

**DRAFT**

**Initial Study/  
Mitigated Negative Declaration**

**ROSAMOND SWITCHING STATION**

Los Angeles Department of Water and Power  
Environmental Affairs  
111 North Hope Street, Room 1044  
Los Angeles, CA 90012

March 2020

*THIS PAGE INTENTIONALLY LEFT BLANK*

## TABLE OF CONTENTS

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	OVERVIEW OF THE PROPOSED PROJECT.....	1
1.2	CALIFORNIA ENVIRONMENTAL QUALITY ACT .....	1
1.3	PROJECT PURPOSE AND NEED .....	2
1.3.1	Regulatory Background .....	2
1.4	ENVIRONMENTAL DOCUMENT FORMAT AND CONTENT.....	3
1.5	IMPACT TERMINOLOGY .....	4
1.6	INITIAL STUDY ORGANIZATION AND CONTENTS.....	4
<b>2.0</b>	<b>PROJECT DESCRIPTION .....</b>	<b>5</b>
2.1	PROJECT LOCATION .....	5
2.1.1	Existing Conditions and Surrounding Land Uses .....	5
2.1.2	Existing General Plan and Zoning .....	6
2.2	EXISTING REGIONAL ELECTRICAL AND TRANSMISSION SYSTEM.....	6
2.3	PROPOSED PROJECT .....	6
2.3.1	Project Components .....	13
2.4	PROJECT CONSTRUCTION .....	23
2.5	PROJECT OPERATIONS AND MAINTENANCE .....	24
2.6	PERMITS AND APPROVALS .....	25
<b>3.0</b>	<b>INITIAL STUDY CHECKLIST AND ENVIRONMENTAL EVALUATION.....</b>	<b>27</b>
3.1	AESTHETICS .....	31
3.1.1	Affected Environment.....	31
3.1.2	Impact Assessment.....	32
3.1.3	Mitigation Measures .....	36
3.2	AGRICULTURAL AND FOREST RESOURCES .....	37
3.2.1	Affected Environment.....	37
3.2.2	Impact Assessment.....	41
3.2.3	Mitigation Measures .....	41
3.3	AIR QUALITY.....	42
3.3.1	Affected Environment and Regulatory Framework .....	42
3.3.2	Impact Assessment.....	44
3.3.3	Mitigation Measures .....	48
3.4	BIOLOGICAL RESOURCES .....	49
3.4.1	Affected Environment.....	49
3.4.2	Impact Assessment.....	50
3.4.3	Mitigation Measures .....	60
3.5	CULTURAL RESOURCES .....	62
3.5.1	Affected Environment.....	62
3.5.2	Impact Assessment.....	63
3.5.3	Mitigation Measures .....	69
3.6	ENERGY .....	70
3.6.1	Affected Environment.....	70
3.6.2	Impact Assessment.....	70
3.6.3	Mitigation Measures .....	71
3.7	GEOLOGY AND SOILS .....	72
3.7.1	Affected Environment.....	72
3.7.2	Impact Assessment.....	73

3.7.3	Mitigation Measures .....	77
3.8	GREENHOUSE GAS EMISSIONS .....	78
3.8.1	Affected Environment and Regulatory Framework .....	78
3.8.2	Impact Assessment.....	80
3.8.3	Mitigation Measures .....	81
3.9	HAZARDS AND HAZARDOUS MATERIALS .....	82
3.9.1	Affected Environment.....	83
3.9.2	Impact Assessment.....	83
3.9.3	Mitigation Measures .....	86
3.10	HYDROLOGY AND WATER QUALITY.....	87
3.10.1	Affected Environment.....	87
3.10.2	Environmental Assessment .....	88
3.10.3	Mitigation Measures .....	94
3.11	LAND USE AND PLANNING.....	95
3.11.1	Affected Environment.....	95
3.11.2	Impact Assessment.....	96
3.11.3	Mitigation Measures .....	96
3.12	MINERAL RESOURCES .....	97
3.12.1	Affected Environment.....	97
3.12.2	Impact Assessment.....	97
3.12.3	Mitigation Measures .....	98
3.13	NOISE .....	99
3.13.1	Affected Environment and Regulatory Framework .....	99
3.13.2	Impact Assessment.....	100
3.13.3	Mitigation Measures .....	105
3.14	POPULATION AND HOUSING.....	106
3.14.1	Affected Environment.....	106
3.14.2	Impact Assessment.....	106
3.14.3	Mitigation Measures .....	107
3.15	PUBLIC SERVICES.....	108
3.15.1	Affected Environment.....	108
3.15.2	Impact Assessment.....	109
3.15.3	Mitigation Measures .....	110
3.16	RECREATION .....	111
3.16.1	Affected Environment.....	111
3.16.2	Impact Assessment.....	111
3.16.3	Mitigation Measures .....	111
3.17	TRANSPORTATION .....	112
3.17.1	Affected Environment.....	112
3.17.2	Impact Assessment.....	113
3.17.3	Mitigation Measures .....	116
3.18	TRIBAL CULTURAL RESOURCES .....	117
3.18.1	Affected Environment.....	117
3.18.2	Impact Assessment.....	118
3.18.3	Mitigation Measures .....	119
3.19	UTILITIES AND SERVICE SYSTEMS.....	120
3.19.1	Affected Environment.....	120
3.19.2	Impact Assessment.....	120
3.19.3	Mitigation Measures .....	122
3.20	WILDFIRE .....	123
3.20.1	Affected Environment.....	123



3.20.2	Impact Assessment.....	124
3.20.3	Mitigation Measures .....	125
3.21	MANDATORY FINDINGS OF SIGNIFICANCE .....	126
<b>4.0</b>	<b>LIST OF PREPARERS.....</b>	<b>129</b>
<b>5.0</b>	<b>REFERENCES.....</b>	<b>131</b>

## FIGURES

FIGURE 2-1	REGIONAL LOCATION .....	7
FIGURE 2-2	SITE VICINITY .....	9
FIGURE 2-3	EXISTING ZONING .....	11
FIGURE 2-4	CONCEPTUAL SITE PLAN .....	15
FIGURE 2-5	TYPICAL SWITCHING STATION LAYOUT .....	17
FIGURE 2-6	TYPICAL FACTS LAYOUT .....	19
FIGURE 2-7	TYPICAL BESS LAYOUT .....	21
FIGURE 3-1	EXISTING SITE PHOTOS .....	33
FIGURE 3-2	FARMLAND MAPPING AND MONITORING PROGRAM.....	39
FIGURE 3-3	BIOLOGICAL SURVEY BOUNDARY .....	51
FIGURE 3-4	VEGETATION COMMUNITIES.....	53
FIGURE 3-5	CULTURAL RESOURCES SURVEY AREA .....	65
FIGURE 3-6	FLOOD ZONE MAP.....	91
FIGURE 3-7	SENSITIVE RECEPTORS .....	103

## TABLES

TABLE 2-1	PROJECT SITE ASSESSOR PARCEL NUMBERS.....	5
TABLE 3-1	EKAPCD AIR QUALITY SIGNIFICANCE THRESHOLDS .....	43
TABLE 3-2	CONSTRUCTION EMISSIONS ASSESSMENT – ANNUAL EMISSIONS.....	46
TABLE 3-3	CONSTRUCTION EMISSIONS ASSESSMENT – DAILY MOBILE SOURCE EMISSIONS .....	47
TABLE 3-4	VEGETATION COMMUNITIES WITHIN THE PROJECT AREA .....	50
TABLE 3-5	SPECIAL-STATUS WILDLIFE SPECIES AND THEIR POTENTIAL TO OCCUR WITHIN THE BIOLOGICAL STUDY AREA.....	57
TABLE 3-6	KNOWN CULTURAL RESOURCES LOCATED WITHIN 0.5 MILE OF THE PROJECT .....	63
TABLE 3-7	SHOVEL TEST PIT RECORD .....	67
TABLE 3-8	ESTIMATED GHG EMISSIONS – PROJECT CONSTRUCTION .....	81
TABLE 3-9	KERN COUNTY ASSESSOR PARCEL NUMBERS.....	82
TABLE 3-10	NOISE LEVEL RANGES OF TYPICAL CONSTRUCTION EQUIPMENT.....	101
TABLE 3-11	TYPICAL OUTDOOR CONSTRUCTION NOISE LEVELS .....	101
TABLE 3-12	TYPICAL CONSTRUCTION LEVELS AT RECEPTORS .....	102
TABLE 3-13	VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT.....	105
TABLE 3-14	PROJECT CONSTRUCTION WEEKDAY TRIP GENERATION .....	114
TABLE 3-15	PROJECT STUDY ROADWAY SEGMENT - EXISTING VOLUMES ANALYSIS .....	115
TABLE 3-16	PROJECT STUDY ROADWAY SEGMENT - FUTURE VOLUMES ANALYSIS.....	115

## APPENDICES

APPENDIX A:	AIR QUALITY AND GREENHOUSE GAS EMISSIONS IMPACTS ASSESSMENT
APPENDIX B:	BIOLOGICAL RESOURCES HABITAT ASSESSMENT
APPENDIX C:	NOISE AND VIBRATION IMPACTS ASSESSMENT
APPENDIX D:	TRAFFIC STUDY

## **TECHNICAL STUDIES (BOUND UNDER SEPARATE COVER)**

Phase I Environmental Site Assessments for the following Assessor Parcel Numbers are bound under separate cover.

- 359-051-11
- 359-051-13
- 359-051-17
- 359-051-18
- 359-051-19
- 359-051-20
- 359-051-21
- 359-015-22
- 359-051-24
- 359-051-25
- 359-051-26
- 359-051-27
- 359-051-28
- 359-051-29
- 359-051-31
- 359-051-37
- 359-051-43
- 359-051-47
- 359-051-49

## ACRONYMS AND ABBREVIATIONS

AB	Assembly Bill
APN	Assessor Parcel Number
BR-HC	Barren Ridge – Haskell Canyon
BESS	Battery Energy Storage System
bgs	below ground surface
BMP	Best Management Practice
Board	Board of Water and Power Commissioners
CalEEMod	California Emissions Estimator Model
CAL FIRE	California Department of Forestry and Fire Protection
Caltrans	California Department of Transportation
CARB	California Air Resources Board
CBC	California Building Code
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CH <sub>4</sub>	Methane
CNDDB	California Natural Diversity Database
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
CREC	Controlled Recognized Environmental Concern
dB	decibels
dBA	A-weighted decibels
DOC	California Department of Conservation
EKAPCD	Eastern Kern Air Pollution Control District
EDR	Environmental Data Resources, Inc.
EIR	Environmental Impact Report
FACTS	Flexible Alternating Current Transmission System
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
GHG	greenhouse gas
GIS	geographic information system
HFC	hydrofluorocarbon
HREC	Historical Recognized Environmental Condition
HVAC	heating, ventilating, and cooling
I-5	Interstate 5
KCFD	Kern County Fire Department
Sheriff's Department	Kern County Sheriff's Department
kV	kilovolt
LADWP	Los Angeles Department of Water and Power
L <sub>eq</sub>	Equivalent Noise Level
LOS	level of service
MLD	Most Likely Descendant
MMs	mitigation measures
MND	Mitigated Negative Declaration
mph	miles per hour
MRZ	Mineral Resource Zones
NAHC	Native American Heritage Commission
N <sub>2</sub> O	nitrous oxide

NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
O <sub>3</sub>	ozone
PCE	Passenger Car Equivalency
PFC	perfluorocarbon
PM <sub>10</sub>	particulate matter up to 10 microns
PM <sub>2.5</sub>	particulate matter up to 2.5 microns
POWER	POWER Engineers, Inc.
PRC	California Public Resources Code
Project	Rosamond Switching Station
RECs	Recognized Environmental Conditions
RPS	Renewable Portfolio Standard
ROW	right-of-way
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCDA	Supervisory Control and Data Acquisition
SCE	Southern California Edison
SF <sub>6</sub>	sulfur hexafluoride
SO <sub>2</sub>	Sulfur dioxide
SO <sub>x</sub>	Sulfur oxides
SPCC	Spill Prevention, Control, and Countermeasure
SR	State Route
SSJVIC	Southern San Joaquin Valley Information Center
STP	shovel test pit
Study Area	Biological Study Area
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SVC	Static Var Compensator
TRTP	Tehachapi Renewable Transmission Project
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
VMT	Vehicle miles traveled
VOC	volatile organic compounds
WEAP	Workers Environmental Awareness Program
WMHCP	West Mojave Habitat Conservation Plan

## 1.0 INTRODUCTION

### 1.1 Overview of the Proposed Project

The Los Angeles Department of Water and Power (LADWP) proposes to construct and operate a new 230 kilovolt (kV) Rosamond Switching Station (Project) on approximately 120 acres. The Project would be constructed adjacent to the LADWP right-of-way (ROW) for the Barren Ridge – Haskell Canyon (BR-HC) 230 kV Transmission Lines 1, 2, and 3, approximately 30 miles south of the Barren Ridge Switching Station.

The Project would be constructed in phases with the first phase (Phase I) consisting of the construction of the switching station and associated facilities. The Project also includes two future expansions (Phase II and Phase III) within the approximate 120-acre site. Phase II construction would add a Flexible Alternating Current Transmission System (FACTS) and Phase III construction would install a Battery Energy Storage System (BESS).

The Project would allow LADWP greater control managing renewable energy transfer along the existing high voltage transmission lines, increase flexibility and reliability, and provide for flexible energy storage. The Project would also accommodate the interconnection process for planned renewable energy projects in the Project vicinity and would support LADWP's Renewable Portfolio Standard (RPS) goals.

### 1.2 California Environmental Quality Act

The California Environmental Quality Act (CEQA) applies to projects initiated by, funded by, or requiring discretionary approvals from state or local government agencies. The proposed Project constitutes a project as defined by CEQA (California Public Resources Code [PRC] Section 21000 et seq.). CEQA Guidelines Section 15367 states that a "Lead Agency" is "the public agency which has the principal responsibility for carrying out or approving a project." LADWP, as a municipal utility, will fund, implement, and operate the proposed Project and will therefore act as the lead agency responsible for compliance with CEQA.

LADWP, as lead agency for the proposed Project, must complete an environmental review to determine if implementation of the Project would result in significant adverse environmental impacts. To fulfill the purpose of CEQA, an Initial Study was prepared to assist in making that determination.

Based on the nature and scope of the proposed Project, and the evaluation contained in the Initial Study environmental checklist (contained herein), LADWP concluded that a Mitigated Negative Declaration (MND) is the proper level of environmental documentation for this Project. The Initial Study shows that potential impacts caused by the proposed Project would be either *less than significant*, or *less than significant with incorporation of appropriate mitigation measures*, as defined herein. This conclusion is supported by CEQA Guidelines Section 15070, which states that an MND can be prepared when "(a) the initial study shows that there is not substantial evidence, in light of the whole record before the agency, that the Project may have a significant effect on the environment, or (b) the initial study identifies potentially significant effects, but (1) revisions in the Project plans or proposals made by, or agreed to by the applicant, before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and (2) there is no substantial evidence, in light of the whole record before the agency, that the Project as revised may have a significant effect on the environment."

## **1.3 Project Purpose and Need**

### **1.3.1 Regulatory Background**

California advanced a series of substantive and far-reaching legislative initiatives in the last decade, focused on increasing the generation of electricity via renewable energy sources and promoting a shift from fossil or carbon-based fuels as a key strategy to reduce greenhouse gas (GHG) emissions, air pollution, and water use associated with the energy sector. In response, the California Legislature passed Senate Bill (SB) 1078 (2002), which implemented an RPS program for the state. California's stated RPS goal is to serve 33 percent of its electric load with renewable energy by 2020, 50 percent by 2026, and 60 percent by 2030. On June 29, 2005, the LADWP Board of Water and Power Commissioners (Board) approved an RPS, which established the goal of increasing the amount of energy LADWP generates from renewable power sources to 20 percent of its energy sales to retail customers by 2017, with an interim goal of 13 percent by 2010.

In 2006, the California Global Warming Solutions Act, Assembly Bill (AB) 32 was passed by the Legislature, establishing a statewide goal of reducing GHG to 1990 levels by the year 2020 and to 80 percent below 1990 levels by 2050. On April 11, 2007, the Board amended the LADWP RPS Policy by accelerating the goal of requiring that 20 percent of energy sales to retail customers be generated from renewable resources by December 31, 2010. The Board subsequently approved an RPS Policy, as amended in April 2008, which included an additional RPS goal of requiring that 35 percent of energy sales to retail customers be generated from renewable resources by December 31, 2020. In 2010, LADWP generated 20 percent of energy sales to retail customers from renewable power resources (LADWP 2013).

On April 12, 2011, California's Governor signed into law the California Renewable Energy Resources Act (SB 2 [1X]). This Act set RPS procurement targets, renewable resource eligibility definitions, and new reporting requirements applicable to publicly-owned utilities. SB 2 (1X) required each publicly-owned utility to attain a minimum of 25 percent RPS by 2016 and 33 percent RPS by 2020, and report on reasonable progress for each intervening year. LADWP's RPS and Policy and Enforcement Program (RPS Policy), as amended, represents the continued commitment by the LADWP to renewable energy resources. The RPS was amended and adopted in December 2011 to address SB 2 (1 X) and its requirement for the governing boards of local publicly-owned electric utilities to adopt "a program for the enforcement of this article" on or before January 1, 2012.

#### **Project Need**

Renewable Energy is energy derived from naturally replenished resources such as wind, sunlight, geothermal heat, and biomass. Kern County, as well as the immediate Project area, has a number of renewable energy projects in various phases of development, from application submittal, certified Environmental Impact Reports, projects currently under construction, to projects currently in operation.

The Project is need to facilitate LADWP's control in managing renewable energy transfer along the existing high voltage transmission lines and increase overall reliability. The Project would support LADWP's RPS goals and provide LADWP with a more reliable and robust transmission system configuration in the region, as well as facilitate the interconnection process for existing and planned renewable developers in the Project area.

#### **Project Objectives**

The overall purpose of the Project is to provide a new 230 kV switching station, FACTS, and BESS for flexible energy storage, to help meet broader goals related to increasing the use of sustainable renewable energy sources while decreasing the production of GHG and air pollutant emissions. The proposed

Project would advance California's and LADWP's RPS and GHG reduction policy objectives, accommodating the interconnection process for planned and existing renewable energy projects in the Project vicinity, and providing for flexible energy storage. Specific objectives related to this purpose include:

- Enhance grid reliability and operational flexibility by constructing a new 230 kV switching station adjacent to the LADWP ROW for the BR-HC 230 kV Transmission Lines 1, 2, and 3.
- Provide LADWP greater control in managing renewable energy transfer along the existing high voltage transmission lines.
- Facilitate the interconnection process for existing and planned renewable energy facilities.
- Provide flexible energy storage during times of over-generation from renewable energy sources (i.e., wind and solar) and deliver it back to the grid when needed.
- Support LADWP ambitious RPS and GHG reduction goals.

## **1.4 Environmental Document Format and Content**

This Initial Study evaluates the proposed Project's effects on the following resource topics:

- Aesthetics
- Agriculture and forestry resources
- Air quality
- Biological resources
- Cultural resources
- Energy
- Geology and soils
- Greenhouse gas emissions
- Hazards and hazardous materials
- Hydrology and water quality
- Land use and planning
- Mineral resources
- Noise
- Population and housing
- Public services
- Recreation
- Transportation
- Tribal cultural resources
- Utilities and service systems
- Wildfire
- Mandatory findings of significance

## 1.5 Impact Terminology

The following terminology is used to describe the level of significance of impacts:

- A finding of *no impact* is appropriate if the analysis concludes that the project would not affect the particular topic area in any way.
- An impact is considered *less than significant* if the analysis concludes that the project would cause no substantial adverse change to the environment and requires no mitigation.
- An impact is considered *less than significant with mitigation incorporated* if the analysis concludes that the project would cause no substantial adverse change to the environment with the inclusion of environmental commitments or other enforceable measures that have been agreed to by the applicant.
- An impact is considered *potentially significant* if the analysis concludes that the project could have a substantial adverse effect on the environment. For the proposed Project, no impacts were determined to be potentially significant.

## 1.6 Initial Study Organization and Contents

This Initial Study is organized into five separate sections that are identified as follows:

**Section 1.0 - Introduction** – Introduces the Project, its purpose and statutory basis for the document.

**Section 2.0 - Project Description** – Describes the location, objectives, and principal elements of the Project.

**Section 3.0 - Initial Study Checklist and Environmental Evaluation** – Contains analyses and evidence employed by the Lead Agency to arrive at the determination required in the CEQA Environmental Checklist.

**Section 4.0 - List of Preparers** – A list of persons who contributed to the preparation of the Initial Study.

**Section 5.0 - References** – A list of references utilized for the preparation of the Initial Study.



## 2.0 PROJECT DESCRIPTION

### 2.1 Project Location

#### 2.1.1 Existing Conditions and Surrounding Land Uses

The Project site is located on approximately 120 acres in unincorporated Kern County, California. It is approximately eight miles west of the community of Rosamond in the western portion of Antelope Valley. The site is in the northwestern portion of the Mojave Desert, approximately three miles north of the Los Angeles County border. Regional access to the Project site includes State Route (SR) 14 located approximately eight miles to the east, SR-138 located approximately 5.5 miles to the south, and Interstate I-5 (I-5) located approximately 30 miles to the west of the Project site (refer to Figure, 2-1 Regional Location).

Edwards Air Force Base is located approximately 25 miles east of the site. The community of Mojave is located approximately 15 miles northeast of the site. Los Angeles County communities of Lancaster and Palmdale are located approximately 15 and 20 miles, respectively, southeast of the Project site.

Local access to the site is via Rosamond Boulevard, which abuts the Project site on its northern boundary. The existing LADWP ROW and associated BR-HC transmission lines traverse the western portion of site diagonally from southwest to northeast. Existing Southern California Edison (SCE) easement and associated transmission lines also cross the western side of site diagonally from southwest to northeast (refer to Figure 2-2, Site Vicinity).

The Project site and surrounding area is vegetated with native and non-native plant species typical of desert vegetation. Land uses in the site vicinity include undeveloped land, industrial/renewable energy generation (i.e., wind and solar), agriculture, and rural residential.

The Project site is comprised of 20 separate Assessor Parcel Numbers (APN), as shown in Table 2-1. Of the 20 parcels, only APN 359-015-22 is LADWP-owned.

For the approximately 120 acres of private property where the Rosamond Switching Station Project is proposed, LADWP would seek to purchase the property required for the Project. As soon as a property has been identified through the final design planning and after the completion of the environmental review and approval process, the property owner would be notified of LADWP's interest in acquiring the property. After the appraisal and inspection process, a written offer may be presented to the property owner. If an agreement cannot be reached after LADWP has exhausted all its opportunities to reach a settlement with a property owner and if the property is needed for the Rosamond Switching Station Project, LADWP may choose to exercise its power of eminent domain to acquire the property interests necessary for the Project.

**TABLE 2-1 PROJECT SITE ASSESSOR PARCEL NUMBERS**

359-051-11	359-051-13	359-051-14	359-051-17
359-051-18	359-051-19	359-051-20	359-051-21
359-015-22*	359-051-24	359-051-25	359-051-26
359-051-27	359-051-28	359-051-29	359-051-31
359-051-37	359-051-43	359-051-47	359-051-49
*LADWP-owned parcel.			

### **2.1.2 Existing General Plan and Zoning**

Land use and development within the Project area is governed by the Kern County General Plan and Zoning. Specifically, the Project site is located within the Willow Spring Specific Plan boundary. As shown on Figure 2-3, the zoning designation for the Project site is RS (2.5-Acres Residential Suburban Combining). Zoning designations within the immediate Project area include: RS (1-Acres Residential Suburban Combining), RS (2.5-Acres Residential Suburban Combining), RS (5-Acres Residential Suburban Combining), and A (Exclusive Agriculture).

## **2.2 Existing Regional Electrical and Transmission System**

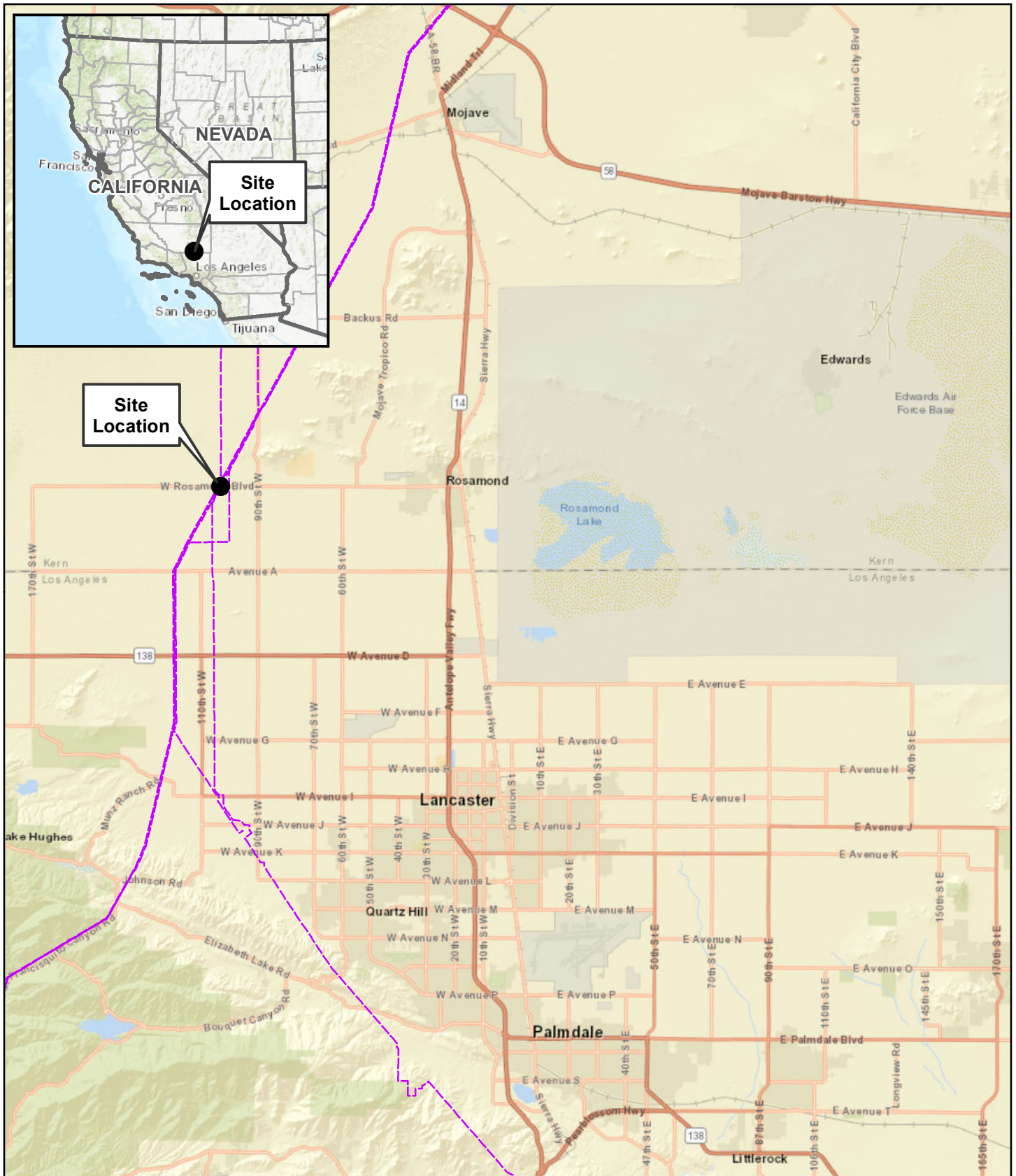
Several existing transmission lines cross the western half of the site. The existing LADWP easement and associated BR-HC 230 kV and 500 kV transmission lines traverse the site diagonally, from southwest to northeast. Existing SCE easement and associated 115 kV transmission lines also cross the site diagonally from southwest to northeast.

SCE's Tehachapi Renewable Transmission Project (TRTP) is located farther to the west of the Project site. It includes new and expanded electricity transmission corridors, substations, and other features. The closest TRTP facilities include the Whirlwind Substation and a major SCE transmission corridor containing 500 kV and 220 kV lines with lattice towers, located approximately three miles west of the Project site.

## **2.3 Proposed Project**

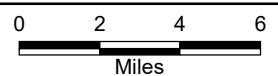
Rosamond Switching Station would be constructed in three phases. Phase I is construction of the switching station and associated facilities, and connecting the existing electrical power lines. The Project also includes two future expansions (Phase II and Phase III) within the approximate 120-acre site. Phase II construction would add a FACTS and Phase III construction would install a BESS. The future expansion would be determined by LADWP.

- Phase I – construction of the switching station and associated facilities, and rearranging existing electrical power lines.
- Phase II – construction of a FACTS.
- Phase III – construction of a BESS.



