avenue in Randsburg (VP 28)

Refer to Figure 1 for photograph viewpoint locations

Figure 12a
Existing View: Lexington Avenue
Ivanpah-Control Project

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Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 12b
Visual Simulation: Lexington Avenue
Ivanpah-Control Project

Existing View from Harper Dry Lake Wildlife Viewing Area (VP 32)

Refer to Figure 1 for photograph viewpoint locations

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Figure 13a
Existing View: Harper Dry Lake
Ivanpah-Control Project

Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 13b
Visual Simulation: Harper Dry Lake
Ivanpah-Control Project

Existing View from Bonanza Road near H Street in Barstow (VP 36)

Refer to Figure 1 for photograph viewpoint locations

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Figure 14a
Existing View: Bonanza Road
Ivanpah-Control Project

Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 14b
Visual Simulation: Bonanza Road
Ivanpah-Control Project

Existing View from I-40 near Daggett (VP 38)

Refer to Figure 1 for photograph viewpoint locations

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Figure 15a
Existing View: I-40
Ivanpah-Control Project

Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 15b
Visual Simulation: I-40
Ivanpah-Control Project

Existing View from Carol Ann Drive at Crystal Lakes Estates, east of Barstow (VP 40)

Refer to Figure 1 for photograph viewpoint locations

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Figure 16a
Existing View: Carol Ann Drive
Ivanpah-Control Project

Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 16b
Visual Simulation: Carol Ann Drive
Ivanpah-Control Project

Existing View from Clyde V. Kane Safety Roadside Rest Area on I-15 (VP 42)

Refer to Figure 1 for photograph viewpoint locations

Figure 17a
Existing View: Clyde V. Kane Safety Roadside Rest Area
Ivanpah-Control Project

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Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 17b
Visual Simulation: Clyde V. Kane Safety Roadside Rest Area
Ivanpah-Control Project

Existing View from SR-127 at Baker Junior High School (VP 45)

Refer to Figure 1 for photograph viewpoint locations

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Figure 18a
Existing View: SR-127 at Baker Junior High School
Ivanpah-Control Project

Visual Simulation of Proposed Project

Refer to Figure 1 for photograph viewpoint locations

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Figure 18b
Visual Simulation: SR-127 at Baker Junior High School
Ivanpah-Control Project