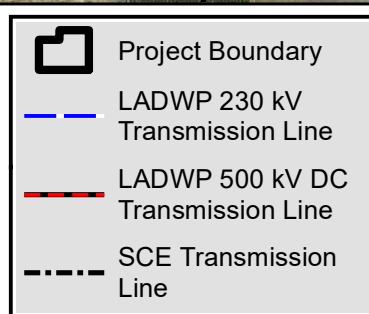
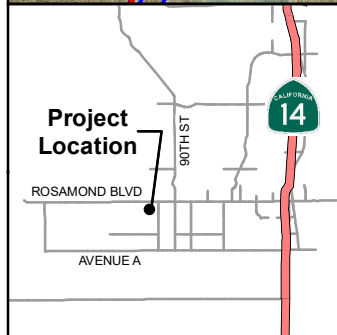
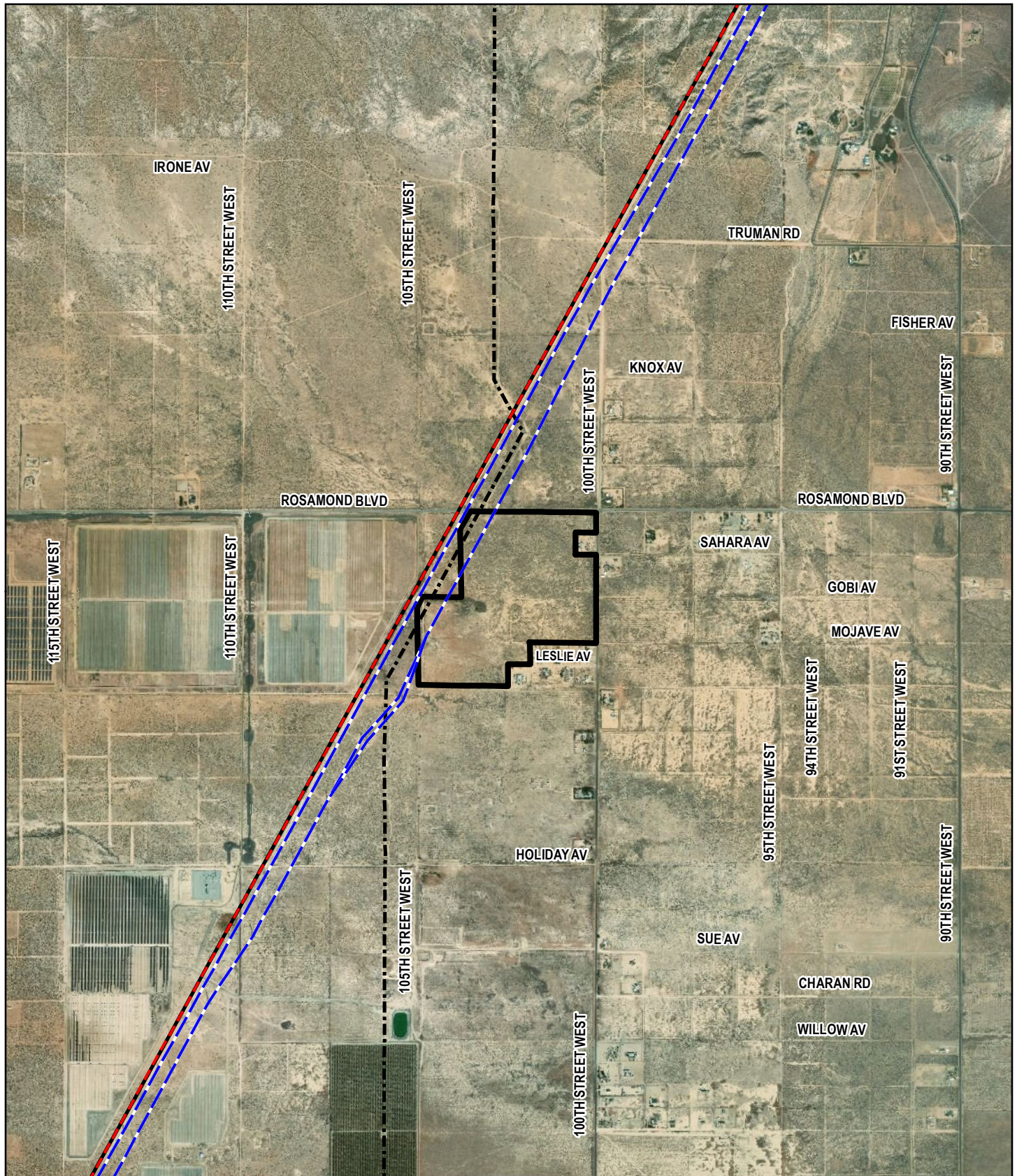
- Site Location
- Existing Transmission Line (115 kV to 500 kV)

Rosamond Switching Station  
**Figure 2-1**  
**Regional Location**



*THIS PAGE INTENTIONALLY LEFT BLANK*





Rosamond Switching Station

**Figure 2-2  
Site Vicinity**

0 1,000 2,000 3,000

Feet

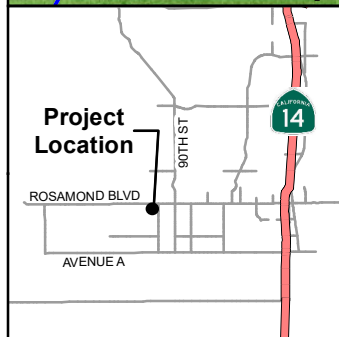
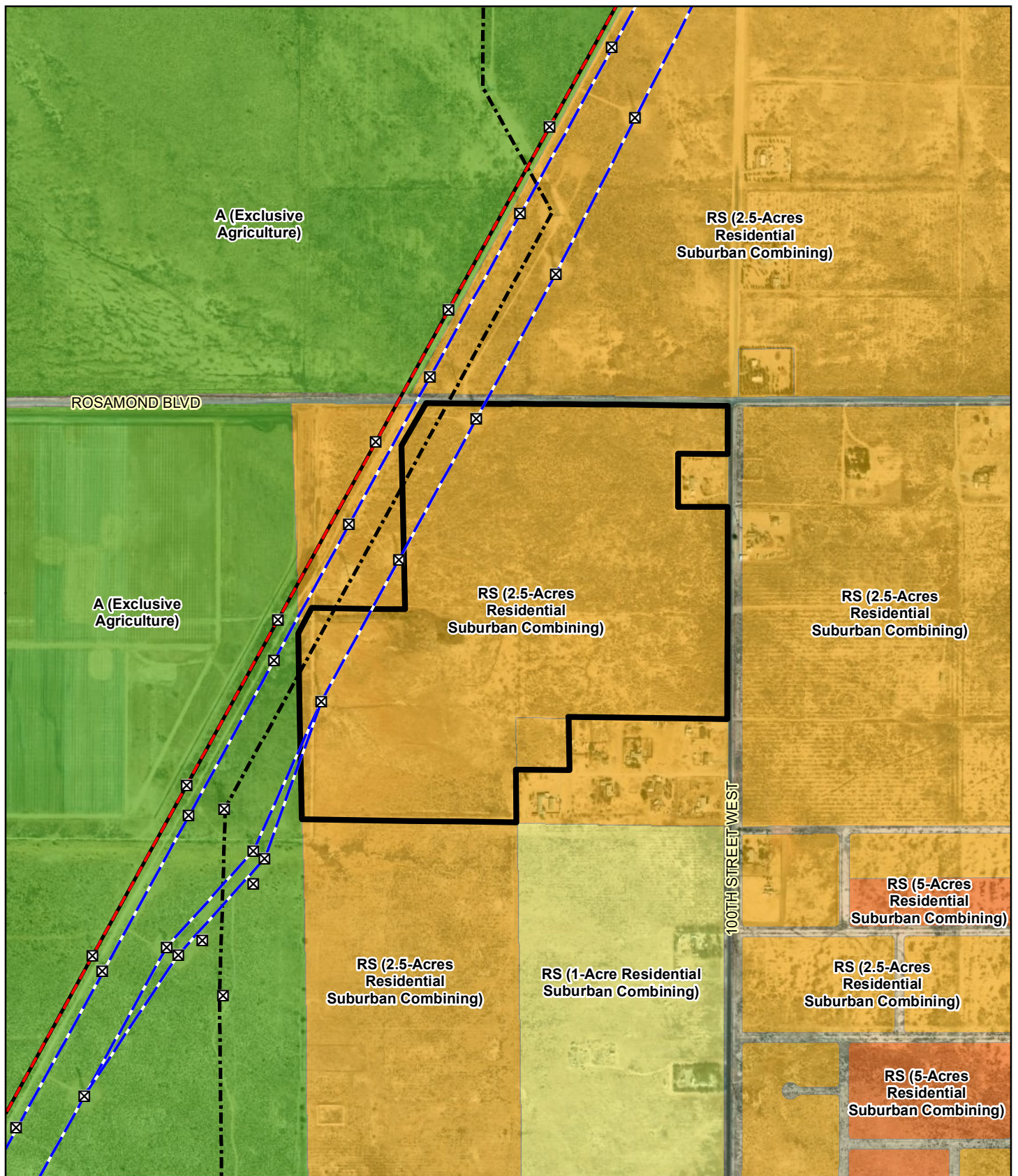
N



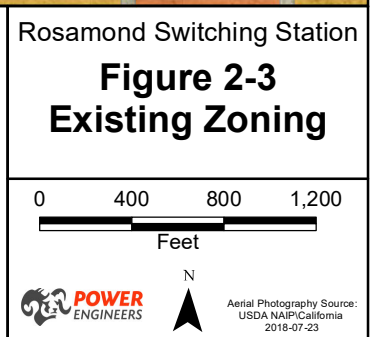
Aerial Photography Source:  
USDA NAIP/California  
2018-07-23



*THIS PAGE INTENTIONALLY LEFT BLANK*



Project Boundary Structure LADWP 230 kV Transmission Line LADWP 500 kV DC Transmission Line SCE Transmission Line	<b>Kern County Zoning</b> RS (1-Acre Residential Suburban Combining) RS (2.5-Acre Residential Suburban Combining) RS (5-Acre Residential Suburban Combining) A (Exclusive Agriculture)
---	--



*THIS PAGE INTENTIONALLY LEFT BLANK*



### **2.3.1 Project Components**

#### **Switching Station**

The proposed switching station, approximately 1,200 feet long and 800 feet wide, would be constructed within the Project boundary on approximately 15 acres (refer to Figure 2-4, Conceptual Site Plan). The switching station footprint would accommodate the necessary circuit positions, including steel support structures, circuit breakers, and disconnect switches. Figure 2-5 illustrates a typical switching station layout.

A control house with parking for Project personal would be constructed. The control house would provide space for necessary operational controls. These include a communication room; battery room with battery storage racks; an operator area; restroom facilities; a closet room containing control and protective relaying equipment; and heating, ventilation and cooling (HVAC) units. The switching station yard would include a paved internal access roads and gravel parking area. In addition, the switching station yard would be covered with crushed-rock aggregate.

In order to bring electricity into the switching station facilities, approximately 10 to 20 new distribution poles would be constructed along Rosamond Avenue and 100<sup>th</sup> Street West (heights would range from approximately 35 to 45 feet). It is anticipated that LAWDP would coordinate with SCE to obtain electricity for the site and tie into the existing electrical distribution system.

#### **Transmission Line**

The Project would “cut-in” the BR-HC Transmission Lines 1, 2, and 3, bringing these circuits into the switching station. Tower modifications or new towers are necessary to direct the existing 230 kV circuits into and out of the new Rosamond switching station. It is anticipated that six new lattice steel towers would be installed to reconfigure transmission lines through the Rosamond switching station. New towers would be constructed within the Project boundary adjacent to the switching station (refer to Figure 2-4).

#### **Access Roads**

Site access from the regional transportation network is provided via SR-14, SR-138, I-5, and Rosamond Boulevard which abuts the Project site on its northern boundary. These roadways would provide access for both construction and operation of the proposed Project.

Paved internal roads would provide access to site facilities. Primary site access during construction and operation would be from Rosamond Boulevard. A secondary access road would also be constructed off 100<sup>th</sup> Street West. Entrance widths at these locations would range from 20 to 25 feet, with internal road widths ranging from 18 to 20 feet. The internal access road network may be expanded during future construction of the planned FACTS and BESS.

#### **Fencing and Security Features**

Security fencing would be installed around the perimeter of the Project site, as well as around the switching station and other areas requiring controlled access. Fencing would restrict public access during both construction and operation of the Project. Security fencing would meet the National Electric and Safety Code requirements for protective arrangements in electric supply stations. The fence would be approximately seven to eight feet high.

The unmanned switching station would have automated features and remote control capabilities. Additional security may be provided through closed-circuit video surveillance cameras. Signage would be

installed at intervals along the perimeter fence and switching station fence, and would include language required to warn the public of hazardous voltage within the switching station.

The Project's lighting system would be designed and installed to provide the minimum illumination necessary for safety, security, and operations. The lighting system may include motion-activated security lighting installed at access gates and around the perimeter of on-site facilities. All lighting would be directed on-site and downwards as necessary to minimize illumination of the night sky or potential impacts to surrounding areas.

### **Flexible Alternating Current Transmission System**

The schedule for implementing Phase II of the Project is currently undetermined by LADWP. The future FACTS facilities, consisting of a switchyard (approximately 189 feet long, 180 feet wide, and 58 feet in height) and a control house (approximately 35 feet long, 86 feet wide, and 13 feet in height), would be constructed on about two acres within the 120-acre Project boundary. Refer to Figure 2-4 for the anticipated location of the FACTS. Figure 2-6 illustrates the typical layout of FACTS facilities.

Transmission systems supply power, from a wide range of power sources including wind and solar, to meet complex electrical load demands. The FACTS technology can reliably respond to the dynamic variations in the electric power arising from changes in load, or amount and quality of power generated. This technology helps to improve the power quality, while increasing system flexibility and reliability. LADWP would use Static Var Compensators (SVCs), a type of FACTS device, to quickly and reliably control line voltages.

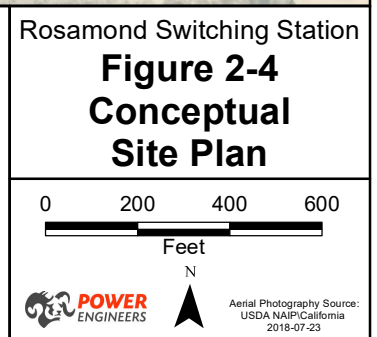
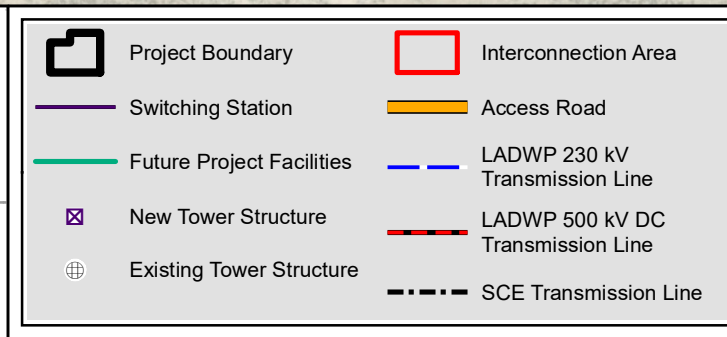
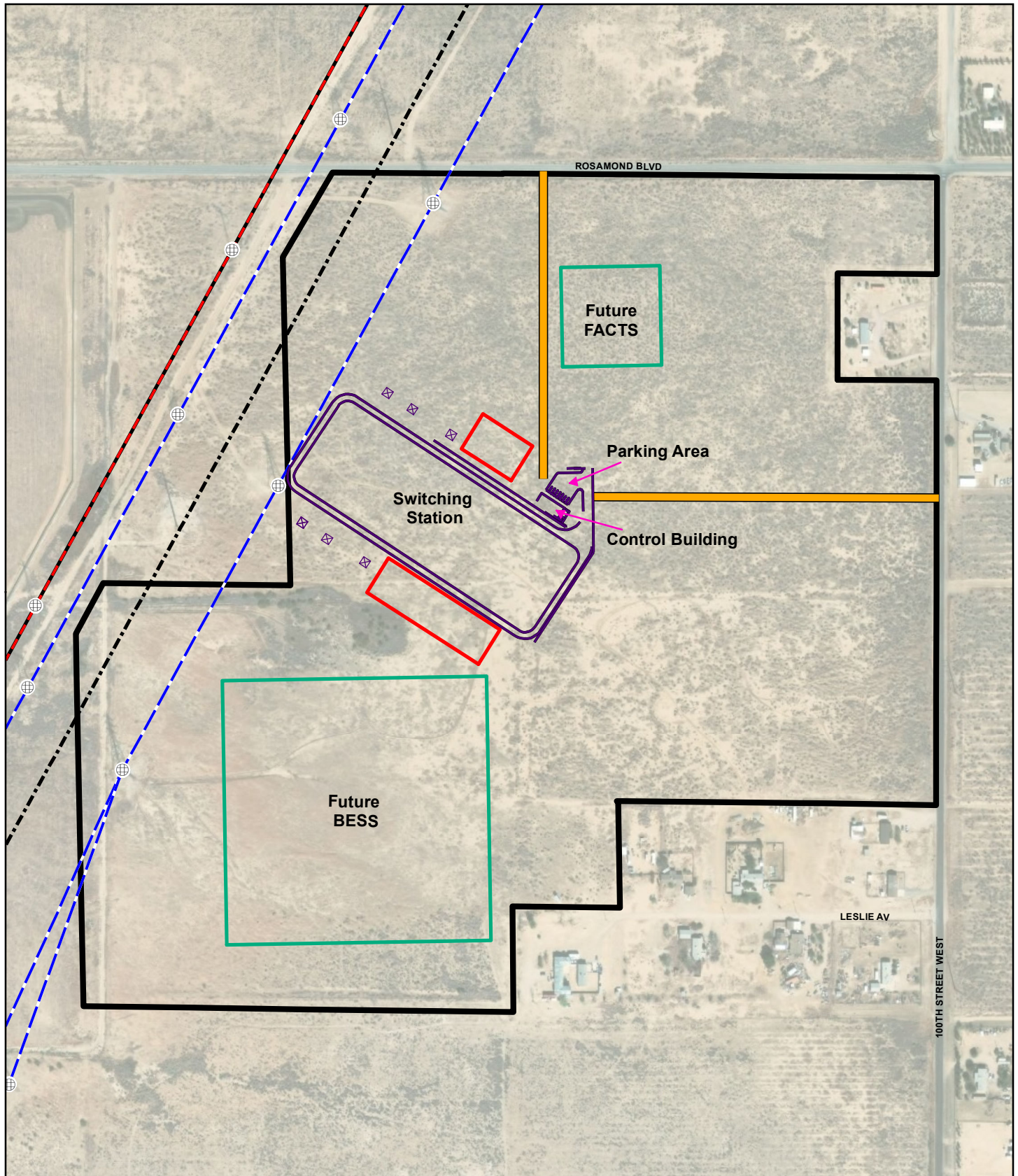
An SVC would typically regulate and control voltage to the required set point, under both normal steady state and contingency conditions, thereby providing dynamic, fast response reactive power following system contingencies (e.g., network short circuits, line and generator disconnections).

### **Battery Energy Storage System**

The schedule for implementing Phase III of the Project is currently undetermined by LADWP. The future BESS, about 850 feet by 850 feet, would be constructed on approximately 10 acres within the 120-acre Project boundary. Refer to Figure 2-4 for the anticipated location of the BESS. Figure 2-7 illustrates the typical BESS layout.

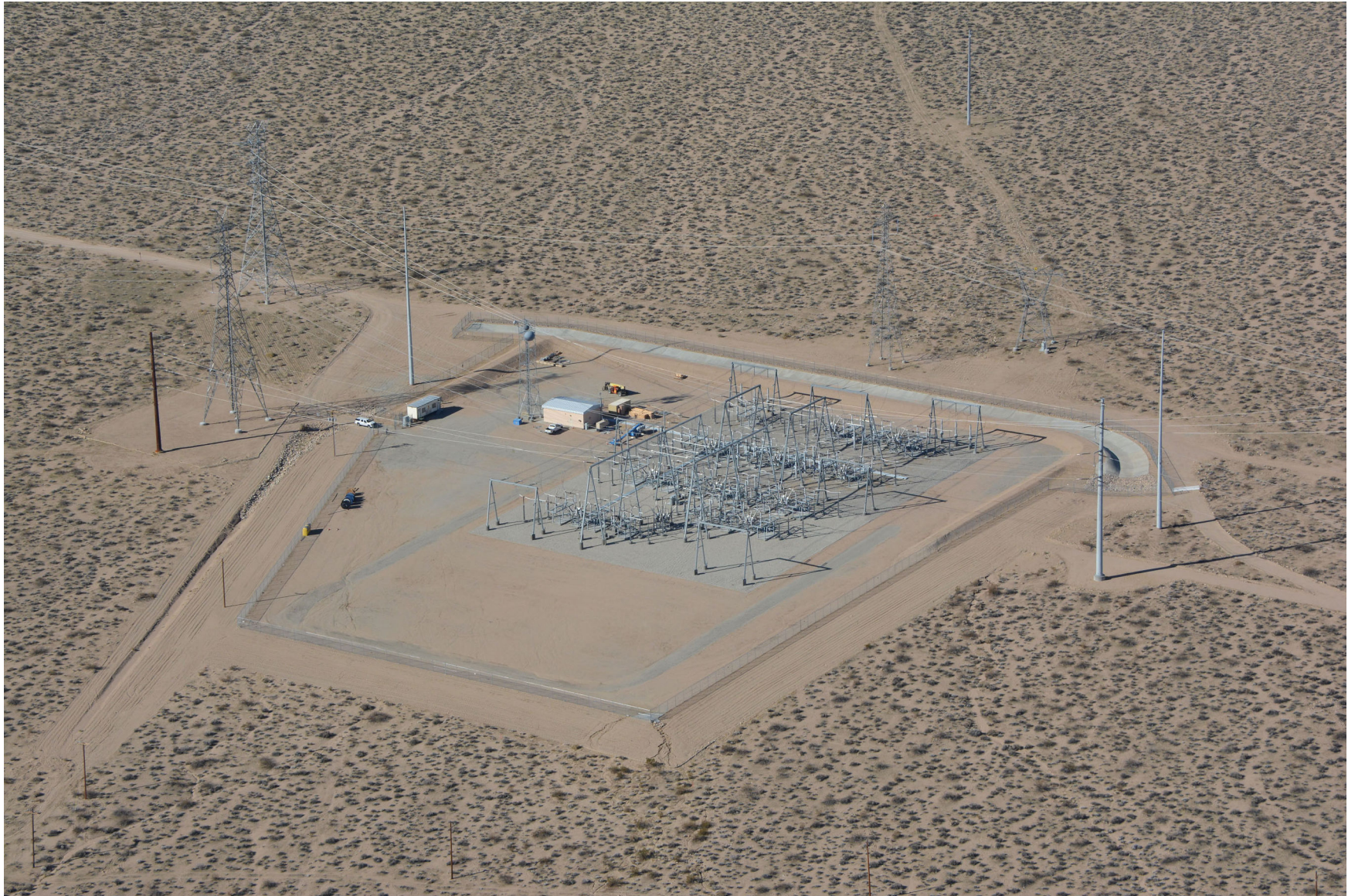
The purpose of BESS is to store excess energy during peak renewable energy production and deliver it back to the grid when needed. BESS would provide LADWP with flexibility to manage peak loads, provide a fast response to power shortages or brownouts, and enhance grid stability and reliability.

LADWP would determine storage capacity of the BESS during the preliminary design phase and engineering design planning. It is anticipated that the proposed BESS would consist of fully enclosed metal battery storage containers, typically made from converted shipping containers, and would measure approximately 24 feet long, 8.0 feet wide, and 10.5 feet in height. The BESS and associated infrastructure (e.g., battery storage racks, inverters, switches, and transformers) would be serviced on an "as needed" basis by qualified technicians.



*THIS PAGE INTENTIONALLY LEFT BLANK*



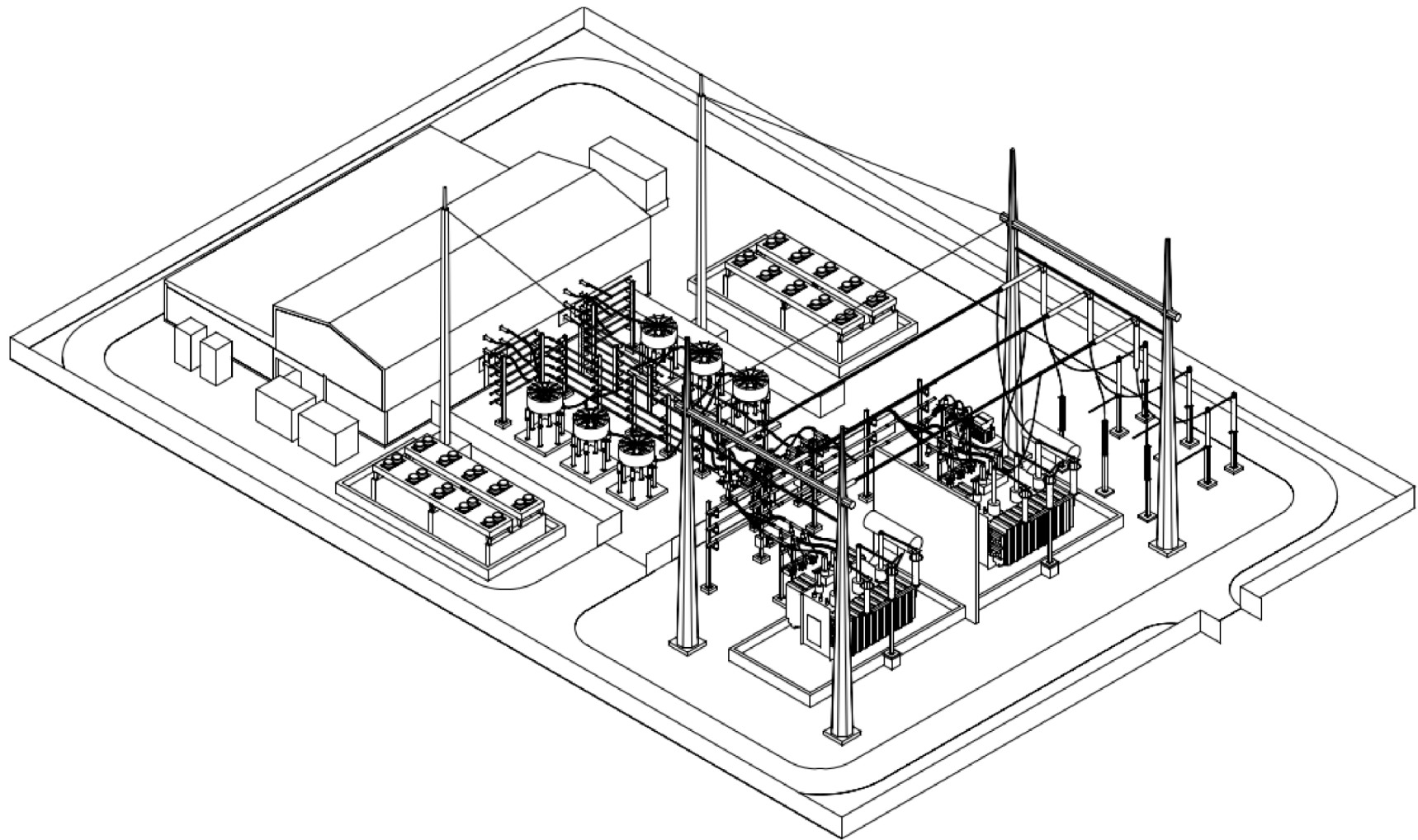


Rosamond Switching Station

**Figure 2-5**  
**Typical Switching**  
**Station Layout**

*THIS PAGE INTENTIONALLY LEFT BLANK*





Rosamond Switching Station

**Figure 2-6**  
**Typical FACTS**  
**Device Layout**

*THIS PAGE INTENTIONALLY LEFT BLANK*





Rosamond Switching Station

**Figure 2-7**  
**Typical**  
**BESS Layout**

*THIS PAGE INTENTIONALLY LEFT BLANK*

## **Battery Modules, Lithium-Ion Battery Technology, and Fire Protection**

Each battery module rack would be located within an individual storage container. Metal storage containers would be constructed or retrofitted with insulation, air-conditioning, and fire suppression with separate enclosures for the electronic controls, inverters, and rectifiers. The primary storage components would consist of self-contained electrochemical battery systems (e.g., lithium-ion) using conventional storage technologies with proven safety and performance records. Battery storage enclosures are designed to facilitate periodic maintenance and replacement of underperforming battery components easily, on an as-needed basis without replacing the entire module.

Due to the positive pressure required within each storage container to ensure functionality of the fire suppression system, battery storage containers would not be vented. Each battery storage container would utilize a supply and return air conditioning system; this system has a fresh air closed loop system. This type of air conditioning system is compatible with a positive pressure environment and does not require venting. Because the battery storage enclosures are not vented, to enhance worker safety, an Occupational Safety and Health Administration approved Confined Space Entry Procedure would be used whenever service technicians enter the containers.

Lithium-ion batteries are high energy-density battery and rechargeable. With this high energy density, along with their charge and discharge profiles, these batteries are ideal for a project of this size, addressing both space constraints and commercial viability. These batteries would allow a safe and effective installation in a shipping container (or similar structures) and perform well under rigorous demand to provide grid stability. Storage containers would include a built-in fire protection system, utilizing suppression through cooling, isolation, and containment. Each battery storage container would likely include a gaseous fire suppressant agent and an automatic fire extinguishing system with sound and light alarms.

The system would be designed in accordance with National Fire Protection Association safety standards, including an automatic shut-down system for fans that keep the container sealed when the fire extinguishing system is activated. The fire suppressant agent is deployed by a releasing panel that uses an aspirating smoke detection system. In addition, each container would also have a manual release. A disable switch would be provided for maintenance to prevent accidental discharge while the system is being serviced.

The BESS would have a Supervisory Control and Data Acquisition (SCADA) system that would allow remote monitoring and control of inverters and other system components. Using SCADA, LADWP would be able to monitor BESS output and availability, and to run diagnostics on the equipment.

Because the Project site is in the Mojave Desert, where weather conditions are extreme, the BESS would be designed with special considerations for the unique temperature extremes. This includes an on-site backup generator that would power the HVAC and monitoring systems for up to seven days, to ensure battery temperature conditions stay within manufacturer requirements.

## **2.4 Project Construction**

Phased construction of the proposed switching station, FACTS, BESS, and associated infrastructure, is proposed with construction of the switching station occurring first; construction of the FACTS and BESS would occur within the 120-acre Project boundary at a future date determined by LADWP. Construction of Project facilities would consist of several tasks, including clearing and site grading, drainage control, installing concrete foundations and steel support structures, installing below- and above-ground electrical conduits for equipment power and control, installing below- and above-grade grounding conductors, constructing the switching station, FACTS, BESS, and installing new control and relay houses.

While these tasks are generally sequential, with some preceding others at a given location, a certain amount of overlap would likely occur in different locations within the Project site as construction proceeds. Project construction would begin with site mobilization, including personnel and equipment, as well as installing trailers, and creating laydown and material storage areas.

Temporary facilities would be developed on-site to facilitate the construction process. These facilities may include, but would not be limited to, construction trailers, portable toilets, parking areas, material receiving/storage areas, recycling/waste handling areas, communications equipment, and temporary lighting. Construction staging and material laydown areas would occur within the 120-acre Project boundary and would be near the area(s) of active construction. Construction staging area(s) would be stabilized with crushed-rock aggregate.

Site preparation work for the Project includes clearing and grubbing, excavation, placement and compaction of engineered fill to provide stabilized subgrade for switching station facilities. Temporary silt fence and other stormwater pollution prevention Best Management Practices (BMPs) would be implemented, in accordance to the Stormwater Pollution Prevention Plan (SWPPP). A new perimeter fence would be installed. The Project site will be graded to maintain current drainage patterns to the greatest extent possible. Following site grading, reinforced concrete foundations would be installed to support the steel structures, electrical equipment, and control facilities.

During construction, a variety of equipment and vehicles would be operating on the site at any given time. Vehicles and equipment used in the construction of the proposed Project would include, but may not be limited to, graders and excavators, backhoes, drill rigs, water trucks, scrapers, sheep's foot compactors, front end loaders, concrete trucks, dump trucks, trash trucks, and flatbed trailers. Cranes, man-lifts, portable welding units, line trucks, and mechanic trucks may also be required.

Construction equipment would be used at various times during Project construction. Various pieces of equipment would operate at different times during the day and at different durations, as needed, to complete Project construction. Temporary construction fencing would be placed around the Project boundary or extended area of construction, if necessary. Native vegetation would be re-established where possible outside the switching station, FACTS and BESS.

Construction of the proposed Project and associated infrastructure is anticipated begin mid-2020 with active construction spanning approximately 38 months. It is assumed that construction activities would be limited to Monday through Friday, from 7:00 a.m. to dusk. No nighttime, weekend or holiday work is anticipated. The work schedule may be modified throughout the year to account for the changing weather conditions (e.g., starting or ending the workday earlier in summer months to avoid work during the hottest part of the day for health and safety reasons). It is anticipated that during the peak of construction activity, up to 70 workers may be present on-site on a given day. The construction workforce would consist of, but would not be limited to, civil personnel, laborers, equipment operators, electrical craft workers, supervisory personnel, and construction management personnel.

## **2.5 Project Operations and Maintenance**

The switching station, future FACTS, and BESS would be unmanned with automated features and remote control capabilities. No full-time, permanent personnel would be required at the Project site. LADWP would conduct routine maintenance and inspections. It is anticipated that LADWP Operations would visit the site weekly, with maintenance at the site anticipated to occur approximately once a month.

Routine maintenance is expected to occur during daytime hours only. Maintenance activities would consist of the following activities, but would not be limited to: regular inspection of equipment and electrical lines, support systems, and control systems; weed abatement; and responding to issues detected by remote monitoring. Maintenance equipment is expected to consist of light- to heavy-duty pickup trucks.

## 2.6 Permits and Approvals

The proposed Project may require subsequent oversight, approvals, or permits from other public agencies in order to be implemented. Other such agencies are referred to as “responsible agencies” and “trustee agencies.” Pursuant to Sections 15381 and 15386 of the CEQA Guidelines, as amended, responsible agencies and trustee agencies are defined as follows:

- **Responsible agency** is a public agency that proposes to carry out or approve a project, for which a lead agency is preparing or has prepared an Environmental Impact Report or Negative Declaration. For the purposes of CEQA, the term “responsible agency” includes all public agencies other than the lead agency that have discretionary approval power over the project (Section 15381).
- **Trustee agency** is a state agency having jurisdiction by law over natural resources affected by a project that are held in trust for the people of the state of California (Section 15386).

The various public agencies and jurisdictions with a particular interest in the Project may include, but are not limited to, the following:

### Federal Agencies

- United States Fish and Wildlife Service

### State Agencies

- California Department of Fish and Wildlife (CDFW)
- California Native American Heritage Commission (NAHC)
- California Department of Transportation (Caltrans), District 6

### Regional Agencies

- Regional Water Quality Control Board (RWQCB), Lahontan – Region 6
- Eastern Kern Air Pollution Control District (EKAPCD)
- Kern Council of Governments

### City of Los Angeles Department of Water and Power

- Adoption of the MND by the Board
- Approval of the proposed Project by the Board

*THIS PAGE INTENTIONALLY LEFT BLANK*

### **3.0 INITIAL STUDY CHECKLIST AND ENVIRONMENTAL EVALUATION**

#### **CEQA Environmental Checklist Form**

The following analysis of potential Project impacts is based on the CEQA Environmental Checklist and available information, including conceptual design plans. A brief explanation for each question in the Environmental Checklist is provided to adequately support each impact determination. The answers take into account the whole of the action involved, including off-site as well as on-site, indirect as well as direct, and construction as well as operational, impacts. Where determined that an impact is potentially significant, mitigation measures have been incorporated to reduce the impacts to less than significant levels. The environmental resources potentially affected by the proposed Project are presented below.

#### **1. Project Title:**

Rosamond Switching Station Project

#### **2. Lead Agency Name and Address:**

Los Angeles Department of Water and Power  
Environmental Planning and Assessment  
111 North Hope Street, Room 1044  
Los Angeles, California 90012

#### **3. Contact Person and Phone Number:**

Aiden Leong  
Environmental Project Manager  
Los Angeles Department of Water and Power  
(213) 367-0706

#### **4. Project Location:**

The Project site is in unincorporated Kern County, approximately eight miles west of the unincorporated community of Rosamond. It is in the southwestern portion of Antelope Valley, in the northwestern portion of the Mojave Desert. Regional access includes SR-14, a four-lane highway, located approximately eight miles east of the Project site; SR-138, a two-lane roadway, located approximately 5.5 miles south of the Project site; and I-5 located approximately 30 miles west of the Project site. Local access to the site is via Rosamond Boulevard, which abuts the Project site on its northern boundary.

#### **5. Project Sponsor's Name and Address:**

Same as Lead Agency

#### **6. General Plan Designation:**

Willow Springs Specific Plan

#### **7. Zoning:**

RS (2.5 Residential Suburban Combining)

## **8. Description of Project:**

LADWP proposes to construct and operate a new 230 kV Rosamond Switching Station on approximately 120 acres. The Project would be constructed adjacent to the LADWP ROW for the BR-HC 230 kV Transmission Lines 1, 2, and 3 and would be located approximately 30 miles south of the Barren Ridge Switching Station. The Project would be constructed in three phases with Phase I consisting of the construction of the switching station and associated facilities. The Project also includes two future expansions (Phase II and Phase III) within the approximate 120-acre site. Phase II would consist of the construction of a FACTS and Phase III would consist of the construction of a BESS.

## **9. Surrounding Land Uses and Setting:**

Land uses in the vicinity of the site include undeveloped land, industrial uses (solar and wind generation), agriculture, and rural residential.

## **10. Other Public Agencies Whose Approval is Required (e.g., permits, financing approval, or participation agreement.):**

### **CEQA Lead Agency**

Los Angeles Department of Water and Power

### **Responsible/Trustee Agencies**

United States Fish and Wildlife Service  
California Department of Fish and Wildlife  
Regional Water Quality Control Board, Lahontan – Region 6  
Eastern Kern Air Pollution Control District  
Kern Council of Governments  
California Native American Heritage Commission  
California Department of Transportation, District 6

## **11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?**

Yes, Native American consultation has begun.



## ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

<input type="checkbox"/>	Aesthetics	<input type="checkbox"/>	Agriculture and Forestry	<input type="checkbox"/>	Air Quality
<input type="checkbox"/>	Biological Resources	<input type="checkbox"/>	Cultural Resources	<input type="checkbox"/>	Energy
<input type="checkbox"/>	Geology/Soils	<input type="checkbox"/>	Greenhouse Gas Emissions	<input type="checkbox"/>	Hazards and Hazardous Materials
<input type="checkbox"/>	Hydrology/Water Quality	<input type="checkbox"/>	Land Use/Planning	<input type="checkbox"/>	Mineral Resources
<input type="checkbox"/>	Noise	<input type="checkbox"/>	Population/Housing	<input type="checkbox"/>	Public Services
<input type="checkbox"/>	Recreation	<input type="checkbox"/>	Transportation	<input type="checkbox"/>	Tribal Cultural Resources
<input type="checkbox"/>	Utilities/Service Systems	<input type="checkbox"/>	Wildfire	<input type="checkbox"/>	Mandatory Findings of Significance

## DETERMINATION:

On the basis of this initial evaluation:

<input type="checkbox"/>	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
<input checked="" type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
<input type="checkbox"/>	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
<input type="checkbox"/>	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
<input type="checkbox"/>	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature

Date

*THIS PAGE INTENTIONALLY LEFT BLANK*

### 3.1 Aesthetics

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the Project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.1.1 Affected Environment

The Project site is in unincorporated Kern County, approximately eight miles west of the unincorporated community of Rosamond. It is in the southwestern portion of Antelope Valley, in the northwestern portion of the Mojave Desert. Regional access includes SR-14, a four-lane highway, located approximately eight miles east of the Project site; SR-138, a two-lane roadway, located approximately 5.5 miles south of the Project site; and I-5 located approximately 30 miles west of the Project site. Local access to the site is via Rosamond Boulevard, which abuts the Project site on its northern boundary.

Edwards Air Force Base is located approximately 25 miles east of the site. The City of Bakersfield is located approximately 50 miles to the north. Los Angeles County communities of Lancaster and Palmdale are located approximately 15 and 20 miles, respectively, southeast of the Project site.

The site is relatively flat with a gentle east-southeast slope, approximately 2,475 feet above mean sea level. Topographic characteristics of the site and surrounding area allow for open, expansive views of hills to the north and the Tehachapi Mountains located farther northwest. The Project site and surrounding area is vegetated with native and non-native plant species typical of desert vegetation.

Land uses in the Project vicinity include undeveloped land, industrial uses (solar and wind generation), agriculture, and rural residential. Existing LADWP and SCE easements, along with associated transmission lines, traverse the site diagonally from northeast-to-southwest. Numerous steel lattice structures, approximately 100 to 150 feet in height, are visible from the Project site (refer to Figure 3-1, Site Photos).

### 3.1.2 Impact Assessment

#### Would the Project:

##### a) Have a substantial adverse effect on a scenic vista?

**No Impact.** Scenic vistas typically consist of far reaching views, such as a panoramic view of a skyline or ridgeline, and provide an aesthetic public benefit (i.e., available to the general public). There are no scenic vistas on-site, nor are there any designated scenic vistas off-site that would offer views of the Project. The proposed Project is not located adjacent to or near any officially-designated scenic vistas or identified as having a scenic vista; therefore, no impacts to a scenic vista would occur and no mitigation is required.

##### b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

**No Impact.** Based on review of the Caltrans website, there are no state-designated scenic highways within Kern County (Caltrans 2019). The Project site is not located within or near the viewshed of any eligible scenic highways. The nearest eligible scenic highways are SR-58 and SR-14, both located approximately 15 miles northeast of the Project area. As a result of this distance from the Project site, the Project would not impact scenic resources within a state scenic highway. In addition, there are no unique or scenic resources, including trees and rock outcroppings, within or adjacent to the Project site. Therefore, no impacts would occur relative to designated scenic resources, including, trees, rock outcroppings, and historic buildings within a state scenic highway, and no mitigation is required.

##### c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

**Less Than Significant Impact.** The visual quality of the Project site and surrounding area generally consists of active and inactive agricultural lands, disturbed lands, industrial uses, rural residential uses, and open space with desert vegetation. Expansive views of hills to the north and west are visible from much of the area, although these views are partially obstructed from some viewpoints by the presence of major electricity transmission corridors and lower voltage power lines.

The proposed Project includes construction and operation of a new 230 kV switching station, along with future development of a FACTS and a BESS, as shown on the preliminary site plan (refer to Figure 2-4). The anticipated future BESS would appear similar to LADWP's BESS facility at the Beacon Solar Facility in the northwestern Mojave Desert, Kern County (refer to Figure 2-6). Project facilities would be visible to the residences located in the immediate Project vicinity and motorists traveling along Rosamond Boulevard and would alter the existing views of the Project site. However, Project support structures would be a lower profile than the existing transmission lines and would not extend above existing transmission lines. Proposed Project facilities would not deviate substantially from the lattice structures and electrical infrastructure currently on-site.



View of the transmission line towers directly west of the Project site.



View of the transmission line corridor in the Project vicinity.



View of the Project site looking east.



View of the transmission line corridor in the Project vicinity.



View of the Project site looking northwest.



View of the Project site looking northeast.  
Wind farm is located in the farther northwest.

Rosamond Switching Station

### Figure 3-1 Site Photographs

*THIS PAGE INTENTIONALLY LEFT BLANK*



While the Project site is situated in a sparsely populated and generally rural area, the region, as well as the immediate Project area, has experienced significant growth of man-made structures in recent years, including electrical transmission facilities and renewable energy projects. As stated above, LADWP and SCE transmission corridors are located in the Project area and traverse the Project site. Several operating, approved, or proposed large-scale industrial solar facilities are located in the Project vicinity. These solar facilities include Rosamond Solar, Willow Springs Solar, Rosamond Solar, RE Astoria Solar, and Antelope Valley Solar. In addition, several operating, approved, or proposed commercial wind projects are in the Project vicinity, including Pacific Wind, Catalina, Avalon, and Morgan Hills (Kern County 2019a). Although the proposed Project would be well-sited, the addition of industrial facilities would change the existing visual character of the site and its surroundings. However, as stated above, no designated scenic resources are within the Project area. The existing visual character of the landscape is already influenced by existing transmission lines, and renewable energy facilities. Although the Project would change the existing visual character of the site from vacant land to a switching station and associated facilities it would not alter the site in a manner that would substantially degrade its existing visual character or quality of public views of the site and its surroundings. Because the proposed Project is in a sparsely populated area with no unique or outstanding visual features, the Project would not degrade the existing visual character or quality of the site. Impacts would be less than significant and no mitigation would be required.

During construction, a variety of equipment and vehicles would be operating on the site at any given time. All equipment, material, and supplies would be stored on-site in a designated staging area within the 120-acre Project boundary. While views of construction-related activities would be visible to the general public (motorist traveling in the area and residences adjacent to the Project site) construction-related activities would be relatively short-term and would cease upon Project completion. Therefore, potential visual impacts during construction would be less than significant and no mitigation is required.

**d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

**Less Than Significant Impact.** The Project's lighting system would be designed and installed to provide the minimum illumination necessary where it is required for safety, security, and operations. The facility may include motion-activated security lighting installed at access gates and around the switching station perimeter and future facilities. This lighting would be activated infrequently during periods of nighttime activity or as a result of security issues at the Project facility. All lighting would conform to applicable Kern County Dark Sky Ordinance requirements.<sup>1</sup> Wherever feasible and consistent with safety and security, lighting would be kept off when not in use. Therefore, the proposed Project would not create a new source of substantial light which would adversely affect nighttime views in the area. Impacts would be considered less than significant with adherence to the County's Dark Sky Ordinance requirements.

The reflection of sunlight off glass or shiny metal surfaces would be the primary potential producer of glare from operation of the proposed Project. There is a potential for Project facilities to result in glare to the surrounding area. Project facilities would have similar finishes and surface coatings as the existing the lattice structures and electrical infrastructure currently on-site. In addition, using a non-reflective finish on all switching station equipment, FACTS and BESS, would reduce impacts associated with glare to a less than significant level.

Project construction is anticipated to occur during daytime hours. No nighttime construction is anticipated. In the event that nighttime construction becomes necessary, construction crews would use

---

<sup>1</sup> Section 19.81 of the Kern County Zoning Ordinance is intended to reduce unnecessary night lighting and to minimize lighting impacts on surrounding properties to help protect Kern County's rural characteristic of access to a natural dark sky environment and to avoid public nuisances (Kern County 2019b).

minimal illumination in order to perform the work safely, and to provide security for equipment and Project components. All such lighting would be directed downward and shielded to focus on the desired areas only and to minimize light spillage off-site.

Project construction would occur during daytime hours; construction equipment could temporarily increase glare condition at the Project site. All construction staging and material laydown areas would occur within the 120-acre Project boundary and would be near the area(s) of active construction. Construction activities would occur in focused areas where Project facilities are being constructed; sources of glare would not be stationary for long periods of time. Sources of glare relative to construction equipment would be temporary and would not result in substantial glare that would affect daytime views in the area; therefore, impacts would be less than significant.

### **3.1.3 Mitigation Measures**

No mitigation measures are proposed.



## 3.2 Agricultural and Forest Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and the forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### 3.2.1 Affected Environment

The Project vicinity is predominantly surrounded by undeveloped land, industrial uses (solar and wind generation), agriculture, and rural residential. The Project site and surrounding areas are located in the County's Willow Springs Specific Plan boundary. As shown on Figure 2-3, the zoning designation for the Project site is RS (2.5-Acres Residential Suburban Combining). Zoning designations within the immediate Project area include: RS (1-Acres Residential Suburban Combining), RS (2.5-Acres

Residential Suburban Combining), RS (5-Acres Residential Suburban Combining), and A (Exclusive Agriculture). The Project site is undeveloped and dominated by native desert vegetation. Topography across the Project site is relatively flat.

The California Department of Conservation's (DOC's) Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources on a continuing basis (DOC 2019). The following provides a comprehensive description of the categories mapped by the DOC. For environmental review purposes under CEQA, the categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, and Grazing Land constitute "agricultural land" (PRC Section 21060.1). The remaining categories are used for reporting changes in land use as required for FMMP's biennial farmland conversion report.

***Prime Farmland.*** Farmland that has the best combination of physical and chemical features able to sustain long-term agricultural production. This land has the soil quality, growing season, and moisture supply needed to produce sustained high yields. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

***Farmland of Statewide Importance.*** Farmland similar to Prime Farmland but with minor shortcomings, such as greater slopes or less ability to store soil moisture. Land must have been used for irrigated agricultural production at some time during the four years prior to the mapping date.

***Unique Farmland.*** Farmland of lesser quality soils used for the production of the State's leading agricultural crops. This land is usually irrigated, but may include non-irrigated orchards or vineyards as found in some climatic zones in California. Land must have been cropped at some time during the four years prior to the mapping date.

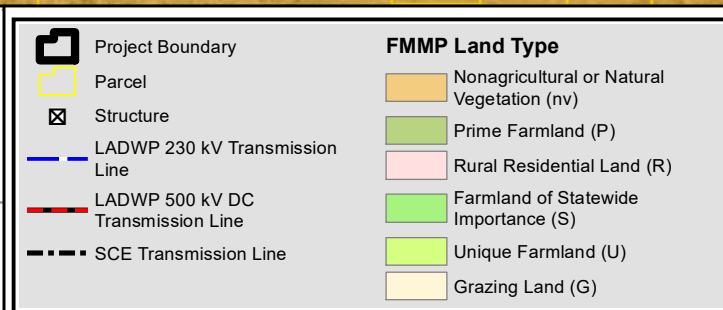
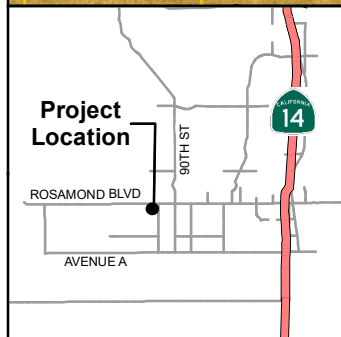
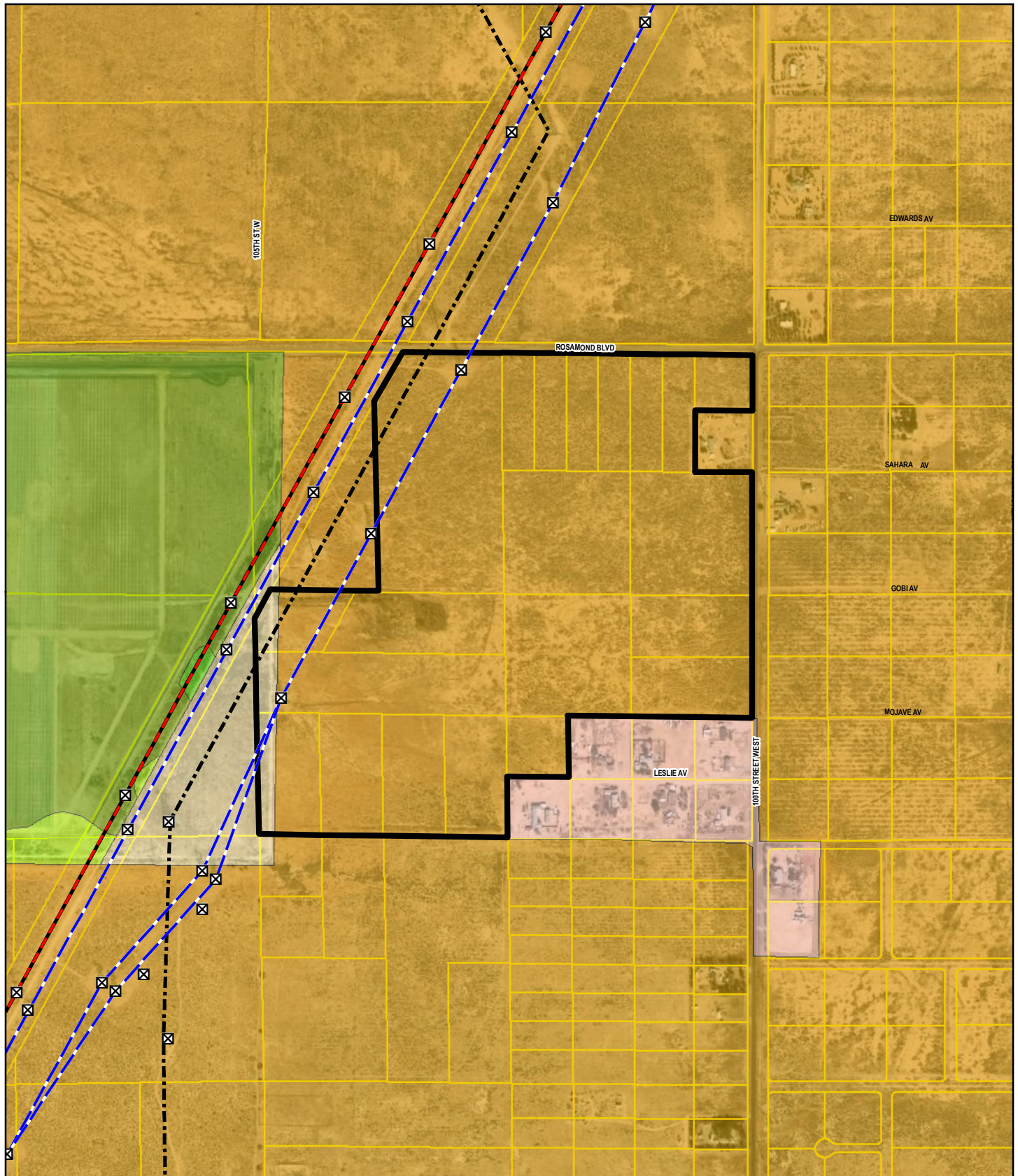
***Farmland of Local Importance.*** Land of importance to the local agricultural economy as determined by each county's board of supervisors and a local advisory committee.

***Grazing Land.*** Land on which the existing vegetation is suited to the grazing of livestock. This category was developed in cooperation with the California Cattlemen's Association, University of California Cooperative Extension, and other groups interested in the extent of grazing activities. The minimum mapping unit for Grazing Land is 40 acres.

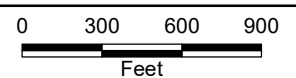
***Urban and Built-up Land.*** Land occupied by structures with a building density of at least one unit to 1.5 acres, or approximately six structures to a 10-acre parcel. This land is used for residential, industrial, commercial, institutional, public administrative purposes, railroad and other transportation yards, cemeteries, airports, golf courses, sanitary landfills, sewage treatment, water control structures, and other developed purposes.

***Other Land.*** Land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, poultry or aquaculture facilities; strip mines, borrow pits; and water bodies smaller than forty acres. Vacant and nonagricultural land surrounded on all sides by urban development and greater than 40 acres is mapped as Other Land.

According to the 2016 FMMP, the Project boundary does not contain any designated Prime Farmland or Farmland of Statewide Importance (refer to Figure 3-2).



Rosamond Switching Station  
**Figure 3-2**  
**Farmland Mapping and Monitoring Program**



Aerial Photography Source:  
 USDA NAIP/California  
 2018-07-23

*THIS PAGE INTENTIONALLY LEFT BLANK*

### 3.2.2 Impact Assessment

#### Would the Project:

- a) **Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

**No Impact.** As illustrated on Figure 3-2, there are no areas classified as Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local Importance within the Project site. No impact would occur and no mitigation is required.

- b) **Conflict with existing zoning for agricultural use, or a Williamson Act contract?**

**No Impact.** There are no agricultural land uses or property under Williamson Act contract on or adjacent to the Project site. The proposed Project would not conflict with existing zoning for agricultural use of a Williamson Contract. No impacts would occur and no mitigation is required.

- c) **Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

**No Impact.** The Project site does not contain designated forest land or timberland as defined in the PCR (Sections 12220[g] and 4526, respectively) and would not result in the loss of forest land or the conversion of forest land to non-forest use. Therefore, no impacts to forest land or timberland would occur and no mitigation is required.

- d) **Result in the loss of forest land or conversion of forest land to non-forest use?**

**No Impact.** The Project site is currently undeveloped and surrounded by undeveloped land, industrial uses (solar and wind generation), agriculture, and rural residential. There are no areas zoned as forest land or timberland within or adjacent to the proposed Project boundaries. The proposed Project would not conflict with existing zoning for forest land or timberland; therefore, no impact would occur.

- e) **Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?**

**No Impact.** The DOC has mapped a portion of the Project study area as Grazing Land. As illustrated in Figure 3-2, grazing land is located within an existing utility corridor within the Project boundary. However, Project facilities would not be constructed within the utility ROW; therefore, no impact would occur relative to designated grazing land. There are no forest lands or timberland on the Project site or in the vicinity of the proposed Project. The Project site is not currently being used for agriculture. As such, the proposed Project would not result in the conversion of farmland to a non-agricultural use. No impact would occur and no mitigation is required.

### 3.2.3 Mitigation Measures

No mitigation measures are proposed.

### 3.3 Air Quality

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the Project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Information in this section is based on the *Rosamond Switching Station Project – Air Quality and Greenhouse Gas Emissions Impacts Assessment* prepared by Terry A. Hayes Associates, Inc. ([TAHA] 2019a).

#### 3.3.1 Affected Environment and Regulatory Framework

The Project site is located within the jurisdiction of the EKAPCD. The EKAPCD is a local government agency whose mission is to attain and maintain ambient air quality standards and protect the public and environment of eastern Kern County from significant adverse effects of air pollution. Endeavors undertaken by EKAPCD to accomplish its goals include adoption of rules that limit pollution, issuance of permits to ensure compliance, and inspection of pollution sources. Additionally, EKAPCD is tasked with preparing clean air plans to identify existing air quality conditions, assess air pollution sources and transport within the region, and determine how to control pollution sources most effectively. EKAPCD also functions in a regulatory oversight role in assessing the air quality impacts associated with new businesses and land development projects.

The United States Environmental Protection Agency (USEPA) and California Air Resources Board (CARB) have established federal and State standards for criteria pollutants. Criteria pollutants relevant to the proposed Project include ground-level ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), particulate matter up to 10 microns (PM<sub>10</sub>), and particulate matter up to 2.5 microns (PM<sub>2.5</sub>). Extensive regional monitoring of sulfur dioxide (SO<sub>2</sub>) and lead concentrations have demonstrated sustained atmospheric levels substantially below applicable air quality standards, and proposed Project emissions would be of negligible magnitude, therefore these pollutants are excluded from the analyses contained herein.



USEPA and CARB designate areas as attainment, maintenance, or nonattainment depending on air quality conditions. EKAPCD jurisdiction is designated as serious nonattainment for the federal 8-hour O<sub>3</sub> and PM<sub>10</sub> standards and nonattainment areas for State O<sub>3</sub> and PM<sub>10</sub> standards.

EKAPCD Rule 401 and Rule 402 limit the emissions of visible particulate matter and wind erosion or fugitive dust from material handling and hauling, bulk storage, earthmoving, construction, and demolition. These rules prohibit any emissions of fugitive dust from construction, demolition, or other operations that remain visible in the atmosphere beyond the property line of the site of the source, except along roadways. Rule 419 prevents public nuisances.

EKAPCD published its 2017 Ozone Attainment Plan for the 2008 Federal 75 parts per billion 8-Hour Ozone Standard, which was adopted July 27, 2017. The Plan contained a discussion of contingency measure requirements and how these requirements are met for Eastern Kern County by emission reductions from continued implementation of CARB's Mobile Source Program, including fleet turnover between the attainment year (2020) and the year following (2021). CARB is amending the Eastern Kern Ozone Plan to include emission inventories for reactive organic gases and nitrogen oxides (NO<sub>x</sub>) for the 2011 baseline year, 2017 milestone year, and 2020 attainment year.

EKAPCD has adopted quantitative mass thresholds to guide the assessment of the potential for air quality impacts in accordance with CEQA.<sup>2</sup> A project would have a significant air quality impact on the environment, if it would generate daily or annual emissions exceeding any of the following threshold values shown in Table 3-1.

**TABLE 3-1 EKAPCD AIR QUALITY SIGNIFICANCE THRESHOLDS**

SOURCE AND AVERAGING PERIOD	POLLUTANT			
	VOC <sup>1</sup>	NO <sub>x</sub>	SO <sub>x</sub> <sup>2</sup>	PM <sub>10</sub>
Annual Emissions, All Sources (tons/year)	25	25	27	15
Daily Emissions, Mobile Sources (pounds/day)	137	137	-	-

<sup>1</sup>volatile organic compounds (VOC).  
<sup>2</sup>sulfur oxides (SO<sub>x</sub>).  
 Note: EKAPCD has not established annual thresholds for CO or PM<sub>2.5</sub>, therefore those emissions are not presented in Table 3-1.

Source: TAHA 2019a.

Additionally, a project may have a significance impact on air quality if it would:

- Cause or contribute to an exceedance of any California Ambient Air Quality Standards;
- Exceed the EKAPCD health risk public notification thresholds; or
- Be inconsistent with adopted federal and state Air Quality Attainment Plans.

<sup>2</sup> EKAPCD, *Kern County CEQA Implementation Document*, June 2004.

### 3.3.2 Impact Assessment

#### Would the Project:

##### a) Conflict with or obstruct implementation of the applicable air quality plan?

###### Less Than Significant Impact.

###### *Construction*

Construction of the proposed Project is anticipated to begin in Spring 2020 and continue for a total of approximately 38 months with operational commissioning near the end of 2023. Graders, scrapers, and dozers would generate fugitive dust emissions during material displacement and site leveling activities. Water trucks employed on the Project site would be used to suppress dust during the ground disturbance activities. Based on controlled dust suppression studies, application of water to disturbed areas at least twice daily would reduce fugitive dust (PM<sub>10</sub> emissions) by approximately 55 percent.<sup>3</sup>

Construction activities would be conducted in accordance with EKAPCD rules and regulations to prevent the occurrence of unwarranted fugitive dust emissions and public nuisances. All air pollutant emissions associated with construction activities would cease upon completion of the Project, and its implementation would not introduce a long-term source of air pollutant emissions to the Project area. As shown in Table 3-2 and Table 3-3, under Checklist Response 3.3.2 (b), construction of the proposed Project would not exceed applicable annual or daily EKAPCD significance thresholds, respectively. Therefore, the proposed Project would result in a less than significant impact related to construction and would not conflict with or obstruct implementation of air quality plans and no mitigation measures would be required.

###### *Operations*

The proposed Project is a passive land use that would not generate regular or substantial daily emissions. Maintenance activities would be intermittent and include limited vehicle trips for inspection and repair of Project components. In addition, the proposed Project would accommodate the interconnection process for planned renewable energy projects in the Project vicinity and would support LADWP's RPS goals. The conversion of nonrenewable to renewable energy generation is a key component of local and statewide efforts to reduce air pollution. Therefore, the proposed Project would result in a less than significant impact related to operation of the Project and would not conflict with or obstruct implementation of air quality plans. No mitigation measures would be required.

##### b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

###### Less Than Significant Impact.

###### *Construction*

The Project area is currently designated nonattainment for O<sub>3</sub> and PM<sub>10</sub> standards. By its very nature, air pollution is largely a cumulative impact. No single project is sufficient in size to, by itself, result in nonattainment of ambient air quality standards. Instead, a project's individual emissions contribute to existing cumulatively significant adverse air quality impacts. If a project exceeds the identified significance thresholds, its emissions may be cumulatively considerable, potentially resulting in significant adverse air quality impacts to the region's existing air quality conditions. In that case, additional analysis to assess cumulative impacts would be necessary.

---

<sup>3</sup>South Coast Air Quality Management District, *Fugitive Dust Mitigation Measure Table XI-A: Construction & Demolition*, revised 2007.



EKAPCD significance thresholds presented in Table 3-1 are the reference metric for this analysis. Construction activities involved with implementation of the proposed Project would employ the following best management practices to comply with EKAPCD Rule 402 Fugitive Dust<sup>4</sup>:

- All soil excavated or graded should be sufficiently watered to prevent excessive dust. Watering should occur as needed with complete coverage of disturbed soil areas. Watering should be a minimum of twice daily on unpaved/untreated roads and on disturbed soil areas with active operations.
- All clearing, grading, earth moving, and excavation activities should cease:
  - a) During periods of winds greater than 20 miles per hour (mph) (averaged over one hour), if disturbed material is easily windblown, or
  - b) When dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or neighboring property.
- All fine material transported off-site should be either sufficiently watered or securely covered to prevent excessive dust.
- If more than 5,000 cubic yards of fill material will be imported or exported from the site, then all haul trucks should be required to exit the site via an access point where a gravel pad or grizzly has been installed.
- Areas disturbed by clearing, earth moving, or excavation activities should be minimized at all times.
- Stockpiles of soil or other fine loose material shall be stabilized by watering or other appropriate method to prevent wind-blown fugitive dust.
- Once initial leveling has ceased all inactive soil areas within the construction site should be watered twice daily until soil has sufficiently crusted to prevent fugitive dust emissions.
- All active disturbed soil areas should be sufficiently watered to prevent excessive dust, but no less than twice a day.
- On-site vehicle speed should be limited to 15 miles per hour.
- All areas with vehicle traffic should be paved, treated with dust palliatives, or watered a minimum of twice daily.
- Streets adjacent to the project site should be kept clean and accumulated silt removed.
- Access to the site should be by means of an apron into the project from adjoining surfaced roadways. The apron should be surfaced or treated with dust palliatives.
- Properly maintain and tune all internal combustion engine powered equipment.
- Require employees and subcontractors to comply with California's idling restrictions for compression ignition engines.

The application of water to disturbed areas and material stockpiles twice daily would reduce fugitive dust emissions by approximately 55 percent. Maximum daily air pollutant emissions during construction activities were quantified using off-road equipment emission factors and calculation methodologies contained in documentation for the California Emissions Estimator Model (CalEEMod, Version

---

<sup>4</sup> EKAPCD, *Suggested Air Pollutant Mitigation Measures for Construction Sites for Eastern Kern APCD*, 2006.

2016.3.2). The CalEEMod software is the preferred tool for estimating air pollutant emissions associated with land use development projects under CEQA. All calculation sheets can be found in the Appendix files.

Construction of the Project would generally occur in three phases, Site Preparation, Site Construction, and Site Finalization. According to the preliminary schedule, Site Preparation activities would take place in 2020 through 2022, Site Construction activities would take place in 2020 through 2023, and Site Finalization activities would occur in 2022 and 2023. To analyze air pollutant emissions associated with construction activities, air pollutant emissions were compared to the EKAPCD significance thresholds presented in Table 3-1, above. Table 3-2 presents the annual emissions of volatile organic compounds (VOC), NO<sub>x</sub>, sulfur oxides (SO<sub>x</sub>), and PM<sub>10</sub> that would be generated by construction of the proposed Project and compares them to the applicable EKAPCD significance thresholds. EKAPCD has not established annual thresholds for CO or PM<sub>2.5</sub>, therefore those emissions are not presented. Maximum annual emissions would not exceed the applicable EKAPCD thresholds in any year.

**TABLE 3-2 CONSTRUCTION EMISSIONS ASSESSMENT – ANNUAL EMISSIONS**

YEAR	ACTIVITY	POLLUTANT EMISSIONS			
		VOC	NO <sub>x</sub>	SO <sub>x</sub>	PM <sub>10</sub>
2020	Site Preparation	0.62	6.45	0.01	1.43
2020	Site Construction	0.34	3.41	0.01	0.37
<b>2020</b>	<b>Total Annual</b>	<b>0.96</b>	<b>9.86</b>	<b>0.02</b>	<b>1.80</b>
2021	Site Construction	1.28	12.61	0.03	1.45
<b>2021</b>	<b>Total Annual</b>	<b>1.28</b>	<b>12.61</b>	<b>0.03</b>	<b>1.45</b>
2022	Site Preparation	0.25	2.42	0.01	0.68
2022	Site Construction	1.24	11.36	0.04	1.39
2022	Site Finalization	0.21	1.92	0.01	0.29
<b>2022</b>	<b>Total Annual</b>	<b>1.70</b>	<b>15.71</b>	<b>0.05</b>	<b>2.36</b>
2023	Site Construction	0.88	7.70	0.03	0.98
2023	Site Finalization	0.16	1.44	0.01	0.23
<b>2023</b>	<b>Total Annual</b>	<b>1.05</b>	<b>9.14</b>	<b>0.03</b>	<b>1.21</b>
<b>All</b>	<b>Maximum Annual</b>	<b>1.70</b>	<b>15.71</b>	<b>0.05</b>	<b>2.36</b>
EKAPCD Annual Threshold (tons/year)		25	25	27	15
Exceed Threshold?		No	No	No	No

Source: TAHA 2019a.

Table 3-3 presents the daily mobile source air pollutant emissions that would be generated by construction of the Project. The emissions presented conservatively assume the possibility of overlap between activities in each given year.

**TABLE 3-3 CONSTRUCTION EMISSIONS ASSESSMENT – DAILY MOBILE SOURCE EMISSIONS**

YEAR	ACTIVITY	DAILY POLLUTANT EMISSIONS	
		VOC (pounds/day)	NO <sub>x</sub> (pounds/day)
2020	Site Preparation	0.7	4.53
2020	Site Construction	1.07	7.35
<b>2020</b>	<b>Maximum Daily Overlap</b>	<b>1.79</b>	<b>11.88</b>
2021	Site Construction	0.92	6.19
<b>2021</b>	<b>Site Construction</b>	<b>0.92</b>	<b>6.19</b>
2022	Site Preparation	0.52	3.40
2022	Site Construction	0.74	4.6
2022	Site Final	0.49	1.47
<b>2022</b>	<b>Maximum Daily Overlap</b>	<b>1.75</b>	<b>9.52</b>
2023	Site Construction	0.74	4.64
2023	Site Final	0.49	1.47
<b>2023</b>	<b>Maximum Daily Overlap</b>	<b>1.23</b>	<b>6.11</b>
<b>Maximum Daily Emissions</b>		<b>1.79</b>	<b>11.88</b>
EKAPCD Daily Mobile Threshold (pounds/day)		137	137
<b>Exceed Threshold?</b>		<b>No</b>	<b>No</b>

Source: TAHA 2019a.

### **Operation**

The proposed Project is a passive land use that would not generate regular or substantial daily emissions. Maintenance activities would be intermittent, including limited vehicle trips for inspection and repair of Project components. Operations would not introduce any new source of air pollutant emissions to the Project area and therefore does not have the potential to contribute to a cumulative effect. This impact would be less than significant. No mitigation measures would be required.

### **c) Expose sensitive receptors to substantial pollutant concentration?**

#### **Less Than Significant Impact.**

### **Construction**

The greatest potential for toxic air contaminant exposure during construction would be associated with diesel particulate matter emissions from heavy equipment exhaust. The dose to which receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the duration of exposure to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the maximally exposed individual. The risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time. Local exposure would range from weeks to months depending on the construction phase and location.

Scattered rural single-family residences are located near the Project site, with the nearest located 150 feet from the Project site on Leslie Avenue. Construction equipment, vehicle, and material movement activities would occur throughout the Project site, with most of the activity generally in the western portion of the site, where the switching station and ancillary infrastructure will be at least 1,000 feet from residences. In addition, the Project would be subject to the regulations and laws relating to toxic air containments at the regional, State, and federal level that would protect sensitive receptors from

substantial concentrations. This impact would be less than significant and no mitigation would be required.

### ***Operation***

The proposed Project is a passive land use that would not generate regular or substantial daily emissions. Maintenance activities would be intermittent and would include limited vehicle trips for inspection and repair of Project components. Operations would not introduce any new substantial source of air pollutant emissions to the Project area and therefore does not have the potential to generate substantial pollutant concentrations. This impact would be less than significant and no mitigation would be required.

### **d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

#### **Less Than Significant Impact.**

### ***Construction***

Equipment exhaust would be the primary sources of odors during construction activities. Odors would be localized and generally confined to the immediate area surrounding the Project site. Construction would employ best management practices (e.g., inspections and maintenance of diesel-fueled heavy-duty equipment) to prevent the occurrence of a nuisance odor in accordance with EKAPCD Rule 419, and the odors would be typical of most construction sites and temporary and would dissipate rapidly from the source with an increase in distance. There are no schools, public parks, or other sensitive land uses in proximity to the Project site that would be especially sensitive to odors emanating from these sources. Additionally, the construction of the proposed Project would adhere to all requirements set forth in the EKAPCD Rules and Regulations. Therefore, impacts would be less than significant and no mitigation would be required.

### ***Operation***

Operational activities involve routine maintenance and would not introduce any new sources of odors to the Project area. There is no potential the proposed Project to result in a permanent impact related to odors.

### **3.3.3 Mitigation Measures**

No mitigation measures are proposed.

### 3.4 Biological Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Information in this section is based on the *Rosamond Switching Station Project – Biological Resources Habitat Assessment* prepared by POWER Engineers, Inc. ([POWER] 2019a).

#### 3.4.1 Affected Environment

Preliminary investigation included review of information obtained from literature searches, examinations of habitat as discernible from aerial photographs, and database searches including California Native Plant Society and the California Natural Diversity Database (CNDDDB) records. To identify the existing and potential biological resources present in the vicinity of the proposed Project, a geographic information system search was performed. This consisted of mapping baseline biological resource data (vegetation mapping and CNDDDB records).

Reconnaissance-level biological resource surveys were conducted by POWER biologist, Ken McDonald. An initial survey was conducted on October 5, 2017, and a second survey of an updated and increased

study area was conducted on August 29, 2019. The Project site consists of 120 acres of undeveloped land. The field survey was conducted within the whole of the Project area with additional and immediately adjacent areas surveyed (approximately 149 acres) due to the potential need for relocation of existing transmission line towers as part of the Project (refer to Figure 3-3 for the boundary of the biological study area). Site elevation is approximately 2,475 feet above mean sea level. The area is vegetated with native and non-native plant species, and portions of the area have been mechanically disturbed by human activities. Land uses in the Project vicinity include undeveloped land, industrial uses (solar and wind generation), agriculture, and rural residential.

The biological study area (study area) survey included vegetation mapping as well as botanical and wildlife inventories within the Project study area. It was conducted by walking throughout the study area and recording detected species. Vegetation communities were classified according to Holland (1986). The botanical inventory of the site was floristic in nature, meaning that all plants observed were identified to the taxonomic level needed to determine whether they were special-status plant species. Wildlife species were detected either by observation, by vocalization, or by sign (e.g., tracks, burrows, scat).

### 3.4.2 Impact Assessment

**Would the project:**

- a) **Have a substantial adverse effect, either directly or indirectly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

**Less Than Significant Impact With Mitigation.**

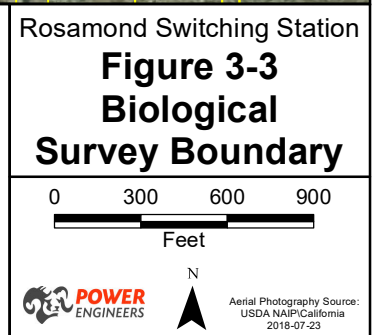
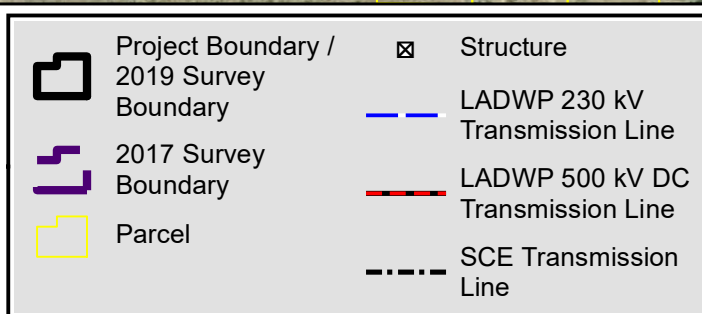
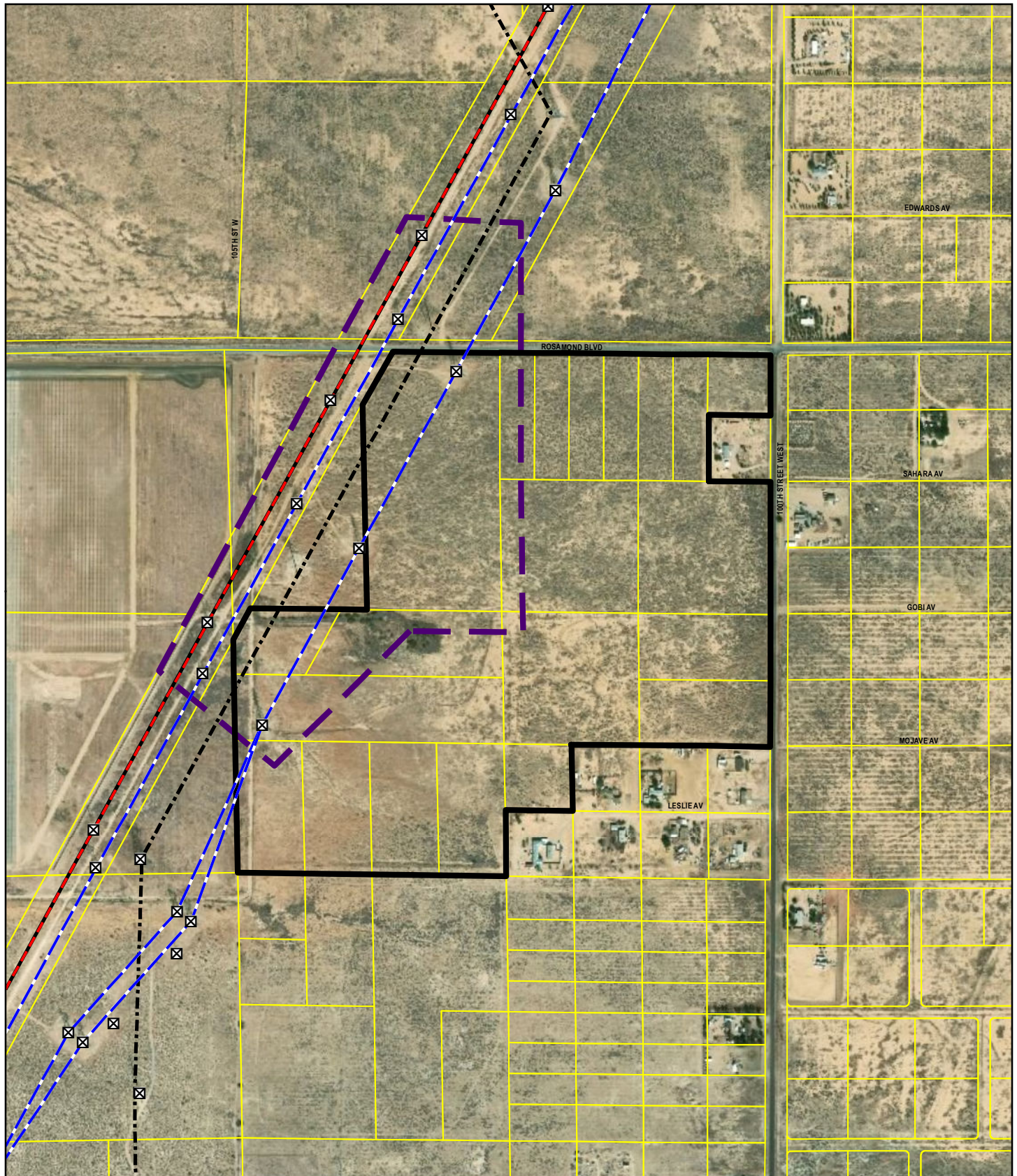
#### *Vegetation Communities*

The study area consists of several different desert scrub vegetation communities typical of the surrounding area. Vegetation communities and land cover types identified in the reconnaissance-level survey include: saltbrush scrub, which comprises the majority of the study area; rabbitbrush scrub, observed in the eastern portion of the study area; non-native grassland, this community was observed in the southwestern portion of the study area but components of the community occur throughout all vegetation communities observed within the study area; ruderal, observed in the western portion of the study area; and disturbed/developed (refer to Figure 3-4, Vegetation Communities). No special-status plant species or vegetation communities were observed during the field survey. Appendix A of the *Biological Resources Habitat Assessment* (Appendix B of this Initial Study/MND) provides a list of plant species observed during the field surveys in the study area. Table 3-4 provides the approximate vegetation community acreages identified within the study area during the 2017 and 2019 field surveys.

**TABLE 3-4 VEGETATION COMMUNITIES WITHIN THE PROJECT AREA**

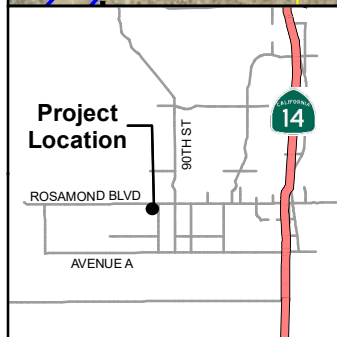
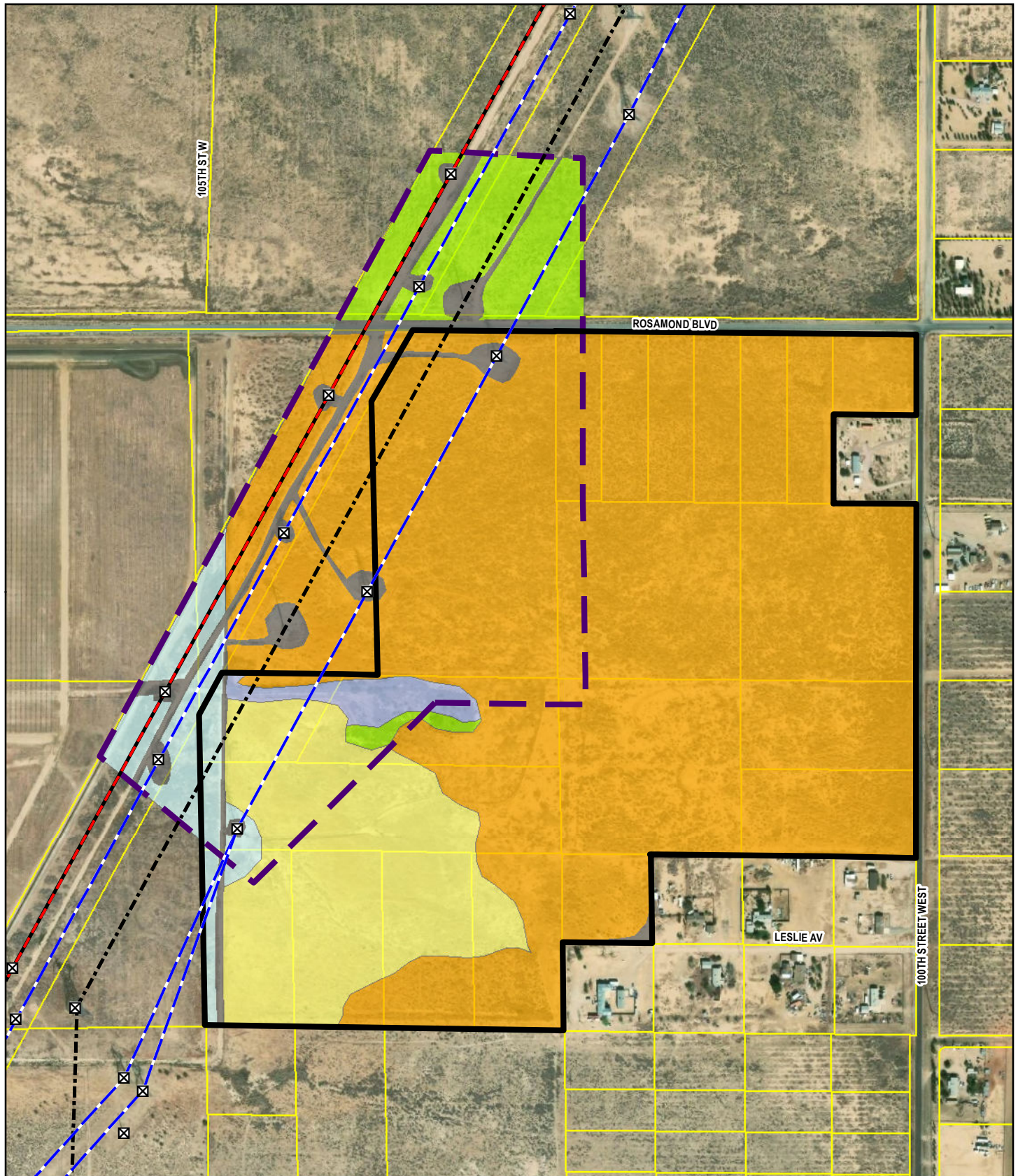
VEGETATION COMMUNITY	ACRES
Saltbush Scrub	102.8
Rabbitbrush Scrub	9.4
Ruderal	6.9
Non-native Grassland	21.1
Tamarisk	2.2
Disturbed/Developed	7.0
<b>Total Acres</b>	<b>149.4</b>



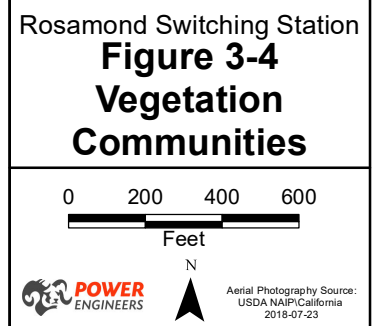


*THIS PAGE INTENTIONALLY LEFT BLANK*





	Project Boundary / 2019 Survey Boundary		Structure
	2017 Survey Boundary	<b>Vegetation Communities</b>	
	Parcel		Saltbush Scrub
	LADWP 230 kV Transmission Line		Non-native Grassland
	LADWP 500 kV DC Transmission Line		Tamarisk
	SCE Transmission Line		Ruderal
			Rabbitbrush Scrub
			Disturbed/Developed



*THIS PAGE INTENTIONALLY LEFT BLANK*

### ***Special-Status Plant Species***

Based on a review of existing data including California Native Plant Society's Rare Plant Inventory and the CNDDB, two special-status plant species have the potential to occur within the Project site.

- **Horn's Milk-vetch** – Suitable habitat for this species does not occur within the study area and, therefore, the species is considered to be absent.
- **Alkali Mariposa Lily** – Suitable habitat for this species occurs on-site, with recent occurrences observed within one mile of the study area; therefore, this species has a moderate potential to occur within the study area. Because the habitat assessments were conducted outside of the appropriate blooming period, it could not be identified as present.

No special-status plant species were observed during field surveys, because the reconnaissance-level surveys were not conducted during an optimum time of year to detect presence of all special-status plant species with potential to occur. Due to suitable habitat on-site, there is a potential that special-status plant species could occur.

Construction of the proposed Project has the potential to impact special-status plant species during site preparation and construction activities, if these species are present, resulting in a significant impact. As a result, a pre-construction focused floral survey within the study area would be conducted to determine presence/absence of special-status plant species determined to have a potential to occur on-site, with focus on the alkali mariposa lily, as described in Mitigation Measure (MM) BIO-1. Impacts as a result of Project construction can be avoided or reduced to a less than significant level through mitigation measures requiring pre-construction surveys and other measures, as described in MMs BIO-2 through BIO-5. Impacts to special-status plant species would be mitigated to a less than significant level with implementation of these mitigation measures.

### ***Wildlife Species***

No special-status wildlife species were detected during the field surveys. A few wildlife species were observed during the field surveys within the study area; however, wildlife sign was observed more frequently. Burrows of varying sizes were present intermittently throughout the study area, primarily small rodent burrows. Appendix B of the Biological Resources Habitat Assessment (Appendix B of this Initial Study/MND) provides a list of animal species observed during the field surveys in the study area.

### ***Special-Status Wildlife Species***

Based on literature review a total of nine special-status wildlife species were determined to potentially occur within the study area. Of the nine wildlife species with a potential to occur within the vicinity, two were determined to have a high potential for occurrence within the study area (burrowing owl and Swainson's hawk), one had a moderate potential, and the rest were determined to have a low potential for occurrence. Their habitat description, status, and potential for occurrence within the study area are provided in Table 3-5. While special-status wildlife species were not observed during field surveys, suitable habitat does exist on-site and the Project could result in significant impacts if a special-status wildlife species were to occupy the site prior to construction and during construction activities.

Suitable burrowing/nesting and foraging habitat for the burrowing owl is found within the desert scrub and grassland habitats on and adjacent to the study area. Construction activity on the Project site could have the potential to result in significant impacts to burrowing owl through mortality or injury. However, potential impacts to burrowing owls would be mitigated to a less than significant level through implementation of mitigation measures requiring pre-construction surveys and other measures, as

described in MM BIO-6. With implementation of MM BIO-6, impacts to the burrowing owl would be mitigated to a less than significant level.

All raptors species, and their nests and eggs, are protected under CDFW Code Section 3503.5 and by the federal Migratory Bird Treaty Act, which prohibits destruction of active nests and interference with nesting activities. The study area and surrounding areas provide suitable nesting and foraging habitat for the state threatened Swainson's hawk and other raptors. Suitable foraging habitat for these species includes grassland, open desert scrub communities, and agricultural fields present on and adjacent to the study area. Although no individual Swainson's hawks or nests were detected within the study area during the field surveys, due to suitable habitat present on-site and in the surrounding area, the Project could have the potential to impact Swainson's hawk through mortality or injury. Loss of individual Swainson's hawks, other raptors, and their nests would be avoided through pre-construction surveys, as described in MM BIO-7. With implementation MM BIO-7, impacts would be less than significant.

Small terrestrial animals (e.g., squirrels, lizards, snakes) may also utilize the study area for foraging. During construction, open pits or holes that are dug to place equipment could trap these species. This could lead to potentially significant impacts. However, MM BIO-8 provides preventive actions to be taken to prevent terrestrial animals from getting trapped in excavations and structures during construction. Mitigation measure BIO-9 addresses training workers to understand and avoid actions that could adversely affect wildlife. With implementation of mitigation measures impacts would be less than significant.

Construction of the proposed Project has the potential to indirectly impact special-status wildlife, with the introduction or increasing of the presence of non-native plant species and noxious weeds; implementation of MM BIO-5 and MM BIO-10 would reduce this potential impact to less than significant. Poor housekeeping during construction, such as food-related trash not disposed of properly, could increase the presence of predators such as common ravens, domestic dogs, and coyotes. Implementation of MMs BIO-11 and MM BIO-12 would reduce these impacts to less than significant.

**b) Have substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

**No Impact.** As determined through Project surveys and CNDDB records, there is no riparian habitat or other sensitive habitat types present within the study area. No impact would occur.



**TABLE 3-5 SPECIAL-STATUS WILDLIFE SPECIES AND THEIR POTENTIAL TO OCCUR WITHIN THE BIOLOGICAL STUDY AREA**

SPECIES	STATUS	HABITAT	POTENTIAL FOR OCCURRENCE
<i>Athene cunicularia</i> burrowing owl	Fed: None State: SSC BLM: S	Occurs in open, dry annual or perennial grasslands, deserts, and scrublands with low-growing vegetation. This includes a wide variety of vegetation communities, including coastal prairies, coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, and valley and foothill grasslands. Depends on fossorial mammals for burrows.	<b>High.</b> Suitable habitat available for this species within the study area and in the area immediately surrounding the Project, with records of this species less than 0.5 mile from the study area.
<i>Buteo swainsoni</i> Swainson's hawk	Fed: None State: <b>THR</b> BLM: S	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, agricultural areas, and ranches. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	<b>High.</b> Suitable habitat available for this species within the study area and in the area immediately surrounding the Project, with records of this species within one mile from the study area.
<i>Charadrius montanus</i> mountain plover	Fed: None State: SSC BLM: S	Occurs in chenopod scrub, short grasslands, freshly-plowed fields, newly-sprouting grain fields, and occasionally sod farms. Needs a mixture of short vegetation and bare ground, along with flat topography. Prefers grazed areas and areas with fossorial rodents.	<b>Moderate.</b> Some suitable habitat to support for this species at this site and in the area immediately surrounding the Project, with records of this species within two miles from the study area.
<i>Anniella pulchra</i> northern California legless lizard	Fed: None State: SSC BLM: None	Occurs in sandy or loose loamy soils under sparse vegetation. Soils with high moisture content are required.	<b>Low.</b> Marginal suitable habitat to support this species occurs within the study area.
<i>Aquila chrysaetos</i> golden eagle	Fed: None State: <b>THR</b> BLM: S	Nests in cliffs or large trees, typically in mountainous regions and in the vicinity of open grassland or oak savanna habitat. Forages in areas of open habitat.	<b>Low.</b> Marginal suitable foraging habitat to support this species occurs within the study area, with records of this species within one mile of the study area. There is no nesting habitat within the study area.
<i>Buteo regalis</i> ferruginous hawk	Fed: None State: WL BLM: None	Occurs in Great Basin grassland, Great Basin scrub, pinon and juniper woodlands, and valley and foothill grassland.	<b>Low.</b> Marginal suitable habitat to support this species occurs within the study area.
<i>Lanius ludovicianus</i> loggerhead shrike	Fed: None State: SSC BLM: None	Open space with patchy shrubs and trees, including desert scrub, agricultural areas, pastoral habitat, and suburban areas.	<b>Low.</b> Marginal suitable habitat to support this species occurs within the study area, with records of observation within four miles.

SPECIES	STATUS	HABITAT	POTENTIAL FOR OCCURRENCE
<i>Taxidea taxus</i> American badger	Fed: None State: SSC BLM: None CA: fur-bearing mammal	Occurs in a wide variety of habitats and vegetation communities but is most abundant in drier, open stages of most shrub, forest, and herbaceous habitats in areas with friable soils. Requires open, uncultivated ground.	<b>Low.</b> Marginal suitable habitat to support this species occurs within the study area, with records of observation within 1.5 miles.
<i>Toxostoma lecontei</i> Le Conte's thrasher	Fed: None State: SSC BLM: None	Occurs primarily in open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in dense, spiny shrubs or densely-branched cacti.	<b>Low.</b> Suitable foraging habitat for this species occurs within the study area, with records of observation within four miles, although not recent. There is no nesting habitat within the study area.

**Low:** Species or sign not observed on the site, but conditions marginal for occurrence.

**Moderate:** Species or sign not observed on the site, but conditions suitable for occurrence and/or an historical record exists in the vicinity.

**High:** Species or sign not observed on the site, but reasonably certain to occur on the site based on conditions, species ranges, and recent records.

**State status**

THR = listed as Threatened under the California Endangered Species Act

SSC = designated as a Species of Concern

WL = Watch List

**BLM status**

S = designated as a Sensitive species

**c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

**No Impact.** Aquatic resources, including riparian areas, wetlands, and certain aquatic vegetation communities are considered sensitive biological resources and can fall under the jurisdiction of several regulatory agencies. The United States Army Corps of Engineers (USACE) exerts jurisdiction over “waters of the United States,” including, but not limited to, all waters which are subject to the ebb and flow of tide; wetlands and other waters such as lakes, rivers, streams (including intermittent or ephemeral streams), mudflats, sandflats, sloughs, prairie potholes, vernal pools, wet meadows, playa lakes, or natural ponds, and tributaries of the above features (USACE 2019).

CDFW exercises jurisdiction over wetland and riparian resources associated with rivers, streams, and lakes under California Fish and Game Code Sections 1600 to 1607. CDFW has the authority to regulate work that would substantially divert, obstruct, or change the natural flow of a river, stream, or lake; substantially change the bed, channel, or bank of a river, stream, or lake; or use material from a streambed. The CDFW’s jurisdiction along a river, stream, creek, or other water body is usually bounded by the top-of-bank or the outermost edges of riparian vegetation.

During the 2017 and 2019 field surveys, no evidence of hydrology or riparian/wetland vegetation was noted within the limits of the study area. Therefore, no USACE jurisdictional “waters of the United States” are present within the study area. In addition, no jurisdictional streambeds or habitats under the jurisdiction of CDFW were noted within the study area during the 2017 and 2019 field surveys. The site is very flat and the on-site drainages are not well developed, do not have specific features such as high water marks or defined “banks,” and do not contain riparian vegetation or wetlands. Therefore, no impacts would occur relative to wetlands or jurisdictional areas.

**d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

**Less Than Significant Impact.** No major wildlife movement corridors or linkage have been identified within the Project study area or immediate vicinity. The Project site is surrounded by land uses that are in agricultural production, are undeveloped desert land, or are occupied by rural residences. The Project region contains large expanses of open space that provide ample amounts of area for local and regional wildlife movement and provides opportunities for wildlife movement elsewhere in the vicinity of the Project study area. Implementation of the Project would not interfere with wildlife movement. Impacts would be less than significant and no mitigation is required.

**e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?**

**No Impact.** The proposed Project would not conflict with goals and policies outlined in the Kern County General Plan or the Willow Springs Specific Plan. Local policies and ordinances protecting biological resources are provided in Section 1.10.10 of the Kern County General Plan and Biological Resources section of the Willow Springs Specific Plan, which provide for the conservation of oak trees, oak woodlands. There are no oak trees or oak woodlands or Joshua trees located within the study area; therefore, no impact would occur and no mitigation is required.

**f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

**No Impact.** There are no approved Habitat Conservation Plans, Natural Communities Conservation Plans, or other local, regional, or state habitat conservation plans that are applicable to the Project study area. Consequently, no conflicts with any adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan would occur and no mitigation is required.

**3.4.3 Mitigation Measures**

- BIO-1 Prior to, and as close to the actual construction date as feasible, pre-construction focused floral surveys shall be conducted within the Project study area. The focused floral surveys shall be conducted within the appropriate blooming periods to determine presence/absence of special-status plant species determined to have a potential to occur on-site, with focus on the alkali mariposa lily, which blooms from April to June.
- BIO-2 A qualified biologist(s) shall monitor all initial earth-moving and vegetation altering construction activities to ensure that standard and special-status species-specific avoidance and minimization recommendations are adhered to. The monitor shall retain stop work authority in the event there is the likelihood of imminent take of special-status species. The biological monitor shall conduct a general pre-construction inspection no more than 14 days prior to the start of construction to verify that no special-status species are in the Project work area or its buffers. The monitor shall also conduct periodic surveys in and around work area to verify adherence to any applicable environmental compliance requirements. If the site is adequately fenced off following initial vegetation disturbance, the monitor will only be needed for periodic check-ins.
- BIO-3 The footprint of disturbance shall be minimized to the extent feasible. Access to the Project site shall be via pre-existing access routes, to the greatest extent possible, and the work area boundaries shall be delineated with staking, flagging, or other comparable markings to minimize surface disturbance associated with vehicle straying. Signs and/or fencing shall be placed around the Project area to restrict access the construction work areas and Project-related vehicles.
- BIO-4 Upon Project completion, any disturbance shall be, to the extent practicable in areas not occupied by permanent Project facilities, restored to pre-construction conditions. As required, the area of Project-related temporary disturbance shall be revegetated (reseeded) to pre-disturbance levels.
- BIO-5 Only certified weed-free straw and hay bales shall be used, as necessary, during construction and weed-free seed for post-construction revegetation.
- BIO-6 A qualified biologist(s) shall conduct pre-construction focused burrowing owl surveys within the Project footprint to determine presence/absence of the species. Surveys shall also record presence of any other species that might be considered to be of concern. If burrows are found, the appropriate CDFW-recommended buffer or a buffer deemed appropriate by a qualified biologist(s), shall be installed until occupancy status is determined. If the buffer cannot be maintained during the non-breeding season, owls may be evicted from the burrows using accepted methodology as approved by resource agencies; however evictions shall not occur during the nesting season. Occupied burrows shall not be disturbed during the owl nesting season and evictions shall not occur from, February 1 through August 31.

- BIO-7 If construction occurs between February 15 through August 15, the time period typically referenced in California for the general bird nesting season, pre-construction nesting surveys shall be conducted within the Project study area by a qualified biologist within one week of the start of construction. If no active bird nests are found within this area, no further mitigation is required. If an active nest is found a 250-foot no disturbance buffer shall be instated around the nest if it belongs to a non-listed or migratory bird. If the nest belongs to a listed or fully-protected species, a 500-foot no disturbance buffer shall be instated around the nest. Nest buffers may be negotiated and nest removal prior to nesting season may be implemented through discussions with CDFW or other agencies, as applicable.
- BIO-8 During construction, workers shall control areas where wildlife could hide or be trapped (e.g., open trenches, sheds, pits, uncovered basins, and laydown areas). Open trenches that could entrap smaller animals shall be provided with escape ramps and shall be backfilled as quickly as possible.
- BIO-9 Prior to the start of construction, a Worker Environmental Awareness Program (WEAP) shall be prepared. All field-related Project personnel, including managers, supervisors, and workers, shall be required to undergo a WEAP training prior to construction. The WEAP training shall address adopted mitigation measures. The WEAP include training related to wildlife and plant species that could be encountered during Project activities, what to do if these species are encountered, and what to do if injured or dead wildlife is encountered. WEAP training shall include potential to encounter cultural and paleontological resources and the procedures to manage and report such finds. If new personnel are brought onto the Project during the construction phase, they shall undergo the WEAP training prior to starting work at the site. A sign-in sheet shall be kept to document each worker's attendance at the WEAP training.
- BIO-10 Project-related equipment shall be cleaned (pressure wash or compressed air) prior to entering the Project area for the first time to reduce the chance of transporting noxious weed seeds from outside the area.
- BIO-11 To avoid attracting predators and nuisance species, the Project footprint shall be clear of debris, where possible. All food-related trash items shall be enclosed in sealed containers and regularly removed from the Project site.
- BIO-12 No pets or firearms shall be allowed on-site, and no harassment, injuring, or killing of wildlife shall be allowed.

### 3.5 Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The information in this section is based on the *Phase I Archaeological Resources Survey* report (POWER 2018), *Extended Phase I Archeological Resource Survey* (POWER 2019b), and *Addendum to the Extended Phase I Archaeological Resource Survey* (POWER 2019c).

#### 3.5.1 Affected Environment

POWER conducted a Phase I cultural resource survey on several parcels of land totaling 19.3 acres in support of construction of the proposed switching station on October 5 and 6, 2017 and prepared the *Phase I Archaeological Resource Survey* report (POWER 2018). No cultural resource discoveries were made inside the Project footprint. However, as a result of tribal responses to LADWP AB 52 inquiries, LADWP requested that POWER staff shovel test the proposed 19.3 Project footprint with a tribal monitor observing the field work. The results of the shovel test were negative and POWER revised the *Phase I Archaeological Resources Survey* report (POWER 2018) into an *Extended Phase I Archeological Resource Survey* (POWER 2019b). Subsequent to the 2017 cultural survey and 2018 shovel testing, the Project footprint was expanded to accommodate the proposed future FACTS and BESS facilities. POWER conducted an additional Phase I cultural resource survey on August 20, 21, and 22, 2019 on several parcels of land totaling 97.5 acres (refer to Figure 3-5). Residential uses are located south of the survey area and none of these private lands were surveyed or crossed during the survey.

POWER prepared the *Addendum to the Extended Phase I Archaeological Resource Survey* report (POWER 2019c) to address the expanded Project boundary to accommodate the future development of the FACTS and the BESS. The Extended Phase I report summarized the methods and results of the 2017 cultural resource investigation of the proposed Project area, included archaeological and historical background research, and included results of the shovel testing conducted in 2018. The Addendum documents the survey results of the 2019 cultural resource survey. Background historical research shows that a few historic-era cultural resources are known for the area and that a single prehistoric core was detected in 2010 beneath the SCE transmission line near the western border of the Project. No previously recorded cultural resource sites would be directly impacted by construction within the 120-acre Project boundary. Portions of the Project area have been surveyed as part of previous high voltage transmission line work. During POWER's survey of the BR-HC portion of the Barren Ridge Renewable Transmission Project, no cultural resource discoveries were made inside the Project footprint.

### 3.5.2 Impact Assessment

Would the project:

- a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

**Less Than Significant Impact With Mitigation.** As part of the *Phase I Archaeological Resource Survey* (POWER 2018), a literature and records search was conducted at the Southern San Joaquin Valley Information Center (SSJVIC) on October 12, 2017. Records consulted at the SSJVIC included the inventory of the National Register of Historic Places, the California Register of Historical Resources, California Historic Landmarks list, topographic maps showing the locations of sites and surveys, and historic topographic maps. Because of the limited potential impacts assumed by the Project, a one-half mile search radius was utilized.

This research effort indicated that a few historic resources are located within a one-half mile of the Project area (refer to Table 3-6). The last survey on the Project site was conducted in January 2014 along the LADWP easement in the northwestern portion of the Project site. Research shows that the rest of the Project site has not been surveyed previously.

**TABLE 3-6 KNOWN CULTURAL RESOURCES LOCATED WITHIN 0.5 MILE OF THE PROJECT**

P NUMBER	TRINOMIAL	PERIOD AND TYPE	DISTANCE/DIRECTION FROM PROJECT AREA
P15-018681	CA-KER-10204	Historic: LADWP transmission line	T-line conduit skirts NW part of the Project site. No effect
P15-012786	n/a	Prehistoric: isolated core	500 feet west of Project
P15-018733	n/a	Historic: isolate	1,160 feet northwest of Project

Source: POWER 2018.

#### **2017 Field Survey and Results**

A field survey was conducted on October 5 and 6, 2017. The survey area included the entire Project area, along with additional and immediately adjacent areas, due to the potential for relocating several existing transmission line towers required as part of the Project (refer to Figure 3-5). The archaeological fieldwork was undertaken to substantiate the presence or absence of intact archaeological deposits within the survey area. Fieldwork included a combination of activities: intensive visual inspection of the ground surface, plus a series of transects spaced 10 to 15 meters apart throughout the entire Project area. Direct soil observation was good with about 25 percent visible throughout the entire survey area.

The survey revealed two historic isolates: two Prince Albert tobacco cans (ISO-1) and an amethyst glass bottle body fragment (ISO-2). Other fragments of metal were observed, including two metal containers recorded by previous studies in the Barren Ridge Renewable Transmission Project footprint. These resources were not located inside the Project study area.

Roads surround the Project site and the area appears to have been in use since World War II. Two to three miles north, in the areas of Willow Springs and Bean Springs, several prehistoric archaeological sites have been discovered in areas bearing intact prehistoric topsoil. Due to the more recent historical activities in the area, the likelihood of uncovering buried prehistoric archaeological materials is low to moderate for this Project site.



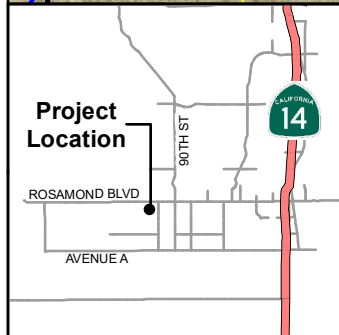
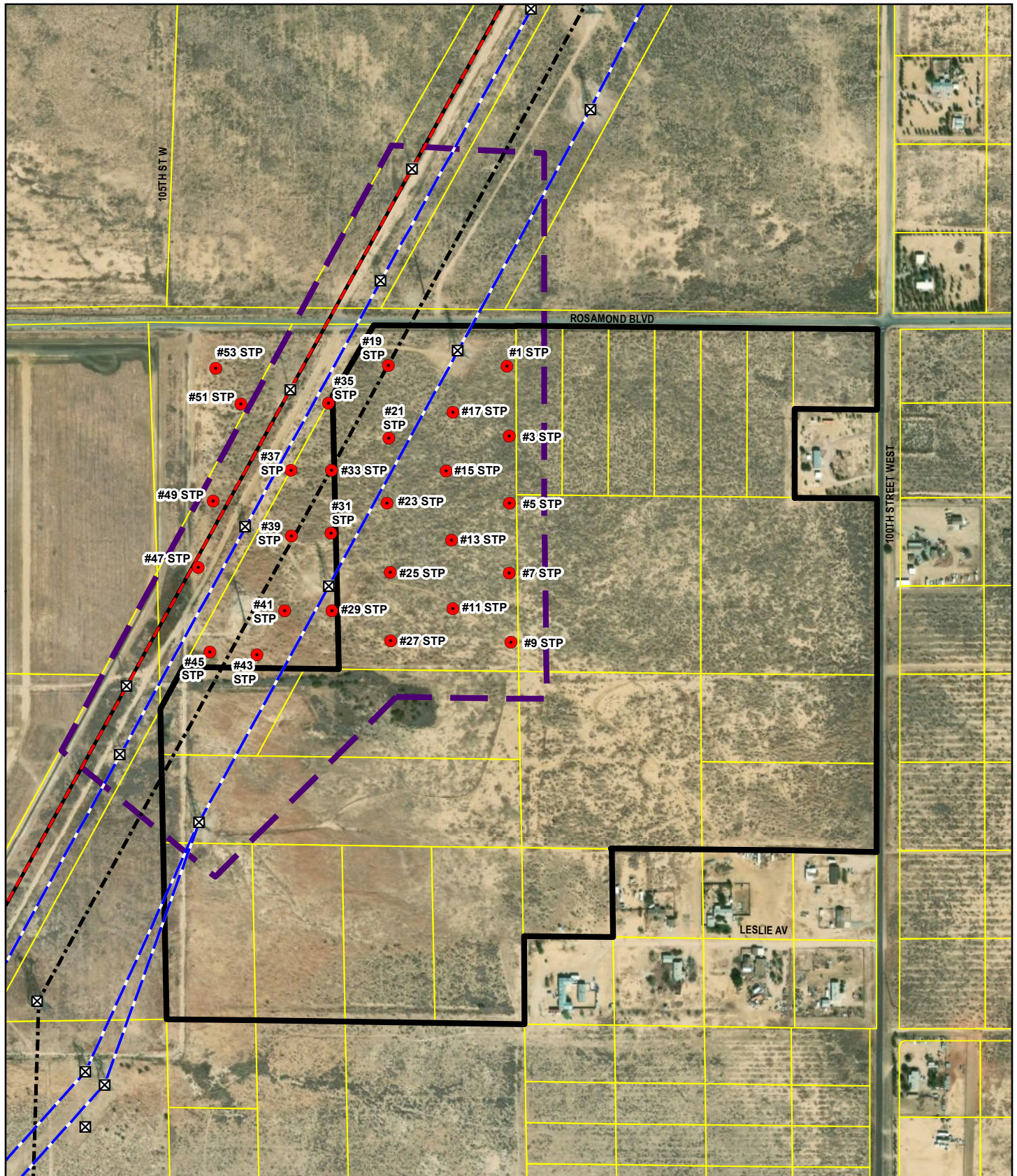
### ***Shovel Testing Methodology and Results***

Prior to undertaking the shovel testing on September 12 and 13, 2018, the entire Project area was inspected during an initial pedestrian survey, with transects spaced 50 meters apart in a north to south orientation. The property is currently utilized for existing LADWP 230 kV, LADWP 500 kV direct current, SCE transmission lines, associated ROW, tower pads, and patrol roads. The remaining portions not utilized by LADWP and SCE are fallow and unutilized. Ground cover and vegetation is sparse and allowed for ideal (100 percent) surface visibility of the soils.

As a result of AB 52 consultations, LADWP prepared a shovel testing plan (refer to Appendix D, Extended Phase I Testing Plan in the *Extended Phase I Archeological Resource Survey* (POWER 2019b)). The Extended Phase I Testing Plan identified 53 potential shovel test pit (STP) locations for the field crew to choose from based on field conditions. Ultimately, 27 were excavated within the planned testing period. The STP locations are illustrated on Figure 3-5.

A data log of soil stratigraphy for each STP excavated was recorded and STPs were backfilled (refer to Table 3-7). Of the 53 plotted STPs, 27 were excavated in a grid-like fashion. The fieldwork crew achieved an average depth of approximately 40 centimeters below the current ground surface.

The characteristic stratigraphic soil profiles for the STPs consisted of fine sandy-silt over hardpan, or fine sand over hard pan. The interfacing surfaces of the stratigraphic levels were clearly defined by soil density and generally did not exhibit any signs of disturbance. The exception to this was located in STP 33 and STP 35 where a thin deposit of very fine grey silt was present between soil horizons; this was interpreted as a disturbance horizon of uncertain origin. The disturbance observed in STPs 33 and 35 did not have any associated cultural material, and it is likely a bi-product of when the existing transmission lines were constructed. No cultural material was recovered during the STP excavations.



Project Boundary / 2019 Survey Boundary	LADWP 230 kV Transmission Line
2017 Survey Boundary	LADWP 500 kV DC Transmission Line
Shovel Test Pit Location	SCE Transmission Line
Structure	Parcel

**Rosamond Switching Station**  
**Figure 3-5**  
**Cultural Resources**  
**Survey Area**

0 200 400 600  
 Feet

N

POWER ENGINEERS

Aerial Photography Source:  
 USDA NAIP/California  
 2018-07-23



*THIS PAGE INTENTIONALLY LEFT BLANK*

**TABLE 3-7 SHOVEL TEST PIT RECORD**

STP#	LEVEL	DEPTH*	MUNSELL	COMPACTION	SOIL TYPE
1	I	0-34	10yr6/3	Moderate	Fine Sandy Silt
3	I	0-42	10yr6/3	Moderate	Fine Sandy Silt
	II	42-52	10yr6/3	High	Fine Sandy Silt
5	I	0-34	10yr6/3	Mod	Fine Sandy Silt
7	I	0-32	10yr6/3	Mod	Fine Sandy Silt
9	I	0-26	10yr6/3	Mod	Fine Sandy Silt
11	I	0-30	10yr6/3	Moderate	Fine Sandy Silt
13	I	0-4	10yr5/3	Low	Fine Sandy Silt
	II	4-10	10yr6/3	Moderate	Fine Sandy Silt
	III	10-32	10yr6/3	Moderate	Fine Sandy Silt
15	I	0-34	10yr6/3	Moderate	Fine Sandy Silt
17	I	0-27	10yr6/3	Moderate	Fine Sandy Silt
19	I	0-43	10yr6/3	Low	Sand
21	I	0-28	10yr6/3	High	Fine Sandy Silt
23	I	0-37	10yr6/3	Moderate	Fine Sandy Silt
25	I	0-38	10yr6/3	Moderate	Fine Sandy Silt
27	I	0-36	10yr6/3	Moderate	Fine Sandy Silt
29	I	0-24	10yr6/3	Low	Fine Sandy Silt
	II	24-43	10yr6/3	Moderate	Fine Sandy Silt
31	I	0-33	10yr6/3	Moderate	Fine Sandy Silt
33	I	0-34	10yr6/3	Moderate	Fine Sandy Silt
	II	34-41	2.5y7/1	Moderate	Silt
	III	41-46	10yr6/3	Moderate	Fine Sandy Silt
35	I	0-29	10yr6/3	Moderate	Fine Sandy Silt
	II	29-35	2.5y7/1	Moderate	Fine Silt
	III	35-50	10yr6/3	Moderate	Fine Sandy Silt
37	I	0-40	10yr6/3	Moderate	Sandy Silt
39	I	0-50	10yr6/3	Moderate	Sandy Silt
41	I	0-35	10yr6/3	Low	Sand
43	I	0-50	10yr6/3	Low	Sand
45	I	0-45	10yr6/3	Low	Sand
47	I	0-20	10yr6/3	Low	Sand
49	I	0-35	10yr6/3	Low	Sand
51	I	0-37	10yr6/3	Low	Sand
53	I	0-32	10yr6/3	Low	Sand

Note: \*centimeters  
Source: POWER 2019b.

### ***2019 Field Survey and Results***

The 2019 field survey was conducted by POWER on August 20, 21 and 22, 2019. The survey area included the expanded Project area of 97.5 acres (refer to Figure 3-5). POWER archaeologists surveyed the Project on foot, using a 15-meter spread for each transect. No artifacts were collected; however, cultural resources were plotted using a geographic information system (GIS) device, photographed and described.

The survey results showed that five historic-era isolates and two prehistoric-era isolates were identified in the area of direct potential impact. One small historic-era site was identified in the area of direct potential impact. The terrain is largely flat and a portion has been previously disturbed due to recent transmission line development within and adjacent to the LADWP and SCE easements and along Rosamond Boulevard.

The survey area is covered in high desert scrub with dry grasses, and ground exposure is about 25 percent. Residential uses are located south of the Project Site. None of these private parcels were crossed during the field survey.

The following are the historic-era and prehistoric-era isolates identified during the 2019 field survey:

- Isolate 1: an intact 50+ years old glass bottle.
- Isolate 2: a beverage can with church keyed opening and solder seal, probably 50+ years old.
- Isolate 3 consisted of two 50+ year soldered paint cans with church keyed openings.
- Isolate 4 is a beverage can with crimped seal and church keyed opening.
- Isolate 6 is a possible utilized core reduction flake.
- Isolate 7 is a secondary core reduction flake with flake removals suggestive of a "pre-form" projectile point and may have been a possible Elko or Fish Slough Side-notch that was dropped unfinished.
- Site SD-1 is a 50+ trash pit with historic glass bottles, cans, metal and glass shards. This pit is dug slightly into the ground surface and is approximately 120 centimeters in diameter. This is most likely an expedient household waste dump site that is quite common in rural desert environments. Because this site is common in rural desert environments; POWER archaeologists believe that site SD-1 is not eligible for the National or California Registers of Historic Places.

Based on the cultural resources analysis conducted in support of the Project, no identified archaeological resources would be directly impacted. Given that few cultural resources are known for this area, and the site has been previously graded and/or otherwise disturbed due to recent transmission line development within and adjacent to the LADWP and SCE easements and along Rosamond Boulevard, the potential for discovering cultural resources is considered low to moderate. Because it is possible that Project-related earthmoving construction activities could uncover intact and significant cultural resources, there is a potential for encountering buried cultural resources. Implementation of MMs CULT-1 through CULT-3 would reduce impacts to cultural resources to less than significant.

**b) Cause a substantial adverse change in the significance of an archaeological resource as defined in California Code of Regulations Section 15064.5?**

**Less Than Significant Impact With Mitigation.** Refer to Checklist Response 3.5.2 (a), above. With implementation of MMs CULT-1 through CULT-3, impacts to cultural resources would be less than significant.

**c) Disturb any human remains, including those interred outside of dedicated cemeteries?**

**Less Than Significant Impact With Mitigation.** The Project site does not exhibit a formal cemetery and is not adjacent to any known formal cemeteries. The Project site and vicinity have been surveyed for archaeological resources and no human remains interred outside formal cemeteries were detected during the survey. Given that the site has been previously graded and/or otherwise disturbed due to recent transmission line development within and adjacent to the LADWP and SCE easements and along Rosamond Boulevard, it is unlikely Project construction would disturb any buried human remains. However, if human remains are discovered during construction, State Health and Safety Code Section 7050.5 (b) states that further disturbances and activities must cease in the area of the suspected human remains, and the County Coroner contacted and permitted to examine the remains. If the Coroner determines that the remains are of Native American origin, the Coroner must then notify the NAHC of the existence of the find within 24 hours. Pursuant to PRC Section 5097.98, the NAHC would then notify the Most Likely Descendant (MLD) of the discovery. The MLD has 48 hours from being granted site access to complete their inspection and make recommendations or provide preferences for treatment. Disposition of remains shall be overseen by the MLD to determine the most appropriate means of treating the human remains and any associated grave artifacts.

Compliance with the above-mentioned California regulations and adherence to MMs CUL-1 through CUL-3 would ensure that the appropriate authorities are notified in the event Project-related construction activities unearth human remains.

### **3.5.3 Mitigation Measures**

CUL-1 In the event that pre-contact cultural resources are discovered during Project-related construction activities, all work in the immediate vicinity of the find (within a 60-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall be hired to assess the find. Work on the other portions of the Project outside of the buffered area may continue during this assessment period. Additionally, Tribes that have requested notification, including the San Manuel Band of Mission Indians Cultural Resources Department and the Tule River Tribe, shall be contacted, as detailed within mitigation measure TCR-1, if any such find occurs and be provided information after the archaeologist makes his/her initial assessment of the nature of the find, so as to provide Tribal input with regards to significance and treatment.

CUL-2 If significant Native American resources are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan, the drafts of which shall be provided to interested Tribes for review and comment, as detailed within mitigation measure TCR-1. The archaeologist shall monitor the remainder of the Project and implement the Plan accordingly.

CUL-3 If human remains or funerary objects are encountered during any activities associated with Project-related construction activity, work in the immediate vicinity (within a 100-foot buffer of the find) shall cease and the County Coroner shall be contacted pursuant to State Health and Safety Code §7050.5 that code enforced for the duration of the Project.

### 3.6 Energy

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the Project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.6.1 Affected Environment

The Project site is in unincorporated Kern County, approximately eight miles west of the unincorporated community of Rosamond. It is in the southwestern portion of Antelope Valley, in the northwestern portion of the Mojave Desert. Regional access includes SR-14, a four-lane highway, located approximately eight miles east of the Project site, SR-138, a two-lane roadway, located approximately 5.5 miles south of the Project site; and I-5 located approximately 30 miles west of the Project site. Local access to the site is via Rosamond Boulevard, which abuts the Project site on its northern boundary.

Edwards Air Force Base is located approximately 25 miles east of the site. The City of Bakersfield is located approximately 50 miles to the north. Los Angeles County communities of Lancaster and Palmdale are located approximately 15 and 20 miles, respectively, southeast of the Project site.

Land uses in the Project vicinity include undeveloped land, industrial uses (solar and wind generation), agriculture, and rural residential. Existing LADWP and SCE easements, along with associated transmission lines, traverse the site diagonally from northeast to southwest.

#### 3.6.2 Impact Assessment

**Would the Project:**

**a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

**Less Than Significant Impact.** An objective of the proposed Project is to allow LADWP greater control in managing existing renewable energy transfer along the existing high voltage transmission lines, while increasing overall grid reliability and operational flexibility. The Project would also accommodate the interconnection process for planned renewable energy projects in the Project vicinity and would support LADWP's RPS and GHG reduction goals. Operation of the Project would support renewable energy transfer of the existing and planned renewable projects in the Project area, and decrease the need for energy from fossil fuel-based power plants in the state, which is considered a beneficial impact to statewide air quality. The proposed Project would not create a new source of wasteful, inefficient, or unnecessary consumption of energy resources during operation.



During Project construction, there would be a temporary consumption of energy resources due to the movement and operation of equipment and materials; however, the duration is limited and the area of construction is minimal. Compliance with federal, state, and local regulations, including current emission standards and related fuel efficiencies would reduce short-term energy demand during Project construction to the extent feasible. These include limiting idling times, maintaining construction equipment, and recycling construction debris. Therefore, the Project would have a less than significant impact on the consumption of energy resources during construction activities.

**b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

**No Impact.** One of the objectives for the proposed Project is to assist LADWP in meeting its RPS goal. The proposed Project would connect wind and solar resources, providing electrical power transmission to the Los Angeles Basin. The proposed Project would facilitate the interconnection process for renewable developers and support LADWP's RPS goals, as well as increase overall grid reliability and operational flexibility. Implementation of the proposed Project would not conflict with or obstruct state or local plans, policies, or regulations adopted related to renewable energy or energy efficiency.

**3.6.3 Mitigation Measures**

No mitigation measures are proposed.

### 3.7 Geology and Soils

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### 3.7.1 Affected Environment

The Project site is located the Antelope Valley of the Mojave Desert Geomorphic Province, a broad interior region of isolated mountains separated by expanses of desert plains (California Geologic Survey [CGS] 2012a). There are two important fault trends that control topography in this region, a prominent northwest-southeast trend and a secondary east-west trend. The Mojave province is wedged in a sharp angle between the Garlock Fault (southern boundary Sierra Nevada Mountains) and the San Andreas Fault, where it bends east from its northwest trend. The northern boundary of the Mojave is separated from the prominent Basin and Range by the eastern extension of the Garlock Fault.

The Project site is located within the Willow Springs Specific Plan area, a seismically active region traversed by several active and potentially active fault zones. The area is subject to severe ground shaking resulting from movement along the Willow Springs-Rosamond, Garlock, San Andreas, or any other large fault in the region.

According to the DOC's Seismic Hazards Program, the Project site is not located within a designated Alquist-Priolo Earthquake Fault Zone (DOC 2019). No documented active faults traverse the Project site or immediate area; however, several faults are in proximity to the Project area and could potentially affect the Project site (Kern County 2004). The potential for damage resulting from seismic-related events exists within the Project area. Seismic hazards include ground shaking, ground failure, ground displacement, and liquefaction.

### **Soils**

Based on the CGS' Geologic Map of California, Little Buttes Sheet (CGS 2012b), the Project site and surrounding area are underlain by younger alluvial fan deposits. The soils are unconsolidated to weakly consolidated, dark yellowish-brown to light yellowish-brown, and fine to medium arkosic silty sand with fine subrounded to subangular gravel (Kleinfelder 2019).

## **3.7.2 Impact Assessment**

**Would the Project:**

**a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**

- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

**Less Than Significant Impact.** The Alquist-Priolo Earthquake Fault Zoning Act was passed in 1972 to mitigate the hazard of surface faulting to structures for human occupancy. The Project site is not located within an Alquist-Priolo Earthquake Fault Zone (DOC 2019). The nearest potentially active faults to the Project site are the Willow Springs-Rosamond fault located approximately one mile northeast of the Project site (DOC 2019). There are no known active faults underlying the Project site, nor are there any known active faults located adjacent to the Project site. Based on the absence of any documented active or potentially active faults that cross or come near the Project site, potential for surface ground rupture due to faulting at the site is considered low. Therefore, impacts related to fault rupture would be less than significant.

- ii. Strong seismic ground shaking?**

**Less Than Significant Impact.** As with most of southern California, the Project site is in a seismically active region within the influence of several fault systems that are considered active or potentially active. The largest active faults located in the Project area are the San Andres and Garlock faults. Numerous other faults are located within a 50 mile radius of the Project site (DOC 2019). The Project site, like much of southern California, would be subject to strong ground shaking in the event of a major earthquake. While Project facilities would include a control house with restroom facilities, Project personnel would only conduct periodic site visits, there is a very low probability that personnel would be at the facility during a major seismic event. Therefore, the potential for seismic ground shaking would not represent a significant new hazard to people.

Furthermore, the proposed Project would be designed and constructed to meet current requirements of the Kern County Building Code (Chapter 17.08) and would comply with seismic safety provisions of the most recent the California Building Code (CBC). The CBC contains provisions for earthquake safety based on factors of occupancy type, the types of soil and rock on-site, and the strength of ground shaking with specified probability occurring at a site. Because the CBC ensures that projects are designed and constructed based on site-specific parameters and current engineering practices, impacts related to ground shaking would be reduced. With adherence to regulatory requirements and standard engineering practices, potential impacts resulting from seismic ground shaking would be less than significant.

### **iii. Seismic-related ground failure, including liquefaction?**

**No Impact.** Liquefaction is a process by which sediments below the water table temporarily lose strength and behave as a liquid rather than a solid. Seismic ground shaking of relatively loose, granular soils that are saturated or submerged can cause the soils to liquefy and temporarily behave as a dense fluid. Liquefaction is caused by a sudden temporary increase in pore water pressure due to seismic densification or other displacement of submerged granular soils. Liquefaction most often occurs in areas underlain by young alluvium where the groundwater table is shallower than 50 feet below the ground surface (bgs).

Surficial geologic units throughout much of the Kern County General Plan planning area, especially in the desert area of eastern Kern County and the Central Valley area of western Kern County, are comprised of thick, unconsolidated, coarse-textured alluvial sediments composed of gravel, sand and silt of granitic composition. Due to the great depth to groundwater in the desert area, liquefaction does not present a major potential hazard within the eastern Kern County area (Kern County 2004).

Because groundwater in the vicinity of the Project site is greater than 100 feet bgs (Kleinfelder 2019), the potential for liquefaction at the site is considered low. While the potential for liquefaction within the Project area and at the site would be low, the Project would be constructed in accordance with pertinent standard engineering practices and design criteria relative to seismic hazards and would comply with applicable CBC earthquake construction standards, including those related to soil characteristics. With adherence to all applicable regulations including Kern County Building requirements no impacts relative to liquefaction are anticipated.

### **iv. Landslides?**

**No Impact.** The topography of the Project site and adjoining properties are relatively flat. Therefore, implementation of the proposed Project would not expose people or structures to substantial adverse impacts involving landslides. No significant impacts would occur and no mitigation is required.

### **b) Result in substantial soil erosion or the loss of topsoil?**

**Less Than Significant Impact With Mitigation.** The Project site consists of approximately 120 acres of previously disturbed land consisting of desert scrub typical of the surrounding area. The site is relatively flat with a gentle east-southeast slope. Land uses in the vicinity of the site include undeveloped land, industrial uses (solar and wind generation), agriculture, and rural residential.

During construction of the switching station, on-site access roads, and future FACTS and BESS would require ground-disturbing activities, including vegetation clearing, grading and soil compaction, and soil stabilization through use of water or soil binders. Grading and excavation required for foundation sites and installing electrical collection system could expose soil to wind and water erosion.

As discussed in Section 3.10, Hydrology and Water Quality, Checklist Response 3.10.2 (a), the Project would comply with National Pollutant Discharge Elimination System (NPDES) requirements for control of discharges of sediments and other pollutants during construction. A SWPPP would be prepared and

submitted to the State Water Resources Control Board (SWRCB) (refer to MM HYD-1). A SWPPP specifies BMPs to be implemented to manage erosion and the loss of topsoil during construction-related activities. Typical measures to prevent wind and water erosion may include, but are not limited to, application of water during earthwork activities, sand bags, straw wattles, and no work on high wind days. The SWPPP would also require preparation of an Erosion and Sediment Control Plan (refer to MM HYD-2). Mitigation measures provided Section 3.10, Hydrology and Water Quality, would reduce construction-related soil erosion impacts.

During construction-related activities, construction vehicles and equipment could contribute to soil erosion. Implementation of mitigation measure BIO-3 would minimize the disturbance footprint and limit grading to the minimum area necessary. Adherence to EKAPCD Rule 402 (Fugitive Dust), as detailed in Section 3.3, Air Quality, Checklist Response 3.3.2 (b), would prohibit any emissions of fugitive dust from construction, demolition, or other operations that remain visible in the atmosphere beyond the property line of the site of the source. Furthermore, the Project's grading plan would also ensure that the proposed earthwork is designed to avoid soil erosion. With adherence to the MMs HYD-1, HYD-2, BIO-3, and adherence to EKAPCD Rule 402, impacts relative to soil erosion would be reduced to a less than significant level.

**c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

**Less Than Significant Impact.** As discussed in Checklist Responses 3.7.2 (a) iii and iv above, the Project site is not located in an area subject to on- or off-site landslides or liquefaction. Because groundwater levels are greater than 100 feet bgs, the Project site is not susceptible to liquefaction or lateral spreading. Additionally, the site is not located in an area undergoing fluid withdrawal that could generate a potential subsidence effect.

However, alluvial soils in some arid and semi-arid environments have the tendency to possess characteristics that make them prone to collapse. To address the potential for unstable soils that may be prone to collapse; the Project would be designed and engineered in compliance with Kern County Building Code and would comply with seismic safety provisions of the most recent the CBC. The CBC contains provisions for earthquake safety based on factors of occupancy type, the types of soil and rock on-site, and the strength of ground shaking with specified probability occurring at a site. Because the CBC ensures that projects are designed and constructed based on site-specific parameters and current engineering practices, impacts related to collapsible soils would be reduced. The proposed Project would incorporate recommendations from the proposed Project's site specific geotechnical investigation. The Project would also comply with Kern County Building Code and CBC requirements to withstand the effects of settlement or collapsible soils. With adherence to all applicable building code regulations, the Project would avoid potential impacts to structures resulting from unstable soils, and potential impacts would be less than significant.

**d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

**Less Than Significant Impact.** Expansive soils are those soils with a significant amount of clay particles that have the ability to take on water (swell) or give up water (shrink). When these soils swell, the change in volume exerts significant pressures on loads that are placed on them. According to the Willow Springs Specific Plan, lateral and vertical extent of certain expansive soils are not accurately known (Kern County 1992). Geotechnical studies by a qualified civil engineering firm(s) shall be performed prior to final design and construction of the proposed Project.

To minimize expansive soil conditions, complete avoidance or engineering design for correction of adverse conditions are required prior to building permit issuance on an individual project basis. Special engineering designs are used effectively to alleviate problems caused by expansive soils. These designs include, but may not be limited to, the use of reinforcing steel in foundations, drainage control devices, over-excavation, and backfilling with non-expansive soils among others. Impacts relative to expansive soils can be alleviated through proper site investigations, soils testing, foundation design, and quality assurance during grading operations as required by the Kern County Building Code. Because construction of the Project would comply with applicable County Codes, CBC design requirements, and standard engineering practices, impacts related to expansive soils are anticipated to be less than significant.

**e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

**Less Than Significant Impact.** The Proposed Project includes on-site toilet facilities that would require either septic tanks or alternative wastewater systems. Shallow geologic units are comprised of thick, unconsolidated, coarse-textured alluvial sediments composed of gravel, sand and silt of granitic composition. Generally, these units are capable of supporting septic tanks or alternative wastewater disposal systems. In addition, groundwater in the vicinity of the Project site is greater than 100 feet bgs (Kleinfelder 2019), thus providing substantial separation between the septic system and groundwater resources. In addition, geotechnical studies by a qualified civil engineering firm(s) shall be performed prior to final design and construction of the Proposed Project to confirm that soils at the Project would adequately support the use of septic tanks.

The septic system would be designed to comply with requirements of the Kern County Health Services Department's Septic System Program which establishes standards for the approval, installation, and operation of on-site wastewater treatment systems within Kern County, consistent with plans, policies, and standards of the SWRCB and applicable regional water quality control boards (Kern County 2020). With proper siting, design, and construction of the proposed septic system in accordance with the County Health Services Septic System Program, impacts would be less than significant.

**f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Less Than Significant Impact With Mitigation.** Several recent projects in the general vicinity of the proposed Project site conducted surveys and literature reviews relative to the potential for encountering paleontological resources during construction activities. For the Willow Springs Solar Project, located approximately 0.5 mile south of the Project site, research indicated that the Project area is underlain by surficial deposits of younger and older Quaternary Alluvium. Younger Quaternary Alluvium is typically not paleontologically sensitive at shallow depths; however, younger Quaternary Alluvium in this area is paleontologically sensitive at greater depths. In addition, older Quaternary deposits, may contain significant vertebrate fossils. However, no vertebrate fossil localities have been recorded within or near the Project area (Kern County 2016).

There is the potential to encounter unique paleontological resources during grading and excavation activities for foundation sites and installation of the electrical collection system, particularly if excavation extends into older alluvium. Potential impacts to paleontological resources can be reduced to a less than significant level by implementing a program to educate construction workers on the nature of paleontological materials that may be encountered during construction, and by having a qualified paleontologist on-call to evaluate any suspected paleontological material discovered during construction. In accordance with MM BIO-9, a Project WEAP would be developed and presented to all workers on-site. The WEAP will include provisions should cultural and paleontological resources be encountered during construction activities. With implementation of MM BIO-9 impacts related to paleontological resources would be reduced to less than significant.

### **3.7.3 Mitigation Measures**

Refer to MM BIO-9 in Section 3.4.3 (Biological Resources) and MMs HYD-1, HYD-2 in Section 3.10 (Hydrology and Water Quality).



### 3.8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Information in this section is based on the *Rosamond Switching Station Project – Air Quality and Greenhouse Gas Emissions Impacts Assessment* prepared by TAHA (2019a).

#### 3.8.1 Affected Environment and Regulatory Framework

The GHG assessment was undertaken to determine whether construction or operation of the Project would have the potential to result in significant environmental impacts related to GHG emissions in the context of Appendix G Environmental Checklist criteria of the CEQA Statutes and Guidelines. Implementation of the proposed Project may result in a significant environmental impact related to GHG Emissions if the proposed Project would:

- a) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

Section 15064.4 of the CEQA Guidelines states that a lead agency should make a good-faith effort to describe, calculate, or estimate the amount of GHG emissions resulting from a project, and that the lead agency should consider the following factors when assessing the significance of impacts from GHG emissions on the environment:

1. The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting;
2. Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
3. The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The proposed Project is located in rural unincorporated Eastern Kern County and is generally surrounded by sparsely distributed residential plots, agricultural land, and solar generating facilities. There are no substantial stationary sources of GHG emissions in the immediate Project vicinity. In 2018, the Kern Council of Governments published and adopted its 2018 Regional Transportation Plan (RTP) to establish a set of regional transportation goals, policies, and actions intended to guide development of the planned

multimodal transportation systems in Kern County. California's Sustainable Communities and Climate Protection Act, or SB 375, calls for the Kern County RTP to include a Sustainable Communities Strategy that reduces GHG emissions from passenger vehicles and light-duty trucks. In addition, the RTP must comply with CEQA, and the 2018 RTP was determined to meet this requirement.

In 2012, the EKAPCD published guidance for evaluating GHG emissions within its jurisdiction under CEQA Guidelines when serving as the lead agency. The guidance states that any project that is not exempt from CEQA would require quantification of Project-Specific GHG Emissions to determine annual emissions. The EKAPCD guidance also states that projects emitting less than 25,000 tons per year of GHGs would be determined to have a less than significant individual or cumulatively considerable impact on GHG emissions and would not require further CEQA review. EKAPCD reasoned that 25,000 tons per year is less than the threshold the CARB uses for industrial source applicability as the first phase of the AB 32 Cap-and-Trade Program and slightly more stringent than the Cap-and-Trade Program. Due to the relatively small magnitude of the regional GHG emission inventory in Eastern Kern County, only large-scale industrial projects that may be subject to federal regulation and EKAPCD Rule 201.3 Federally Enforceable Limits on Potential to Emit could have potentially significant impacts related to GHG emissions under CEQA Guidelines under EKAPCD jurisdiction.

### ***Greenhouse Gas Emissions***

GHG emissions refer to a class of pollutant emissions that are generally understood to affect global climate conditions due to their long atmospheric lifetimes and ability to trap infrared heat energy in the atmosphere that is radiating from the Earth's surface, known as the greenhouse effect. The most prevalent anthropogenic GHG compounds are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF<sub>6</sub>). The presence of these gases and other GHG compounds in the atmosphere maintains global surface temperatures at generally habitable levels. Of all the GHG compounds, CO<sub>2</sub> is the most abundant gas that contributes to climate change, especially through fossil fuel combustion. The other GHG compounds are less abundant but have a higher potential to affect climate change on a per-mass basis. To account for the higher global warming potential, GHG emissions are commonly expressed in the equivalent mass of CO<sub>2</sub>, denoted as carbon dioxide equivalent (CO<sub>2</sub>e).

Anthropogenic emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O have resulted in atmospheric concentrations in excess of natural ambient levels that are responsible for intensifying the greenhouse effect. In acknowledgement of the environmental consequences of the amplified greenhouse effect, regulations have been adopted at international, federal, state, regional, and local levels to control GHG emissions. GHG emissions associated with implementation of the Project are evaluated in the context of applicable regulations aimed at reducing GHG emissions.

The proposed Project is not located within a metropolitan planning organization's jurisdiction for which an RTP has been prepared. The GHG emissions impacts assessment considers GHG emissions associated with implementation of the proposed Project with respect to statewide and EKAPCD policies.

### 3.8.2 Impact Assessment

#### Would the Project:

##### a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

**Less Than Significant Impact.** The atmospheric effects of GHG emissions are borne globally and cumulative in nature, and the direct effect of an individual project's GHG emissions on the environment cannot be delineated precisely. Regulations adopted to control and reduce GHG emissions generally take a holistic approach and consider a variety of sources and strategies to achieve their objectives. Due to the long atmospheric lifetimes of GHG emissions, the assessment of environmental impacts characterizes GHG emissions associated with implementation of the proposed Project in terms of annual emissions of tons of CO<sub>2</sub>e. GHG emissions that would be generated by construction and operation of the proposed Project are analyzed together.

Construction would generate GHG emissions through the use of heavy-duty equipment and vehicle trips for workers and material hauling to and from the Project site. Annual GHG emissions were estimated using emission factors and calculations contained within CalEEMod, Version 2016.3.2, which is the preferred regulatory model for quantifying GHG and air pollutant emissions associated with land use development projects. The emissions modeling exercise incorporated conservative assumptions that 20 construction workers would report to the site every day and that all required equipment would be used continuously for eight hours per day. Construction of the proposed Project is expected to last for a total of approximately 38 months beginning in early 2020, with completion expected by the end of 2023.

SF<sub>6</sub> is a gas that is used as insulation in electric power transmission and distribution equipment such as circuit breakers. LADWP would routinely inspect and monitor all equipment to ensure equipment is operating properly. This would include inspecting the circuit breakers for leaks. LADWP would also maintain records when circuit breakers are refilled, noting the volumes used, thus allowing them to detect leaks and replace breakers with defective seals. PFCs and HFCs are refrigerants that may be used in the air conditioning systems at the Project site. Through the monitoring and inspection process, potential SF<sub>6</sub>, PFC, and HFC emissions would be monitored and controlled, resulting in a less than significant impact relative to SF<sub>6</sub>, PFC, and HFC emissions during Project operations.

Following the completion of construction activities, the proposed Project would be a passive land use that would not generate regular or substantial daily emissions. Maintenance activities would be minimal and intermittent and would include limited vehicle trips for inspection and repair of Project components. Operations would not introduce any new substantial source of GHG emissions to the Project area. Therefore, the emissions modeling exercise did not quantify any GHG emissions associated with operations.

Table 3-8 illustrates the results of the GHG emissions analysis for heavy duty construction equipment and vehicle trips during construction activities, expressed in tons of CO<sub>2</sub>e. The GHG emissions associated with construction of the Project would cease entirely upon completion of construction activities. There would be negligible long-term operational sources of GHG emissions. The emissions modeling results presented in Table 3-8 demonstrate that maximum annual emissions associated with construction of the Project would be approximately 4,382.6 tons CO<sub>2</sub>e. Based on the above analyses, impacts related to GHG emissions would be less than significant and no mitigation is required.

**TABLE 3-8 ESTIMATED GHG EMISSIONS – PROJECT CONSTRUCTION**

ACTIVITY AND YEAR	ANNUAL EMISSIONS (tons CO <sub>2</sub> e)
Site Preparation (2020) – Equipment	878.2
Site Preparation (2020) – Mobile Sources	298.6
Site Construction (2020) – Equipment	568.0
Site Construction (2020) – Mobile Sources	240.7
<b>Total 2020 Emissions</b>	<b>1,985.5</b>
Site Construction (2021) – Equipment	2,367.6
Site Construction (2021) – Mobile Sources	972.7
<b>Total 2021 Emissions</b>	<b>3,340.3</b>
Site Preparation (2022) – Equipment	439.3
Site Preparation (2022) – Mobile Sources	140.2
Site Construction (2022) – Equipment	2,368.7
Site Construction (2022) – Mobile Sources	940.3
Site Finalization (2022) – Equipment	357.0
Site Finalization (2022) – Mobile Sources	137.2
<b>Total 2022 Emissions</b>	<b>4,382.6</b>
Site Construction (2023) – Equipment	1,801.1
Site Construction (2023) – Mobile Sources	573.1
Site Finalization (2023) – Equipment	297.6
Site Finalization (2023) – Mobile Sources	114.3
<b>Total 2023 Emissions</b>	<b>2,786.1</b>
<b>Maximum Annual Emissions</b>	<b>4,382.6</b>
EKAPCD Annual Threshold	25,000
<b>Exceed Threshold?</b>	<b>No</b>
Note: Emissions modeling files can be found in the Appendix.	

Source: TAHA 2019a.

**b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

**Less Than Significant Impact.** Plans, policies, and regulations adopted to reduce GHG emissions generally focus on long-term sources of GHG emissions that provide opportunities for life-cycle improvements in efficiency and sustainability. Implementation of the proposed Project would not introduce a new permanent source of GHG emissions into the Project area, and GHG emissions resulting from construction activities would cease entirely following completion of the switching station. As discussed previously, construction of the Project would not generate GHG emissions of sufficient quantities to approach exceeding EKAPCD annual threshold and represent only 17.5 percent of the significance threshold value. Therefore, impacts related to GHG plans, policies, and regulations would be less than significant and no mitigation is required.

### 3.8.3 Mitigation Measures

No mitigation measures are proposed.

### 3.9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Information in this section is based on the *Phase I Environmental Site Assessment* prepared by Odic Environmental (2018) and the *Phase I Environmental Site Assessments* prepared by Kleinfelder (2019). Phase I Environmental Site Assessments (ESA) were conducted for parcels which make up the approximate 120-acre Project site and are shown in Table 3-9. The Phase I ESAs are bound under separate cover.

**TABLE 3-9 KERN COUNTY ASSESSOR PARCEL NUMBERS**

359-051-11	359-051-13	359-051-14	359-051-17
359-051-18	359-051-19	359-051-20	359-051-21
359-015-22	359-051-24	359-051-25	359-051-26
359-051-27	359-051-28	359-051-29	359-051-31
359-051-37	359-051-43	359-051-47	359-051-49

### 3.9.1 Affected Environment

The Phase I ESAs were performed in conformance with ASTM International Designation E 1527- 13, Standard Practice for Environmental Site Assessments. The purpose of the Phase I ESA's was to identify Recognized Environmental Conditions (RECs), Controlled Recognized Environmental Concern (CREC) or Historical Recognized Environmental Condition (HREC) related the sites, to the extent feasible.

- RECs are defined in ASTM Standard Practice as “the presence or likely presence of any hazardous substance or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.”
- A CREC is defined in ASTM Standard Practice as “...a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).”
- ASTM Standard defines HRECs as “...a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to environmental controls.”

#### **Standard Environmental Records Search**

Federal, state, and local regulatory agencies publish databases or “lists” of businesses and properties that handle hazardous materials or hazardous waste, or are the known location of a release of hazardous substances to soil and/or groundwater. These databases are available for review and/or purchase at the regulatory agencies, or the information may be obtained through a commercial database service. Environmental Data Resources, Inc. (EDR), a commercial database service, performed the government database searches of the most current database sources maintained by state and federal regulatory agencies for listings within the ASTM Standard's minimum search distance from the Project site boundary for each searched database. The *EDR Radius Map™ Report with GeoCheck®* is provided as Appendix B for each Phase I ESA conducted for the Project.

As a result of the review of pertinent federal, state, and local regulatory databases or “lists” conducted in conjunction with preparation of the Phase I ESAs for each parcels within the Project boundary (refer to Table 3-9), no RECs, CRECs, or HRECs were identified on- or off-site.

### 3.9.2 Impact Assessment

**Would the Project:**

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

**Less Than Significant Impact With Mitigation.** Project-related construction activities would be short-term and may include the transport, storage, and short-term use of petroleum-based fuels, lubricants, and other similar materials, and disposal of hazardous materials associated with construction. Materials used in the construction of the Project would be stored, handled, and disposed of in accordance with federal, state, and local rules and regulations.

Additionally, a Spill Prevention, Control, and Countermeasure (SPCC) Plan for Project construction and for facility operation would be prepared (refer to mitigation measure HAZ-1). The SPCC Plan for Project construction would address fuels, lubricants, and hydraulic fluids expected to be used in construction equipment. Such equipment would be properly maintained to minimize leaks, and to prevent spills, vehicle service and repair would be performed off-site at an appropriate facility. The SPCC Plan for facility operation would address the oil that may be contained in Project facilities. The SPCC Plan for facility operation would be updated on a regular basis as new equipment is commissioned and turned over from construction to operations.

BESS batteries may contain materials that may be considered hazardous. Batteries and other materials for the BESS facilities would be manufactured off-site and transported to the site by truck. As stated in Section 2.0, Project Description, there are several options for the types of batteries used in BESS system.

One option is using lithium ion batteries. Transportation of lithium ion batteries is subject to 49 Code of Federal Regulations 173.185 (Pipeline and Hazardous Materials Safety Administration 2019). The BESS facility would be subject to Kern County Building Ordinance and the Kern County Uniform Fire Code, governing the storage of hazardous materials, liquids, and chemicals, including a provision related to the storage of hazardous materials. After the BESS becomes operational, the Project would be subject to annual inspection by the Kern County Fire Department. Project operation would also be required to comply with the most recent California Code of Regulations, Title 24, (California Fire Code) and the National Fire Protection Association rules and regulations governing the operation of stationary storage battery systems. Adherence to federal, state, and local requirements and regulations, personnel training, safe interim storage, and segregation from other potential waste streams would minimize any public hazard related to transport, use, and/or disposal of batteries.

All transport, handling, use, and disposal of substances, such as petroleum products, paints, and solvents, and batteries related to the construction and operation and maintenance of the proposed Project, would comply with all federal, state, and local laws regulating management and use of hazardous materials. With implementation of the SPCC (MM HAZ-1) and compliance with pertinent rules and regulations, use of such material would not create a significant hazard to the public and impacts would be reduced to a less than significant level.

**b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

**Less Than Significant Impact With Mitigation.** As discussed above, construction of the proposed Project would involve the use of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids. However, all hazardous materials would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations.

The level of risk associated with the accidental release of hazardous substances is not considered significant due to the small volume and low concentration of hazardous materials utilized during construction. However, as stated in the Checklist Response 3.9.2 (a), a SPCC Plan for construction and for facility operation would be prepared for the Project. The SPCC Plan for Project construction would address fuels, lubricants, and hydraulic fluids expected to be used for construction equipment. The SPCC Plan for facility operation would address the oil that would be contained Project facilities. With the implementation of the SPCC Plan (refer to HAZ-1), the Project would not create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the release of hazardous materials; therefore, impacts would be less than significant.



**c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

**No Impact.** There are no schools located within a one-quarter mile radius of the Project site and therefore no impact in this regard would occur.

**d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

**No Impact.** As mentioned above, a database search was conducted to evaluate the potential for the Project site or properties near or adjacent to the Project site to create adverse environmental impacts. The database search for the proposed Project concluded that the Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. The Phase I ESAs revealed no evidence of RECs, CRECs, HRECs, or de minimis conditions in connection with the Project site or surrounding properties. As such, no impact would occur and no mitigation would be required.

**e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?**

**No Impact.** The Project site is not located within an airport land use plan nor is it located within two miles of a public airport or private airstrip; the closest airfield is the Lloyd's Landing Airport. This airfield is privately owned and located approximately three miles north of the Project site. Therefore, the proposed Project would not result in a safety hazard or excessive noise for people residing or working at the Project site. No impact would occur.

**f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Less Than Significant Impact.** Primary site access during construction and operation would be from Rosamond Boulevard. A secondary access road would also be constructed off 100<sup>th</sup> Street West. Neither roadway is officially designated as an evacuation route.

All construction and staging would occur within the Project boundaries and no road closures are anticipated during Project construction. Traffic control measures, such as flag persons, may be required at specific times to facilitate construction vehicle ingress to and egress from Rosamond Boulevard or 100<sup>th</sup> Street West onto the Project site. Interior access roads within the Project would be designed to provide sufficient access for fire trucks and emergency responders.

A Traffic Control Plan (refer to MM TRA-1 in Checklist Response 3.17.3, Transportation) would be prepared, which would include measures to avoid disruptions or access delays for emergency service vehicles. Appropriate police department, fire department, ambulance, and paramedic services would be notified in advance of Project construction. The Plan would also include contact information for those agencies, assign responsibility for notifying the service providers, and specify coordination procedures. Copies of the Plan would be provided to all affected police departments, fire departments, and ambulance and paramedic services.

Once completed, the proposed Project would operate primarily as an unmanned facility and generate a negligible amount of traffic and potential traffic disruptions. The proposed Project would not impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan during construction or operation; therefore, impacts would be less than significant.

**g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

**Less Than Significant Impact With Mitigation.** The Project site and immediate area are not located in “Hazardous Fire Area” as designated by the Kern County General Plan, Safety Element (Kern County 2009). Additionally, the Project site and immediate area are not designated as a “Fire Hazard Severity Zone” by the California Department of Forestry and Fire Protection (CAL FIRE 2007) nor is the site located in a “fire threat area” as designated by California Public Utilities Commission (CPUC) fire hazard maps (CPUC 2019). While remote, there is a possibility of, electrical sparks, combustion of fuel oil, hydraulic fluid, mineral oil, flammable liquids, explosions, and over-heated equipment may cause small fires at the site; however, the majority of the equipment would be of nonflammable material (aluminum and steel). During construction, standard fire prevention and suppression measures would be implemented for the proposed Project including locating portable fire extinguishers of appropriate sizes and types throughout the Project site.

Operation of the proposed Project would introduce Project components (e.g., lithium ion batteries) that could potentially increase the risk of fire. In order to reduce the risk of fire during operation of Project facilities including those associated with lithium ion batteries, an Emergency Action Plan would be prepared which would address proper planning, risk assessment, storage methods, and response protocols (refer to MM HAZ-2). Personnel training would be required to help address the unique issues this type of battery technology presents, such as battery fire behavior, emergency response procedures, and fire extinguisher use (lithium-ion battery focus). This Emergency Action Plan would be developed to effectively address all emergencies that may be reasonably expected to occur at the Project site (BESS focus). The Plan may include, but not limited to, a designated emergency coordinator who would be responsible for notification of emergency personnel, safely evacuating Project employees and the proper use of fire extinguishers (if applicable).

Project operation would be required to comply with the most recent California Code of Regulations, Title 24, (California Fire Code) and the National Fire Protection Association rules and regulations governing the operation of stationary storage battery systems. The Project would also be required to comply with all existing regulations and requirements of the Kern County General Plan Safety Element and the Kern County Fire Code (Chapter 17.32). With implementation of MM HAZ-2 and adherence to federal, state, and local requirements and regulations, impacts relative to significant risk of loss, injury, or death involving wildland fires would be less than significant.

### **3.9.3 Mitigation Measures**

HAZ-1 Prior to construction of the Project, a SPCC Plan shall be prepared and certified by a professional engineer; a complete copy shall be maintained on-site. The SPCC Plan would include engineered and operational methods for preventing, containing, and controlling potential releases and provisions for a quick and safe cleanup during all phases of construction activities and operation of the Project. The SPCC Plan for facility operation would be updated on a regular basis as new equipment is commissioned and turned over from construction to operations.

HAZ-2 An Emergency Action Plan shall be prepared in coordination with the Kern County Fire Department and Kern County Building Department and shall address proper planning, risk assessment, storage methods, response protocols, and employee training. The Emergency Action Plan shall indicate and describe in detail the backup fire suppression equipment that will be available to County Fire Department responders in the event of a BESS fire. A map or plan identifying the locations of nearby existing fire hydrants shall be included. Any specialized fire response manuals or technical guidelines applicable to the Project shall be included in the Emergency Action Plan. The Emergency Action Plan shall effectively address all emergencies that may be reasonably expected to occur at the Project site focusing on the BESS components. The plan shall include protocol for notifying adjacent land uses in the event of a fire.

### 3.10 Hydrology and Water Quality

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the Project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off- site;	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Impede or redirect flood flows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.10.1 Affected Environment

##### Hydrology and Drainage

The Project site is located within the hydrologically-enclosed Antelope Valley Groundwater Basin of the South Lahontan Hydrologic Region. The Antelope Valley watershed area is bound by the Tehachapi Mountains on the northwest, the San Gabriel and Sierra Pelano Mountains on the south, and low-lying buttes in San Bernardino County to the east. All stormwater runoff generated in the Antelope Valley that does not percolate into the ground eventually ponds and evaporates in the Rosamond, Rogers, and Buckhorn dry lake beds (Kern County 1992). Rosamond Lake is located approximately 11 miles west of the Project site.

The SWRCB and nine RWQCBs oversee the protection of water quality in California. The SWRCB sets statewide policy for the implementation of state and federal laws and regulations. The RWQCBs adopt and implement Water Quality Control Plans (Basin Plans) which recognize regional differences in natural water quality, actual and potential beneficial uses, and water quality problems associated with human activities. The Project site is within the jurisdiction of the Lahontan RWQCB-Region 6 (SWRCB 2019).

The Project site consists of approximately 120 acres of previously disturbed land consisting of desert scrub typical of the surrounding area. Topographic relief is relatively flat with a gentle east-southeast slope. Surface flow exists primarily as sheet flow over the generally uniform terrain at the site. Based on site surveys, little evidence of significant drainage through the site exists and there are no designated blue line or intermittent drainages shown crossing the Project site.

### **Groundwater**

The Site is located within the Antelope Valley Groundwater Basin of the South Lahontan Hydrologic Region. The Antelope Valley Groundwater Basin underlies an extensive alluvial valley in the western Mojave Desert. The basin is bound on the east by ridges, buttes, and low hills that form a surface and groundwater drainage divide. On the north, the Antelope Valley Groundwater Basin is separated from the Fremont Valley Groundwater Basin by a southeastward-trending groundwater divide, represented by a line from the mouth of Oak Creek through Middle Butte to exposed bedrock near Gem Hill, and the Rand Mountains farther east (Kleinfelder 2019).

The primary water-bearing materials are Pleistocene and Holocene age unconsolidated alluvial and lacustrine deposits, consisting of compact gravels, sand, silt, and clay. Coarse alluvial deposits form the two main aquifers of the basin; a lower aquifer and an upper aquifer. The upper aquifer is the primary source of groundwater for the valley and is generally unconfined. The lower aquifer is generally confined (Kleinfelder 2019).

Based on groundwater level measurements collected from federal and state wells, groundwater is anticipated to be greater than 100 feet bgs. Specific groundwater flow direction has not been identified at the Project site; however, groundwater in the Project area is anticipated to flow toward the east-southeast following regional surface topography (Kleinfelder 2019).

### **Floodplains**

As indicated on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (map number 06029C4000E, effective 09/26/2008), the Project site is located within Zone A. As defined by FEMA Zone A is a Special Flood Hazard Area subject to inundation by one percent annual chance flood event or also known as a 100-year flood event (refer to Figure 3-6).

## **3.10.2 Environmental Assessment**

**Would the Project:**

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?**

**Less Than Significant Impact With Mitigation.** The proposed Project could result in short-term construction impacts without proper controls. Soils loosened during grading, as well as spills of fluids or fuels from vehicles and equipment, if mobilized or transported off-site in overland flow, have the potential to degrade water quality.

The Project site is relatively flat, with low potential for surface runoff. Construction of the switching station, access roads, and future FACTS and BESS would require ground-disturbing activities, including vegetation clearing, grading and compacting soils, and soil stabilization through water use or soil binders. Grading and excavation activities, for foundation sites and installing the electrical collection system, could affect drainage on the Project site. Because construction activities would exceed the one-acre threshold of ground disturbance, adherence to the NPDES General Construction Permit is required. LADWP would develop a SWPPP (refer to MM HYD-1). The SWPPP would include (BMPs, including measures to prevent soil erosion (i.e., soil stabilization, silt fencing, straw bale and temporary catch basins). These BMPs would be implemented during construction, and therefore, would minimize soil erosion and loss of topsoil to the extent feasible. With implementation of the SWPPP and MM HYD-1, the proposed Project would not result in substantial soil erosion during construction at the site or in the surrounding area.

As stated in Section 2.5, the switching station would be unmanned with automated features and remote control capabilities. No full-time, permanent personnel would be required at the Project site. It is anticipated that LADWP would conduct routine inspections on a weekly basis and perform maintenance on a monthly basis. For periodic and nominal vehicle and other motorized equipment use during operations and maintenance, an accidental release of diesel fuel, gasoline, lubricant oils, hydraulic fluid, antifreeze, transmission fluid, or lubricant grease could occur. In contrast with construction activities, which would include more intensive use of heavy equipment, operation and maintenance of the proposed Project would have substantially less potential to result in an accidental spill or release of hazardous materials that could result in water quality degradation.

The Project site is currently entirely pervious. New Project features would add approximately 26 acres of impervious areas that could possibly increase the rate of stormwater runoff, with potential for increased erosion and long-term siltation, and contribution to additional sources of polluted runoff. Except for the foundations for the switching station and future project facilities (FACTS and BESS), most of the area would remain as permeable surface. The amount of new impervious surface as a result of the proposed Project would be negligible and would not result in a substantial increase in runoff leading to negative impact to surface water quality.

**b) Substantially deplete decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

**Less Than Significant Impact.** Following construction, the amount of impervious surface would increase within the Project area as a result of the proposed Project. However, the addition of paved surfaces associated with the Project would not substantially decrease groundwater recharge in the area. The amount of new impervious area would be limited relative to the existing pervious area of the Project site and surrounding area. The proposed Project may involve limited groundwater extraction, providing non-potable water supply for the switching station facilities. This limited use would not substantially decrease groundwater supplies and limited impervious area would not substantially interfere with groundwater recharge such that the Project may impede sustainable groundwater management of the basin. Potential impacts would be less than significant and no mitigation is required.

**c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or through the addition of impervious surfaces, in a manner which would:**

**i.) Result in substantial erosion or siltation on- or off-site;**

**Less Than Significant Impact With Mitigation.** No streams or rivers exist on the Project site; therefore, no Project-related impact to such features would occur. The Project site is relatively level; nevertheless, some areas of the site where facilities are proposed would require grading for leveling.

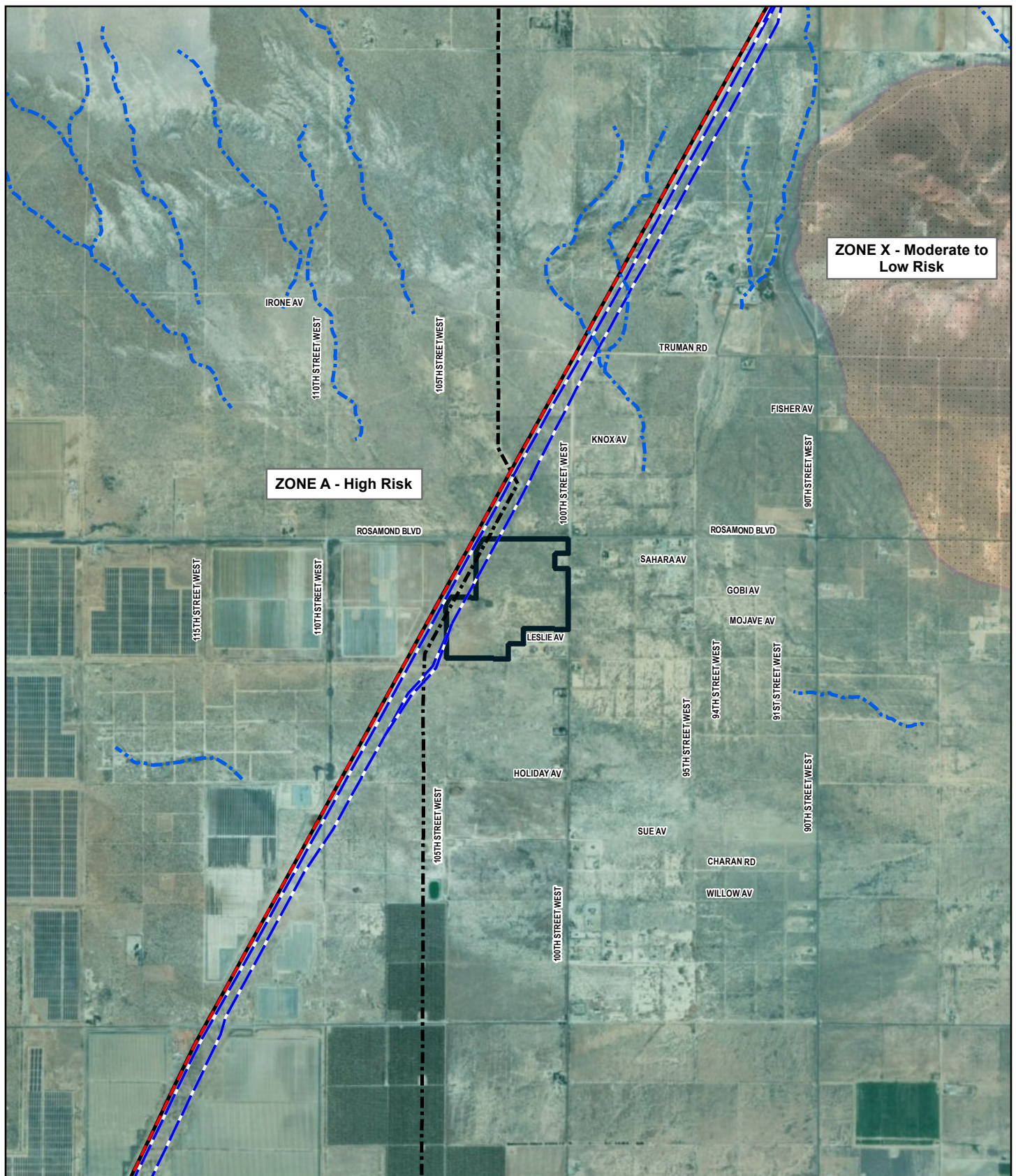
While relatively minor landform modification and topography alteration is anticipated, site grading could interfere with existing drainage patterns on-site. During rainfall events, there would be the potential for surface erosion or siltation on- or off-site. As stated in Checklist Response 3.10.2 (a) a SWPPP would be prepared; the SWPPP would include BMPs that would minimize impacts from stormwater runoff and disturbance to existing drainage patterns. The SWPPP would identify areas with potential construction related erosion, and would specify the design of BMPs to minimize potential erosion and sedimentation impacts. In addition to preparing a SWPPP, a Drainage, Erosion, and Sedimentation Control Plan (refer to HYD-2), would be prepared to minimize runoff. The Drainage Plan would include post-construction structural and nonstructural BMPs, including, but may not be limited to, soil cover and stabilization, filtration, and energy dissipaters. Implementation of MMs HYD-1 and HYD-2 would reduce impacts on drainage patterns that could result in substantial erosion and siltation on-site or off-site to less than significant.

**ii) Substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;**

**Less Than Significant Impact With Mitigation.** As shown in Figure 3-6, the Project site is located in a FEMA Special Flood Hazard Area “Zone A”, otherwise known as a 100-year flood area. Construction of the proposed Project would require grading, which could alter local site drainage patterns. The introduction of impervious surfaces related to the switching station, as well as future FACTs and BESS, could increase runoff at the Project site, potentially resulting in on- or off-site flooding. However, because the site is relatively flat with a gentle slope, run-off is anticipated to spread out and have relatively shallow depths and slow velocities. In addition, as shown on Figure 2-4 Preliminary Site Plan, Project facilities would be widely separated across the approximate 120-acre Project site, and therefore, they would not substantially impede or redirect flood flows.





According to the Willow Springs Specific Plan, new development within the 100-year floodplain shall be regulated in accordance with Kern County Public Works Floodplain Management and is subject to the requirements of the Floodplain Management Ordinance, Chapter 17.48 of the County Code. Project design would account for anticipated site flooding hazards and include engineering features to minimize potential impacts to facilities, and avoid or minimize potential off-site impacts. In addition, the Drainage, Erosion, and Sedimentation Control Plan would address Project site stormwater drainage and runoff, both on- and off-site (refer to MM HYD-2). The Project would comply with the most recent requirements of the Kern County Building Codes and the Flood Damage Prevention Ordinance, Chapter 17.48. With adherence to existing regulations related to Floodplain Management and MM HYD-2 impacts related flooding on- or off-site would be less than significant.








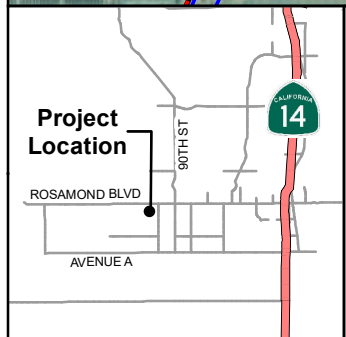
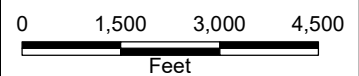
**ZONE X - Moderate to Low Risk**

**ZONE A - High Risk**

-  Project Boundary
-  LADWP 230 kV Transmission Line
-  LADWP 500 kV DC Transmission Line
-  SCE Transmission Line

-  Ephemeral Stream
- FEMA Flood Zones**
-  A - High Risk (Area with a 1% annual chance of flooding)
-  X - Moderate to Low Risk (Area of minimal flood hazard)

Rosamond Switching Station  
**Figure 3-6  
Flood Zone Map**





*THIS PAGE INTENTIONALLY LEFT BLANK*

**iii) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;**

**Less Than Significant Impact With Mitigation.** As discussed above, during construction of the proposed Project, LADWP would develop a SWPPP (refer to MM HYD-1), which would include specific design features to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby drainages. The Drainage, Erosion, and Sedimentation Control Plan (refer to MM HYD-2) would address Project site stormwater drainage and runoff. These measures would control stormwater flows, erosion, and protect water quality during runoff events. During operation approximately 26 acres of site would be impervious areas; therefore, a substantial portion of Project site would remain as pervious surfaces, allowing infiltration of precipitation and runoff. With implementation of MM HYD-2, the proposed Project would not create or contribute runoff that would exceed the capacity of drainage systems or create substantial additional sources of polluted runoff; therefore, the impact would be less than significant.

**iv) Impede or redirect flood flows?**

**Less Than Significant Impact With Mitigation.** Refer to Checklist Response 3.10.2 (c) (i and ii) above for a discussion.

**d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

**Less Than Significant Impact With Mitigation.** No major surface water bodies are located within the Project area; therefore, the Project site would not be subject to inundation from seiches or tsunamis. Furthermore, the Project site is in a relatively flat area and not subject to mudflow. As stated in Checklist Response 3.10 (c) (ii), the Project area is located in a 100-year flood hazard zone. Project design would account for anticipated site flooding hazards and include engineering features to minimize potential impacts to facilities, and avoid or minimize potential off-site impacts. In addition, the Project would comply with the most recent requirements of the Kern County Building Codes and the Flood Damage Prevention Ordinance, Chapter 17.48. The Drainage, Erosion, and Sedimentation Control Plan (refer to HYD-2) would address Project site stormwater drainage and runoff. These measures would control stormwater flows, erosion and protect water quality during runoff events. With adherence to existing regulations related to Floodplain Management and MM HYD-2 impacts related flooding on- or off-site would be less than significant.

**e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

**No Impact.** As discussed above, the Project is located within the Antelope Valley Basin and under jurisdiction of the Lahontan RWQCB-Region 6.

The proposed Project could result in short-term construction impacts to surface water quality from clearing, grading, and other construction-related activities. Stormwater runoff from the Project site during construction could contain sediment resulting from these activities. Spills or leaks from heavy equipment and machinery, construction staging areas, or building sites could also enter runoff and would typically include petroleum products such as fuel, oil and grease, and heavy metals. Because construction activities would exceed the one-acre threshold of ground disturbance, adherence to the NPDES General Construction Permit, LADWP would be required to develop a SWPPP, which would include measures to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby drainages. The Drainage, Erosion, and Sedimentation Control Plan (refer to HYD-2) would address Project site stormwater drainage and runoff. Substantial portions of the Project site would remain permeable, and therefore, not affect regional groundwater management. Therefore, the Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.

### 3.10.3 Mitigation Measures

HYD-1 Prior to construction, a SWPPP would be developed. The SWPPP shall describe the BMPs that would be implemented to control erosion, sediment, tracking, construction materials, construction wastes, and non-stormwater flows. This would be accomplished by, but not limited to, minimizing the acreage of disturbed and exposed soil during the construction phase and implementing soil stabilization measures where necessary. Methods may include straw wattles, straw bale barriers, or silt fencing, which would be placed at construction boundaries. Gravel ramps may be installed at access points to public roadways to prevent or minimize the tracking of mud, dirt, sediment, or similar materials onto the roadway. Selection of appropriate erosion control materials will be based on soil properties and anticipated surface flow or runoff.

Diesel fuel, gasoline, oil, and other lubricants, as well as adhesives and sealants, would be utilized during the construction. Bulk quantities may be stored in the designated construction yard/staging area. Vehicle fueling and maintenance activities would be restricted to staging areas. All construction vehicles would be monitored for leaks and receive regular off-site preventive maintenance to reduce the chance of leakage.

HYD-2 Prior to construction, a Drainage, Erosion, and Sedimentation Control Plan shall be prepared. The Drainage Plan would be designed to minimize runoff and shall include engineering recommendations to minimize the potential for impeding or redirecting 100-year flood flows. The final design of the Project facilities shall be graded as required by Kern County Floodplain Damage Prevention Ordinance.

### 3.11 Land Use and Planning

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.11.1 Affected Environment

The Project site is in unincorporated Kern County, approximately eight miles west of the unincorporated community of Rosamond. It is in the southwestern portion of Antelope Valley, in the northwestern portion of the Mojave Desert. Regional access includes SR-14, a four-lane highway, located approximately eight miles east of the Project site, SR-138, a two-lane roadway, located approximately 5.5 miles south of the Project site; and I-5 located approximately 30 miles west of the Project site. Local access to the site is via Rosamond Boulevard, which abuts the Project site on its northern boundary.

Edwards Air Force Base is located approximately 25 miles east of the site. The City of Bakersfield is located approximately 50 miles to the north. Los Angeles County communities of Lancaster and Palmdale are located approximately 15 and 20 miles, respectively, southeast of the Project site.

Land uses in the Project vicinity include undeveloped land, industrial uses (solar and wind generation), agriculture, and rural residential. Existing LADWP and SCE easements, along with associated transmission lines, traverse the site diagonally from northeast to southwest. The Project site consists of approximately 120 acres of previously disturbed land consisting of desert scrub typical of the surrounding area. Land uses in the vicinity of the site include undeveloped land, industrial/renewable energy generation (i.e., wind and solar), agriculture, and rural residential.

The Project site and surrounding areas are located in Kern County Willow Springs Specific Plan boundary. As shown on Figure 2-3, the zoning designation for the Project site is RS (2.5-Acres Residential Suburban Combining). Zoning designations within the immediate Project area include: RS (1-Acres Residential Suburban Combining), RS (2.5-Acres Residential Suburban Combining), RS (5-Acres Residential Suburban Combining), and A (Exclusive Agriculture).

The Project site is not located within two miles of a public airport; the closest airfield is the Lloyd's Landing Airport. This airfield is privately owned and located approximately three miles north of the Project site. The Project site is located outside of the geographical boundaries of military restricted airspace known as the R-2508 Joint Land Use Study Complex (R-2508 Complex) in the Airport Land Use Compatibility Plan (Kern County 2012).

### 3.11.2 Impact Assessment

#### Would the Project:

##### a) Physically divide an established community?

**No Impact.** The proposed Project involves constructing a new switching station and associated facilities, as well as future construction of the FACTS and BESS. The site is currently undeveloped land with transmission lines traversing the Project boundary diagonally from southwest to northeast. Additional high-voltage transmission lines are located directly west of the Project. Rosamond Boulevard abuts the Project to the north, and undeveloped lands are located east and south of the Project location.

The nearest residential uses are located adjacent to the northeast and southeast quadrants of the Project site. Scattered rural single-family residences are also located farther northeast, east, and southeast the Project site.

Access to the adjacent land uses is via Rosamond Avenue and 100<sup>th</sup> Street West. The proposed Project would not alter access to adjacent properties. The area consists of scattered rural residential parcels, and the Project would not physically divide an established community. Therefore, no impact would occur and no mitigation is required.

##### b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**Less Than Significant Impact.** According to the Kern County General Plan, Zoning Map, and Willow Springs Specific Plan, the Project would be built primarily on undeveloped lands designated as residential. The Project site is RS (2.5-Acres Residential Suburban Combining). Project components proposed by the Project are not a specified use within the RS zone. However, existing transmission facilities currently traverse the Project site and in accordance with California Government Code 53090, utilities are exempt from county building and zoning ordinances and county general plans.

As part of LADWP's duties as the lead agency under CEQA, LADWP has conducted an impact determination regarding the Project. CEQA establishes a clear duty of the lead agency to minimize environmental impacts as practical while also balancing competing public objectives in the review and potential approval of the proposed Project (Section 15021). In accordance with CEQA's public review and disclosure guidelines, Kern County, along with other agencies, organizations, and individuals, are provided with the opportunity to review and comment on the adequacy of the analysis conducted in relation to the potential environmental impacts of the Project and on the conclusions pertaining to the environmental impacts.

The proposed Project would not conflict with any land use plan, policy or regulation. Based on analysis contained in this Initial Study/MND, the proposed Project would not create a significant adverse effect either directly or indirectly to the physical environment. As such, impacts would be less than significant.

### 3.11.3 Mitigation Measures

No mitigation measures are proposed.

### 3.12 Mineral Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.12.1 Affected Environment

The State Mining and Reclamation Act of 1975 identifies and protects California's mineral resources. The State Mining and Reclamation Act mandated the CGS to implement a classification-designation process. Based on an assessment of local and regional mineral deposits, CGS assigns different Mineral Resource Zones (MRZs). These include:

- MRZ 1: Areas where adequate information indicates that no significant mineral deposits are present or likely to be present.
- MRZ 2: Areas where significant mineral deposits are present or likely to be present.
- MRZ 3: Areas with known mineral deposits that may qualify as mineral resources.
- MRZ 4: Areas of unknown or undetermined mineral resource potential

#### 3.12.2 Impact Assessment

**Would the Project:**

**a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

**No Impact.** Kern County contains numerous mining operations that extract a variety of materials, including sand and gravel, stone, gold, dimensional stone, limestone, clay, shale, gypsum, pumice, decorative rock, silica, and specialty sand. Based on readily available public data, mineral potential has not been officially assessed by CGS." There are no known mineral resources on the Project site (CGS 2015). The Project would not have a significant impact on future mineral development. Therefore, no impacts to mineral resources are anticipated and no mitigation is required.

**b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

**No Impact.** There are no mineral resource recovery sites identified on or adjacent to the Project site. The proposed Project would not result in the loss of availability of a locally-important mineral resource recovery site. No impact would occur and no mitigation is required.

### **3.12.3 Mitigation Measures**

No mitigation measures are proposed.



### 3.13 Noise

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Information in this section is based on the *Rosamond Switching Station Project – Noise and Vibration Impacts Assessment* prepared by TAHA (2019b).

#### 3.13.1 Affected Environment and Regulatory Framework

The standard unit of measurement for noise is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. Addressing this human hearing limitation, the A-weighted dB scale, abbreviated dBA, reflects the normal hearing sensitivity range of the human ear. On this scale, the range of human hearing extends from approximately 3 to 140 dBA.

The noise analysis discusses sound levels in terms of Equivalent Noise Level ( $L_{eq}$ ).  $L_{eq}$  is the average noise level, on an energy basis, for any specific time period. The  $L_{eq}$  for one hour is the energy average noise level during the hour. The average noise level is based on the energy content (acoustic energy) of the sound.  $L_{eq}$  can be thought of as the level of a continuous noise which has the same energy content as the fluctuating noise level. The equivalent noise level is expressed in units of dBA.

Noise levels decrease as the distance from the noise source to the receiver increases. Noise generated by a stationary noise source, or “point source,” decreases by approximately 6.0 dBA over hard surfaces (e.g., reflective surfaces such as parking lots or smooth bodies of water) and 7.5 dBA over soft surfaces (e.g., absorptive surfaces such as soft dirt, grass, or scattered bushes and trees) for each doubling of the distance. For example, if a noise source produces a noise level of 89 dBA at a reference distance of 50 feet, then the noise level is 83 dBA at a distance of 100 feet from the noise source, 77 dBA at a distance of 200 feet.

Noise generated by a mobile source decreases by approximately 3.0 dBA over hard surfaces and 4.8 dBA over soft surfaces for each doubling of the distance. Generally, noise is most audible when the source is in a direct line-of-sight of the receiver. Barriers, such as walls, berms, or buildings, that break the line-of-sight between the source and the receiver, greatly reduce noise levels as sound can only reach the receiver

by bending over the top of the barrier. However, if a barrier is not sufficiently high or long to break the line-of-sight from the source to the receiver, its effectiveness is greatly reduced.

Studies have shown that the smallest perceptible change in sound level for a person with normal hearing sensitivity is approximately 3.0 dBA. A change of at least 5.0 dBA would be noticeable and may evoke a community reaction. A 10 dBA increase is subjectively heard as a doubling in loudness and would likely cause a negative community reaction.

The Project site is located in a rural environment with few substantial sources of noise. It is anticipated that audible noise includes occasional traffic and aircraft flyovers. As shown in Figure 3-7, the nearest land uses are residences located adjacent to the northeast and southeast portion of the Project site. Scattered rural single-family residences are also located approximately 200 to 1,400 feet to the east of the Project site. In 2017, a noise and vibration assessment, in a similar rural environment, was completed for the LADWP Fairmont Treatment Plant Project. The Fairmont Treatment Plant is located approximately 12 miles southwest of the Project site. Those measurements indicate that rural noise levels typically range from 47.7 to 55.1 dBA  $L_{eq}$ . It is anticipated that ambient noise levels would be similar at the Project site due to the similar rural environment.

The Kern County Code (Code) establishes noise standards related to construction at the Project site. Section 8.36(h) of the Code establishes prohibitions for construction noise. The Code states that construction activity may occur Mondays through Fridays from 6:00 a.m. to 9:00 p.m. and 8:00 a.m. to 9:00 p.m. on weekends. Construction occurring outside of those hours which would be audible to a person at 150 feet from the construction site at a residence within 1,000 feet of a construction site would be prohibited.

### **3.13.2 Impact Assessment**

#### **Would the Project:**

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?**

#### **Less Than Significant Impact.**

##### ***Construction***

Noise impacts from construction of the proposed Project would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. Construction activities typically require using numerous pieces of noise-generating equipment. Typical noise levels from various types of equipment that would be used during construction are listed in Table 3-10. Noise levels from individual pieces of equipment typically are between 67.7 and 82.2 dBA  $L_{eq}$  at 50 feet. To more accurately characterize construction-period noise levels, the noise levels shown in Table 3-11 take into account the likelihood that multiple pieces of construction equipment would be operating simultaneously and the typical overall noise levels that would be expected for each phase of construction. When considered as an entire process with multiple pieces of equipment, site preparation would generate the loudest noise level of approximately 89 dBA  $L_{eq}$  at 50 feet.

**TABLE 3-10 NOISE LEVEL RANGES OF TYPICAL CONSTRUCTION EQUIPMENT**

CONSTRUCTION EQUIPMENT	NOISE LEVEL AT 50 FEET (dBA)
All Other Equipment > 5 HP	82.0
Auger Drill Rig	77.4
Backhoe	73.6
Compactor (ground)	76.2
Compressor (air)	73.7
Concrete Mixer Truck	74.8
Concrete Pump Truck	74.4
Crane	72.6
Dozer	77.7
Drum Mixer	77.0
Dump Truck	72.5
Excavator	76.7
Flat Bed Truck	70.3
Front End Loader	75.1
Generator	77.6
Gradall	79.4
Grader	81.0
Man Lift	67.7
Pickup Truck	71.0
Pneumatic Tools	82.2
Pumps	77.9
Scraper	79.6
Welder / Torch	70.0

Source: TAHA 2019b.

**TABLE 3-11 TYPICAL OUTDOOR CONSTRUCTION NOISE LEVELS**

CONSTRUCTION METHOD	NOISE LEVEL AT 50 FEET (dBA, L <sub>eq</sub> )
Ground Clearing	84
Site Preparation	89
Foundations	78
Structural	85
Finishing	89

Source: TAHA 2019b.

The Project area includes scattered rural residences within 1,000 feet of the active construction zone. Table 3-12 shows the anticipated maximum noise levels at these residences. It is anticipated that noise levels would range from 52.8 dBA Leq to 81.5 dBA Leq at nearby residences (refer to Figure 3-7). Construction noise would be audible at the nearest residences, particularly those to the south of the Project site, although equipment would primarily operate in the center of the Project site. Noise levels below represent a conservative level of analysis. Construction activity may occur Mondays through Fridays from 6:00 a.m. to 9:00 p.m. and 8:00 a.m. to 9:00 p.m. on weekends. Project construction would occur within these hours and would not require nighttime or early morning construction. Kern County has not established a quantitative noise threshold to determine noise impacts at sensitive receptors, but instead imposes time restrictions for construction.

The proposed Project would be consistent with Kern County standards and would not significantly increase noise levels at nearby residences. Therefore, the proposed Project would result in a less than significant impact related to on-site construction noise. No mitigation measures would be required.

**TABLE 3-12 TYPICAL CONSTRUCTION LEVELS AT RECEPTORS**

KEY TO FIGURE 3-	SENSITIVE RECEPTOR	DISTANCE (FEET) /A/	MAXIMUM NOISE LEVEL (DBA)
1	Residence on 100 <sup>th</sup> St. north of Rosamond Blvd.	1,000	56.5
2	Residence on 100 <sup>th</sup> St. north of Rosamond Blvd.	300	69.5
3	Residence on 100 <sup>th</sup> St. south of Rosamond Blvd.	100	81.5
4	Residence on Rosamond Blvd. east of 100 <sup>th</sup> St.	920	57.4
5	Residence on 100 <sup>th</sup> St. south of Rosamond Blvd.	200	73.9
6	Residences on Leslie Ave.	150	77.1
7	Residences on Leslie Ave.	500	64.0
8	Residence on 100 <sup>th</sup> St. south of Leslie Ave.	1,200	54.5
9	Residence on 100 <sup>th</sup> St. south Leslie Ave.	1,400	52.8

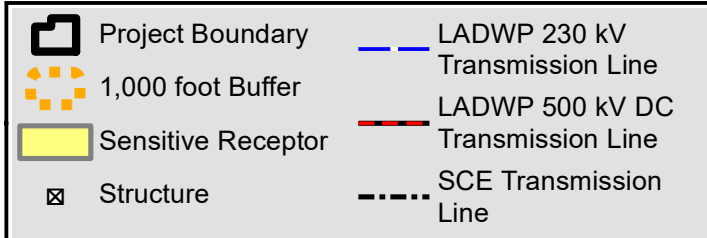
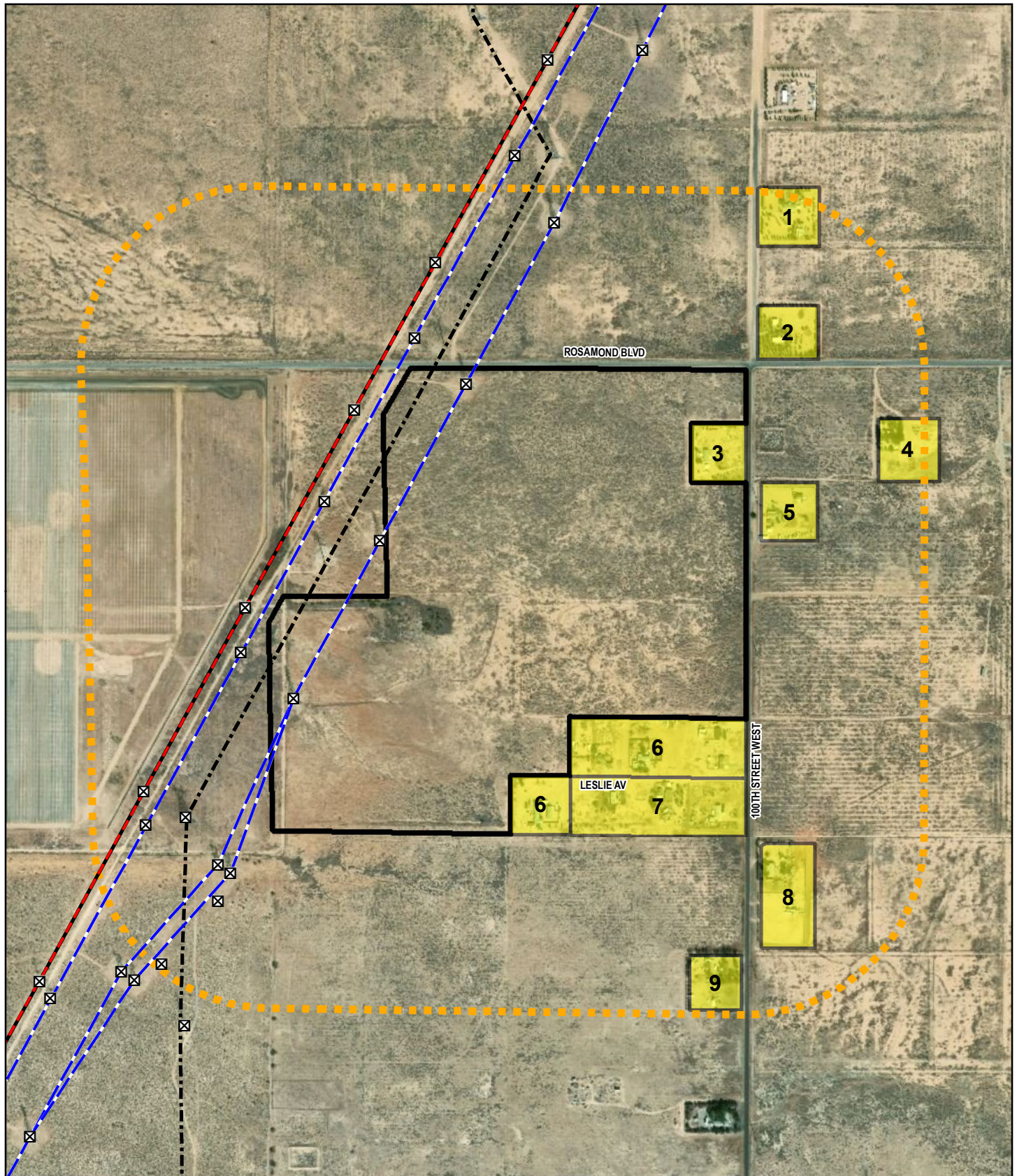
/a/ Measured from the Project site to the nearest structure.

Source: TAHA 2019b.

### **Operations**

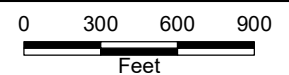
Operational sources of noise would include mechanical equipment and periodic maintenance activities. On-site operational noise would be limited to low humming sounds from equipment, which would not be audible past the Project site boundary. Noise generated at the Project site would not be audible at the nearest residence, which is approximately 100 feet away. Therefore, the proposed Project would result in a less than significant impact related to operational noise and no mitigation would be required.





Rosamond Switching Station

## Figure 3-7 Sensitive Receptors



Aerial Photography Source:  
USDA NAIP/California  
2018-07-23

*THIS PAGE INTENTIONALLY LEFT BLANK*

**b) Generation of excessive groundborne vibration or groundborne noise levels?**

**Less Than Significant Impact.**

**Construction**

Construction activity can generate varying degrees of vibration, depending on the procedure and equipment. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). Construction-related vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, and to slight damage at the highest levels. In most cases, the primary concern regarding construction vibration relates to damage.

The Federal Transit Administration provides vibration levels for various types of construction equipment, with an average source level reported in terms of velocity.<sup>5</sup> Construction activity would utilize equipment that is best characterized in Table 3-13 by large bulldozers. A large bulldozer produces a vibration level of 0.089 inch per second at 25 feet. Vibration is a localized event typically perceptible within 25 feet or less from construction equipment. The nearest receptor is located approximately 100 feet away and vibration generated at the Project site would not be perceptible at this land use. The vibration level would be less than 0.01 inch per second. Therefore, the proposed Project would result in a less than significant impact related to on-site construction vibration. No mitigation measures would be required

**TABLE 3-13 VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT**

EQUIPMENT	VIBRATION LEVEL AT 25 FEET (INCHES/SECOND)
Large Bulldozer	0.089
Loaded Trucks	0.076
Small Bulldozer	0.003

Source: TAHA 2019b.

**Operations**

Operation of the proposed Project would not include significant sources of vibration. Mechanical equipment and associated maintenance activities would not generate perceptible vibration beyond the Project site. Therefore, the proposed Project would result in a less than significant impact related to operational vibration. No mitigation measures would be required.

**c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?**

**No Impact.** The Project site is not located within an airport land use plan nor is it located within two miles of a public airport or private airstrip; the closest airfield is Lloyd's Landing Airport. This airfield is privately owned and located approximately three miles north of the Project site. No impact related to airport or airstrip noise would occur and no mitigation would be required.

**3.13.3 Mitigation Measures**

No mitigation measures are proposed.

<sup>5</sup>Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, May 2006.



### 3.14 Population and Housing

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.14.1 Affected Environment

According to the United States Census Bureau, 2010 Census data, Kern County's population was estimated to be 839,631, and the number of housing units in the County was estimated at 293,548 with an average household size of 3.1. The community of Rosamond's population was estimated at 18,150, and the number of housing units in Rosamond was estimated at 6,968 with an average household size of 2.93 (United States Census Bureau 2019).

Land uses in the vicinity of the site include undeveloped land, industrial uses (solar and wind generation), agriculture, and rural residential. The Project area is sparsely populated with scattered rural single-family residences. As shown in Figure 3-7, the nearest residences are located adjacent to the northeast and southeast portion of the Project site. Scattered rural single-family residences are also located farther to the east of the Project site.

#### 3.14.2 Impact Assessment

**Would the project:**

**a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

**No Impact.** The Project would not include the construction of new homes or businesses, nor would it extend roads into previously undeveloped areas or areas that are limited in potential for growth due to lack of infrastructure. Operation of the proposed Project would require maintenance activities that would be intermittent and would not require permanent staff on-site.

During construction, an average construction workforce of 56 workers per day is anticipated, with the peak number of workers estimated at 70 workers. It is anticipated that the majority of construction jobs for the proposed Project would be filled by workers from Kern County as well as Los Angeles County communities, such as Lancaster. Some specialty trade contractor's would likely come from the Los Angeles region.

Because construction would be temporary, it is not expected that workers from outside the Project vicinity would permanently relocate to the communities in the Project vicinity in order to work at the site; therefore, the proposed Project is not expected to contribute to population growth in the local area. Some workers may engage in “weekly commuting,” in which they find temporary or transient housing closer to the job site during the workweek. It is expected that such workers would seek temporary housing in the local area, where rental housing as well as hotel or motel rooms would be available. According to the U.S. Census Bureau between 2013-2017 Kern County and the communities within the vicinity of the Project site had the following rental vacancy rates (United States Census Bureau 2019):

- Kern County - 5.3 percent
- Rosamond - 4.6 percent
- Lancaster - 7.3 percent
- Mojave - 7.4
- Tehachapi - 10.1 percent

The housing needs of the Project construction force would be spread throughout the surrounding communities and could use hotels, motels, mobile home sites, and campground RV spaces. A smaller percentage may use utilize vacant housing and apartment units. Therefore, there would be a sufficient supply of temporary housing options to accommodate workers who may seek temporary housing near the jobsite. The proposed Project would not induce substantial unplanned population growth, either directly or indirectly, no impact would occur as a result of the proposed Project and no mitigation is required.

**b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

**No Impact.** The proposed Project would be located on undeveloped land and would not displace housing. As stated above, the amount of vacant housing units and the amount of temporary housing accommodations in the Project area would accommodate the construction workforce during peak construction. The proposed Project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. Therefore, no impact would occur and no mitigation is required.

### **3.14.3 Mitigation Measures**

No mitigation measures are proposed.

### 3.15 Public Services

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.15.1 Affected Environment

##### Fire

The Kern County Fire Department (KCFD) provides fire suppression and prevention, along with emergency medical services, to unincorporated areas of Kern County, as well as the cities of Arvin, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Taft, Tehachapi and Wasco. KCFD has over 546 uniformed firefighters stationed in 46 fire stations throughout Kern County. KCFD also participates in 14 Mutual Aid Agreements with neighboring fire suppression organizations to further strengthen emergency services response capabilities (KCFD 2019a). The closest fire station to the Project is Station #15 Rosamond Station located at 3219 35<sup>th</sup> West Street in Rosamond.

##### Police/Sheriff

Kern County Sheriff's Department (Sheriff's Department) provides law enforcement for unincorporated Kern County. The Sheriff's Department is comprised of five major bureaus: Office of the Undersheriff, Support Services Bureau, Detentions Bureau, Law Enforcement Bureau, and Investigations Bureau; each bureau is be divided in divisions that manage identified assignments. The Law Enforcement Bureau is comprised of Metro Patrol, Communications and Substations.

The closest substation to the Project site is the Rosamond Substation, located at 1379 35<sup>th</sup> Street West, Rosamond. The Rosamond Substation serves approximately 20,000 residents. Response times to the service area range from three to 10 minutes for non-emergency response, and approximately three to six minutes for emergency response (Sheriff Department 2019).

In addition, the California Highway Patrol provides law enforcement through patrol of State and County highways throughout Kern County. The California Highway Patrol's Central Division, Bakersfield Area (9855 Compagnoni Street, Bakersfield) serves Bakersfield and Kern County and is available to report to

major accidents anywhere in the unincorporated areas and has mutual aid agreements with other agencies to assist in emergencies. The Bakersfield area's jurisdiction encompasses two major freeways (SR-99 and SR-58).

### 3.15.2 Impact Assessment

#### Would the Project:

- a) **Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:**

#### **Less Than Significant Impact With Mitigation.**

##### *Fire protection?*

The Project site and immediate area are not located in "Hazardous Fire Area" as designated by the Kern County General Plan, Safety Element (Kern County 2009). Additionally, the Project site and immediate area are designated as a "High Fire Severity Zone" by CAL FIRE (CAL FIRE 2007) nor is the site located in a "fire threat area" as designated by CPUC fire hazard maps (CPUC 2019). As stated in Checklist Response 3.9.2 (g) there is a remote possibility of small fires at the site due to electrical sparks, combustion of fuel oil, hydraulic fluid, mineral oil, flammable liquids, explosions, and over-heated equipment. The majority of the equipment would be of nonflammable material (aluminum and steel). During construction, standard fire prevention and suppression measures would be implemented for the proposed Project.

No permanent residential structures would be constructed as part of the proposed Project. The proposed Project would not induce substantial population growth on the site or in the surrounding area. The unmanned switching station, and future FACTS and BESS facilities would be fenced as well as managed, monitored, and controlled 24 hours per day by remote controlled motion-detection cameras. Project is not anticipated to exceed the existing fire service capacities and would not interfere with established service ratios or response times. Therefore, additional permanent fire protection services, equipment, facilities, or personnel is not anticipated to be required. Therefore, impacts related to fire protection and emergency medical services would be less than significant.

As discussed in Checklist Response 3.9.2 (g), operation of the proposed Project would introduce Project components (e.g., lithium ion batteries) that could potentially increase the risk of fire. In order to reduce the risk reduce of fire during operation of Project facilities including those associated with lithium ion batteries, an Emergency Acton Plan would be prepared which would address proper planning, risk assessment, storage methods, and response protocols. While the Project would not result in adverse physical impacts associated with the provision of new or physically altered governmental facilities, implementation of MM HAZ-2 would ensure coordination with the KCFD.

Short-term congestion related to the construction phase would be minimized with the implementation of a Traffic Control Plan (refer to MM TRA-1) as described below in Checklist Response 3.17.2 (a). The Plan would include measures to avoid disruptions or delays in access for emergency service vehicles. The applicable fire department, ambulance, and paramedic services would be notified in advance of Project construction. The Plan would also include contact information for those agencies, assign responsibility for notifying the service providers, and specify coordination procedures. Once completed, the proposed

Project would operate primarily as an unmanned facility and generate a negligible amount of traffic and potential traffic disruptions.

***Police protection?***

The proposed Project does not include residential or commercial components that would increase the population in the area resulting in the need to provide additional police protection services, equipment, or facilities. As stated above, security measures at the site include complete enclosure of the site with fencing as well as managed, monitored, and controlled 24 hours per day by remote motion-detection cameras. The proposed Project not anticipated to exceed the existing police protection capacities, and would not interfere with established service ratios or response times. Therefore, additional, permanent police protection services, equipment, facilities, or personnel is not anticipated to be required. Therefore, no impacts related to police protection services would occur during operation of the proposed Project.

Construction of the proposed Project would generate truck and employee traffic along Rosamond Boulevard, which could temporarily result in a minor increase of the accident potential in these areas resulting in an increase in demand for police protection services over existing levels; however, the small number of incidents would be well within the capability of existing police facilities to accommodate. The slight and temporary increase in needed services during construction activities would not result in the construction of new facilities or a major alteration to existing facilities such that a significant impact to the physical environment would occur. Further, implementation of MM TRA-1 would reduce impacts related to traffic congestion. The Plan would include measures to avoid disruptions or delays in access for emergency service vehicles. The applicable Sheriff's Department and California Highway Patrol would be notified in advance of Project construction. The Plan would also include contact information for those agencies, assign responsibility for notifying the service providers, and specify coordination procedures. Once completed, the proposed Project would operate primarily as an unmanned facility and generate a negligible amount of traffic and potential traffic disruptions.

***Schools, Parks, or Other Facilities?***

**No Impact.** The Project would not result in an increase in population or facilities that would require the services of schools, parks or other facilities, or result in the need for new or physically altered facilities. The temporary workforce would not result in an increase in population that would adversely affect the local schools, parks, or other populations. No impact would occur and no mitigation would be required.

### **3.15.3 Mitigation Measures**

Refer to MM HAZ-2 in Section 3.9.3 (Hazards and Hazardous Materials) and MM TRA-1 in Section 3.17.3 (Transportation), no additional mitigation measures are required.

### 3.16 Recreation

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.16.1 Affected Environment

There are no parks within the vicinity of the Project site. According to the Willow Springs Specific Plan (Kern County 1992), there are no parks or community buildings within the Specific Plan boundary with the closest park facilities located in Rosamond.

#### 3.16.2 Impact Assessment

**Would the Project:**

**a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

**No Impact.** Implementation of the proposed Project would not induce population growth or result in an increase in the demand for existing neighborhood or regional park facilities; therefore, no impacts related to demand or use of recreation facilities would occur and no mitigation is required.

**b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

**No Impact.** As stated above, the proposed Project does not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. No impact would occur and no mitigation is required.

#### 3.16.3 Mitigation Measures

No mitigation measures are proposed.

### 3.17 Transportation

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Information in this section is based on the *Traffic Study for LADWP Rosamond Switching Station* prepared by KOA (2019).

#### 3.17.1 Affected Environment

##### *Project Area*

The traffic study for the proposed Project quantitatively assessed Project construction impacts on roadway segments on the construction truck and employee vehicle trip route. Roadway segment counts were compiled from counts conducted along Rosamond Boulevard, between the Project site and SR-14. The following are the study roadway segments included in the traffic impact analysis:

- Rosamond Boulevard east of 100<sup>th</sup> Street
- Rosamond Boulevard east of 55<sup>th</sup> Street
- Rosamond Boulevard west of 25<sup>th</sup> Street

The daily traffic count summaries collected for these study roadway segments are provided in the Appendix D of this Initial Study/MND (Appendix A of the traffic study).

##### *Analysis Methodology*

The traffic report includes analysis of the trip distribution, trip assignment, and daily roadway volumes for the designated study area. The analysis is based on the impacts of Project during peak construction activity. Project construction would peak in 2022. This year was defined as the future analysis year, because it represents the period of highest combined construction truck and worker traffic.



### Vehicle Miles Traveled

Updated CEQA Guidelines became effective on December 28, 2018, this change required vehicle miles traveled (VMT) metrics in CEQA transportation analysis efforts instead of level of service (LOS). LOS metrics can continue to be used under local agency review of traffic circulation, but automobile delay cannot be the determinant of impacts.

VMT analysis is required under CEQA to review potential impacts that could be caused by development projects. VMT metrics are not an appropriate measurement of Project construction activity, however. VMT data focuses on trip type, automobile use, transit use, walking and bicycling, and general auto trip reduction qualities of development and the management of travel to and from development sites. As Project construction activities involve necessary travel to and from the site by construction employees and the necessary use of construction truck delivery and hauling operations, VMT is not an appropriate analysis tool and has been excluded from this analysis.

### ***Existing Conditions***

Rosamond Boulevard provides direct vehicular access to the Project site. Adjacent to the Project site, this is a two-lane paved roadway with a striped centerline. Shoulders are soft (no curbs, dirt graded areas on each side). Posted speed limit is 45 mph.

West of the intersection with 35<sup>th</sup> Street, Rosamond Boulevard transitions into a four-lane roadway, with that configuration continuing to the east from that point. There is a center striped two-way left-turn lane. Posted speed limit is also 45 mph in this area.

In the vicinity of the SR-14 interchange, the roadway has a posted speed limit of 35 mph.

### ***Project Construction Trips***

#### Project Trip Generation Methodology

Project trip generation calculations included construction truck trip estimates and construction employee vehicle trips. The trip generation totals were determined based on the period that would generate the highest number of combined trips for the Project. Truck volumes were multiplied by a Passenger Car Equivalency (PCE) factor of 2.5 to estimate the real effect of total Project. This methodology is consistent with truck studies in the area.

Although some carpooling would likely occur during Project construction, trip generation calculations conservatively assumed that each employee would commute in a single personal vehicle. To provide a conservative analysis, the total number of trips analyzed represents the highest anticipated trips generated by both construction employees and trucks.

## **3.17.2 Impact Assessment**

### **Would the Project:**

#### **a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?**

**No Impact.** As analyzed in Checklist Response 3.17.2 (b), Project construction and operation would not generate substantial traffic as compared to existing condition. The proposed Project would not conflict with the applicable congestion management program, ordinances, or policies related to the circulation system. No impact would occur and no mitigation is required.

**b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

**Less Than Significant Impact.**

The total daily Project trips defined in Table 3-14 represent one-way inbound and outbound trips by both the construction personnel vehicles and construction trucks. Foundation work on the Project would be the most intense construction period, with 153 concrete truck trips to and from the site over a 180-day working period. Trash haul trucks and delivery trucks would add additional trips.

The construction daily trip numbers are based on the estimated peak day of construction, based on these totals: the peak day truck trip totals would be up to 10 concrete trucks, four trash trucks, and four delivery trucks in use at the peak period of construction or 18 trucks. Each truck was assumed to make two round trips per day.

- 36 daily peak-period truck round trips
- 70 construction employees on-site

The 36 daily truck trips are round trips, so those were multiplied by two, with a total of 72 one-way trips. Those trips were then multiplied by a PCE rate of 2.5 trip number of 180.

**TABLE 3-14 PROJECT CONSTRUCTION WEEKDAY TRIP GENERATION**

TRIP GENERATION	AVERAGE DAILY PCE TRIPS		
	Trucks*	Employee	Total
Field Personnel	0	140	140
Construction Trucks	180	0	180
<b>TOTAL TRIPS</b>	<b>180</b>	<b>140</b>	<b>320</b>

\*Truck trips include a PCE factor of 2.5.

Source: KOA 2019.

During the peak period of construction, the Project site is estimated to generate a weekday daily total of 320 passenger car-equivalent trips.

This total daily number of trips is included in the analysis of the daily capacity of the affected roads while also accounting for existing traffic volumes. Peak-hour trips related to construction (i.e., during the morning and evening period when workers would be arriving and departing the site) were not considered because there is no discernable peak traffic period in the vicinity of the Project site.

**Project Trip Distribution**

Construction employee and truck vehicle trip patterns were based on the local roadway network that would provide primary access to the Project site.

Rosamond Boulevard has a full-access interchange with the SR-14 freeway to the east of the Project site. Project construction-period traffic would use Rosamond Boulevard to access the regional highway network. The analyzed roadway segments were therefore along Rosamond Boulevard, on two-lane and four-lane portions of the roadway, between the Project site and SR-14. All of the Project-generated trips were assumed to travel across all of the analyzed study roadway segments.

## Roadway Impact Analysis

As both existing and future projected volumes at the analyzed roadway segments are very low and do not approach the capacities of the roadways, this analysis focuses on daily volumes.

The tables below provide a comparison of the analyzed existing and future volumes with and without the Project, for the study roadway segments. Comparisons to the total roadway capacity are provided, based on the lane configuration of the roadways, and daily volume capacities generally defined by the Highway Capacity Manual that are 10,000 vehicles per lane for major roadways.

Table 3-15 provides a Project volume analysis based on the existing period analysis, included here based on CEQA precedence that Project impact analyses should include a scenario without future estimated traffic growth.

**TABLE 3-15 PROJECT STUDY ROADWAY SEGMENT - EXISTING VOLUMES ANALYSIS**

ROADWAY SEGMENT	EXISTING DAILY VOLUMES	DAILY CONSTRUCTION TRIPS	EXISTING WITH CONSTRUCTION	ROADWAY CAPACITY
Rosamond Boulevard east of 100 <sup>th</sup> Street W	1,226	320	1,546	20,000
Rosamond Boulevard east of 50 <sup>th</sup> Street W	6,297	320	6,617	20,000
Rosamond Boulevard west of 25 <sup>th</sup> Street W	18,651	320	18,971	40,000

Source: KOA 2019.

Table 3-16 provides a Project volume analysis at the roadway segments based on a future volume analysis. Future year-2022 volumes were defined by multiplying the existing year-2019 volumes by an ambient growth rate for the area defined by modeled sub-regional analysis output within the Metro Congestion Management Program.

**TABLE 3-16 PROJECT STUDY ROADWAY SEGMENT - FUTURE VOLUMES ANALYSIS**

ROADWAY SEGMENT	EXISTING DAILY VOLUMES	FUTURE 2022 WITHOUT CONSTRUCTION	DAILY CONSTRUCTION TRIPS	FUTURE 2022 WITH CONSTRUCTION	ROADWAY CAPACITY
Rosamond Boulevard east of 100 <sup>th</sup> Street W	1,226	1,276	320	1,596	20,000
Rosamond Boulevard east of 50 <sup>th</sup> Street W	6,297	6,553	320	6,873	20,000
Rosamond Boulevard west of 25 <sup>th</sup> Street W	18,651	19,408	320	19,728	40,000

Source: KOA 2019.

For the remainder of the construction period, construction traffic volumes would decline from the peak levels analyzed. The roadway capacities of the roadway segments range from 20,000 to 40,000 vehicles per day. The roadway segments analyzed would operate in the range of 1,596 to 19,728 total vehicles per day based on the construction period numbers in Table 3-15 and Table 3-16.

On all of the roadway study segments, adequate capacity would remain during the construction period. At least half of the roadway capacity would remain. During the other non-peak months of the overall construction schedule, traffic volumes would decline from these peak levels. Therefore, the proposed

Project would not create any significant impacts at the analyzed locations and impacts would be less than significant and no mitigation would be required.

### ***Project Operational Trips***

While it is anticipated that the proposed Project would require intermittent maintenance to be conducted by the Project staff or contractors, such maintenance would be minimal requiring a negligible amount of traffic trips on an annual basis. Operational impacts would therefore be less than significant.

#### **c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**No Impact.** Primary access to the Project site during construction and operation would be via Rosamond Boulevard. A secondary access road would also be constructed off 100<sup>th</sup> Street West. New internal access roads would be constructed to access Project facilities. All road improvements would be designed by a registered civil engineer to meet development standards, as applicable. The proposed Project would not substantially increase safety hazards due to a geometric design feature or incompatible use. No impact would occur and no mitigation is required.

#### **d) Result in inadequate emergency access?**

**Less Than Significant Impact With Mitigation.** No road closures are anticipated during Project construction. Traffic control measures, such as flag persons, may be required at specific times to facilitate construction vehicle ingress to and egress from Rosamond Boulevard. Interior access roads within the Project would allow for sufficient access for fire trucks and emergency responders. A Traffic Control Plan (refer to MM TRA-1) would be prepared, which would include measures to avoid disruptions or delays in access for emergency service vehicles and to keep emergency service agencies informed of any road or traffic impacts. The Plan would also include advance notification to police and fire departments of Project construction activities. With implementation of MM TRA-1 impacts relative to emergency access would be less than significant.

### **3.17.3 Mitigation Measures**

TRA-1 Prior to the start of construction, LADWP shall submit a Traffic Control Plan to agencies with jurisdiction over public roads that would be directly affected by construction activities. Although no road closures are anticipated, the Plan shall define the use of flag persons, warning signs, lights, barricades, cones, etc. to control construction traffic as necessary. The Plan shall include measures to avoid disruptions or delays in access for emergency service vehicles. Appropriate police department, fire department, ambulance services, and paramedic services shall be provided with the Plan and notified in advance of Project construction by LADWP. The Plan shall also include contact information for those agencies, assign responsibility for notifying the service providers, and specify coordination procedures.

### 3.18 Tribal Cultural Resources

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### 3.18.1 Affected Environment

##### Native American Coordination

##### ***Sacred Lands Search Letter and Responses***

POWER performed a sacred lands file search in 2016 for the Barren Ridge Renewable Transmission Project, located in the immediate Project area. The purpose of the sacred lands file search request was to determine if any known Native American cultural properties (e.g., traditional use or gathering areas, places of religious or sacred activity) are present within or adjacent to the Project area. The sacred lands file records search failed to indicate the presence of Native American cultural resources within the immediate Project area.

##### **AB 52 Consultation**

On January 20, 2018 LADWP received a list of tribes from the NAHC with traditional land or cultural places located in Kern County. Pursuant to AB 52 procedures, LADWP sent notification letters to the Native American tribes identified by NAHC. The letters informed the tribes of the proposed Project and included a brief Project description, location map, and Project contact information. The following Native American tribes were sent notification letters:

- Big Pine Paiute Tribe of the Owens Valley, Genevieve Jones, Chairperson
- Big Pine Paiute Tribe of the Owens Valley, Danelle Gutierrez, Tribal Preservation Officer
- Kitanemuk & Yowlumne Tejon Indians, Delia Dominguez, Chairperson

- San Manuel Band of Mission Indians, Lee Clauss, Director-CRM Department
- San Manuel Band of Mission Indians, Lynn Valbuena
- Chumash Council of Bakersfield, Julio Quair, Chairperson
- Kern Valley Indian Community, Julie Turner, Secretary
- Kern Valley Indian Community, Robert Robinson, Chairperson
- Santa Rosa Indian Community of the Santa Rosa Rancheria, Rueben Barrios Sr., Chairperson
- Tejon Indian Tribe, Octavio Escobedo, Chairperson
- Tubatulabals of Kern Valley, Robert L. Gomez, Jr., Tribal Chairperson
- Tule River Indian Tribe, Neil Peyron, Chairperson

San Manuel Band of Mission Indians and Tule River Indian Tribe responded. San Manuel Band of Mission Indians requested additional excavation at the Project site to determine presence/absence of cultural resources and the Tule River Indian Tribe requested continued updates related to the proposed Project.

POWER undertook a Phase I cultural resource survey on several parcels of land totaling 19.3 acres in support of proposed construction of the Project on October 5 and 6, 2017 and prepared the *Phase I Archaeological Resource Survey* report (POWER 2018). No cultural resource discoveries were made inside the Project footprint. However, as a result of tribal responses to LADWP AB 52 inquiries, LADWP requested that POWER staff shovel test the proposed 19.3 Project footprint of the switching station with a tribal monitor observing the field work. The results of the shovel test were negative and POWER revised the *Phase I Archaeological Resources Survey* report (POWER 2018) into an *Extended Phase I Archeological Resource Survey* (POWER 2019b). Subsequent to the 2017 cultural survey and 2018 shovel testing, the Project footprint was expanded to accommodate the proposed FACTS and the BESS. POWER conducted an additional Phase I cultural resource survey on August 20, 21, and 22, 2019 on several parcels of land totaling 97.5 acres for the survey area. San Manuel Band of Mission Indians reviewed the results of the 2019 field survey and had no further request.

### 3.18.2 Impact Assessment

**Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:**

**a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?**

**Less Than Significant With Mitigation.** As discussed in Checklist Responses 3.5.2 (a), a literature and records search was conducted at the SSJVIC on October 12, 2017. Records consulted at the SSJVIC included the inventory of the National Register of Historic Places, the California Register of Historical Resources, California Historic Landmarks list, topographic maps showing the locations of sites and surveys, and historic topographic maps. Because of the limited potential impacts assumed by the Project, a one-half mile search radius was utilized. The objective of this records search was to identify prehistoric and historic period archaeological and built-environment resources that had been previously recorded within the study area during prior cultural resource investigations.

This research effort indicated that several historic resources are located within a one-half mile of the Project area (refer to Table 3-6). Many of the parcels near the Project have been surveyed by professional archaeologists in the last 40 years. The last survey on the Project site was conducted in January 2014 along the LADWP easement in the northwestern portion of the Project site. Research shows that the rest of the Project site has not been surveyed previously.

The region has been farmed since about 1890 and few cultural resources are known for this area. Since few area resources are known and the site was previously disturbed due to recent transmission line development within and adjacent to the LADWP and SCE easements and along Rosamond Boulevard, the potential for the discovery of cultural resources is considered low.

The field surveys and cultural resources analysis conducted in support of the proposed Project did not identify any archaeological resources located on-site or within the Project area. However, the lack of surface evidence of archaeological resources does not preclude their subsurface existence. As such, earth moving construction activities may encounter intact subsurface archaeological deposits. Implementation of MMs CULT-1 through CULT-3 (refer to Section 3.5.3, Cultural Resources) would reduce impacts to cultural resources to less than significant. In addition, MMs TCR-1 and TCR-2 would ensure continued coordination with Native American tribes.

**b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?**

**Less Than Significant With Mitigation.** Refer to Checklist Response 3.17.2 (a) above for a discussion.

### **3.18.3 Mitigation Measures**

TCR-1 Tribes that have requested notification, including the San Manuel Band of Mission Indians Cultural Resources Department and Tule River Tribe, shall be contacted, as detailed in CUL-1, of any pre-contact cultural resources discovered during Project implementation, and be provided information regarding the nature of the find, so as to provide Tribal input with regards to significance and treatment. Should the find be deemed significant, as defined by CEQA (as amended, 2015), a Cultural Resources Monitoring and Treatment Plan (Plan) shall be created by the archaeologist, in coordination with Tribal representatives, and all subsequent finds shall be subject to this the monitoring Plan. This Plan shall allow for a monitor to be present that represents the Tribes for the remainder of the Project, should this be requested by an interested Tribe.

TCR-2 Any and all archaeological/cultural documents created as a part of the Project (isolate records, site records, survey reports, testing reports, etc.) shall be supplied to the Lead Agency, which will share this information with interested Tribes. The Lead Agency shall, in good faith, consult with interested Tribes throughout Project construction.



### 3.19 Utilities and Service Systems

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.19.1 Affected Environment

A variety of local and regional purveyors provide and maintain utility and service system facilities associated with water, sewer, electric, gas, telephone, and cable within the Project area. Existing utilities in the area include: potable water, reclaimed water, sewer, electrical, telecommunications, gas, and fiber optic.

#### 3.19.2 Impact Assessment

**Would the Project:**

**a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?**

**Less Than Significant Impact.** During construction, wastewater would be contained within portable toilet facilities and disposed of by contract at an approved disposal site. The switching station, future FACTS, and BESS would be unmanned with automated features and remote control capabilities. No full-time, permanent personnel would be required at the Project site. Routine maintenance and inspection of Project facilities is anticipated to include weekly site visits with maintenance at the site anticipated to occur approximately once a month. The Project includes a control house containing restroom facilities for

use of personnel on-site during operation and maintenance activities. To support the restroom facilities located in the control house, a septic system would be installed. The system would be installed in conformance with the standard conditions and permit requirements of the Kern County Environmental Health Services Division; the proposed Project would not exceed wastewater treatment requirements. The Project would not result in the relocation or construction wastewater treatment facilities, natural gas, or telecommunication facilities. In order to bring electricity into the switching station facilities, approximately 10 to 20 new distribution poles would be constructed along Rosamond Avenue and 100<sup>th</sup> Street West (height approximately 45 feet or less). It is anticipated that LAWDP would coordinate with SCE to obtain electricity for the site and tie into the existing electrical distribution system. The Project would not require or result in the substantial relocation or construction of public utility service systems; therefore, impacts would be less than significant and no mitigation would be required.

**b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?**

**Less Than Significant Impact.** Construction activity would require the use of water for dust control during construction activities. Water for construction purposes would be obtained from a new well proposed on-site. As stated above, no full-time, permanent personnel would be required at the Project site. Routine maintenance and inspection of Project facilities is anticipated to include weekly site visits with maintenance at the site anticipated to occur approximately once a month. The Project includes a control house containing restroom facilities for use of personnel on-site during inspection and maintenance activities.

The proposed Project may involve limited groundwater usage for non-potable water supply for the switching station facilities during construction and operation and would not require or result in the construction of new water infrastructure or expansion of existing facilities. In addition, LAWDP would coordinate with Kern County and obtain all necessary permits for construction of the proposed well. The proposed Project water usage would not adversely affect the available water supply that could be used by surrounding land uses. It is anticipated that sufficient water supplies would be available to serve the Project; therefore, impacts of the proposed Project on water supply would be less than significant.

**c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

**No Impact.** The proposed Project would include a restroom and on-site septic system. It would not generate wastewater that would require treatment at a water treatment plant. No impact would occur and no mitigation would be required.

**d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

**Less Than Significant Impact.** Due to the nature of the Project, solid waste generated during the Project's operation phase would be minimal. However, construction of the proposed Project would generate wastes such as non-hazardous metal and refuse from construction workers that would be recycled or disposed of in local or regional facilities. Construction of the Project would marginally increase the amount of solid waste disposal above current levels. However, due to the small scale and short duration of Project construction, construction of the Project would not generate solid wastes in excess of state or local standards, or in excess of the capacity of local infrastructure nor would it impair the attainment of solid waste reduction goals. Impacts relative to construction-related solid waste disposal would be less than significant and no mitigation would be required.

**e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

**No Impact.** The solid waste generated during the construction and operation of the proposed Project would be disposed of in accordance with all applicable state, regional, and local statutes and conservation measures regarding solid waste and recycling of waste materials. No impact would occur and no mitigation would be required.

**3.19.3 Mitigation Measures**

No mitigation measures are proposed.

### 3.20 Wildfire

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Would the Project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.20.1 Affected Environment

As stated in Section 3.15.1, KCFD provides fire suppression and prevention and emergency medical services for unincorporated areas of Kern County and the cities of Arvin, Delano, Maricopa, McFarland, Ridgecrest, Shafter, Taft, Tehachapi and Wasco. The Project site and surrounding area are served by the Rosamond Station #15, located at 3219 35<sup>th</sup> West Street.

The Project site and immediate area are not located in “Hazardous Fire Area” as designated by the Kern County General Plan, Safety Element (Kern County 2009). Additionally, the Project site and immediate area are not designated as a “Fire Hazard Severity Zone” (CAL FIRE 2007) nor is the site located in a “fire threat area” as designated by California Public Utilities Commission fire hazard maps (CPUC 2019).

The Kern County Emergency Operations Plan establishes an emergency management organization and assigns functions and tasks consistent with California’s Standardized Emergency Management System and the National Incident Management System. The Emergency Operations Plan provides for the integration and coordination of planning efforts of the County/Operational Area with those of its cities, special districts and the state. The content is based on guidance provided by the California Emergency Management Agency, the Federal Emergency Management Agency and Department of Homeland Security. The intent of the Plan is to facilitate emergency response and short-term recovery by providing a framework for response to all significant emergencies, regardless of the nature of the event (KCFD 2019b).

The Emergency Operations Plan is comprised of four major parts as follows:

- **Basic Plan** – Overview of County/Operational Area's emergency management program, Emergency Management Organization, and concept of emergency operations.
- **General Procedures** – Emergency procedures to be implemented by employees at the time of a major emergency or disaster.
- **Emergency Operations Center Procedures and Annexes** – Procedures, annex and checklists for each major Emergency Operations Center function, and resource and contact lists.
- **Contingency Plans** – Event-specific information and emergency instructions (e.g., Terrorism). The Contingency Plans are separate documents that may be implemented independent of the Plan and are incorporated into the Plan by reference.

### 3.20.2 Impact Assessment

**Would the Project:**

**a) Substantially impair an adopted emergency response plan or emergency evacuation plan?**

**No Impact.** Kern County has developed an Emergency Operations Plan which identifies emergency response and actions. The Plan identifies emergency procedures to be implemented at the time of a major emergency or disaster. The Plan facilitates emergency response and short-term recovery by providing a framework for response to all significant emergencies, regardless of the nature of the event. The proposed Project would not impair implementation of or physically interfere with implementation of County's Emergency Operations Plan or any emergency response plan or emergency evacuation plan. Therefore, no impact would occur and no mitigation would be required.

**b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

**No Impact.** The Project does not include any habitable structures. Furthermore, the Project site and immediate area are not located in "Hazardous Fire Area" as designated by the Kern County General Plan, Safety Element (Kern County 2009). Additionally, the Project site and immediate area are not designated as a "Fire Hazard Severity Zone." Therefore, the Project would not exacerbate wildfire risks and would not expose occupants to pollutant concentrations from a wildfire.

**c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment?**

**Less Than Significant Impact With Mitigation.** As stated in Checklist Response 3.9.2 (g), during construction there is a possibility of, electrical sparks, combustion of fuel oil, hydraulic fluid, mineral oil, flammable liquids, explosions, and over-heated equipment may cause small fires at the site. The majority of the equipment would be of nonflammable material (aluminum and steel). During construction-related activities, standard fire prevention and suppression measures would be implemented for the proposed Project. Portable fire extinguishers of appropriate sizes and types would be located throughout the Project site.

Lithium ion batteries used in the BESS could potentially increase the risk of fire at the Project site. To reduce the risk of fire from lithium ion batteries each battery module rack would be located within a metal

storage container, retrofitted to add insulation, air-conditioning, and fire suppression with separate enclosures for the electronic controls, inverters, and rectifiers.

The built-in fire protection system would utilize suppression through cooling, isolation, and containment. Each battery storage container would likely include a gaseous fire suppressant agent and an automatic fire extinguishing system with sound and light alarms. The system would be designed in accordance with the National Fire Protection Association safety standards including an automatic shutdown system for fans that keep the container sealed when the fire extinguishing system is activated. The fire suppressant agent is deployed by a releasing panel that uses an aspirating smoke detection system. In addition, each container would also have a manual release. A disable switch would be provided for maintenance to prevent accidental discharge while the system is being serviced. As such, the risk of fire from lithium ion batteries would be reduced to a less than significant level.

The proposed Project would comply with all existing regulations and requirements of the Kern County General Plan Safety Element and the Kern County Fire Code (Chapter 17.32), and would be reviewed for adherence to prevention measures for fires. Implementation of MM HAZ-2 and adherence to federal, state, and local requirements and regulations, would reduce fire ignitions and prevent the spread of fires, impacts related to the risk of fire would be reduced to less than significant.

**d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

**Less Than Significant Impact.** The Project site and immediate surrounding area are relatively level, with a low potential for landslides. As discussed in Checklist Response 3.10.2 (c) above, the Project would not substantially alter the existing drainage patterns of the site or result in substantial erosion or siltation on- or off-site. Development of the switching station, FACTS, or BESS would not result in large slopes on the Project site. Therefore, implementation of the proposed Project would not expose people or structures to significant risks due to runoff, post-fire slope instability, or drainage changes.

### **3.20.3 Mitigation Measures**

Refer to MM HAZ-2 in Section 3.9.3 (Hazards and Hazardous Materials).

### 3.21 Mandatory Findings of Significance

	Potentially Significant Impact	Less Than Significant with Mitigation	Less Than Significant Impact	No Impact
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### Would the Project:

- a) **Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

**Less Than Significant With Mitigation.** As addressed in the pertinent sections of this Initial Study, the proposed Project would not substantially degrade the quality of the environment. As discussed in Section 3.4 (Biological Resources) of this Initial Study/MND, Project construction would not result in significant impacts on biological resources with implementation of MMs BIO-1 through BIO-12. As discussed in Section 3.5 (Cultural Resources) there are no known cultural resources on the Project site. However, because there is the potential for discovery of previously-unknown subsurface resources, MMs CUL-1 through CUL-3 would be implemented to reduce impacts to a less than significant level. In addition, implementation of MMs TCR-1 and TCR-2 would reduce impacts relative to tribal cultural resources to a less than significant level.

- b) **Have Impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

**Less Than Significant Impact With Mitigation.** As described in the previous sections of this Initial Study, Checklist Responses 3.1 through 3.20, the proposed Project would result in less than significant



impacts with incorporation of mitigation measures. Project impacts would be individually limited and not cumulatively considerable due to the site-specific nature of the potential impacts.

Potentially significant impacts that can be reduced to less than significant level with implementation of recommended mitigation measures include the following areas: biological resources, cultural resources, geology and soils (erosion or loss of top soil), hazards/hazardous wastes, hydrology and water quality, public services (site access during construction), transportation, tribal cultural resources, and wildfire (fire hazards). These impacts would primarily be related to construction activities, would be temporary in nature, and would not substantially contribute to any potential cumulative impacts associated with these environmental topics. Potentially significant biological resources impacts would be reduced to less than significant with implementation of MMs BIO-1 through BIO-12. Potentially significant cultural resources impacts would be reduced to less than significant with implementation of MMs CUL-1 through CUL-3. Potentially significant impacts related to geology and soils would be reduced to less than significant with implementation of MM BIO-9. Potentially significant impacts related to hazards and hazardous materials would be reduced to less than significant with implementation of MMs HAZ-1 and HAZ-2. Potentially significant impacts related to hydrology and water quality would be reduced to less than significant with implementation of MMs HYD-1 and HYD-2. Potentially significant public service impacts would be reduced to less than significant with implementation of MM TRA-1. Potentially significant transportation impacts would be reduced to less than significant with implementation of MM TRA-1. Potentially significant tribal cultural resources impacts would be reduced to a less than significant with implementation of MMs TCR-1 and TCR-2. Potentially significant impacts related to wildfire (fire hazards) would be reduced to less than significant with implementation of MM HAZ-2.

The Project would have no impact or less than significant impacts to the following environmental areas: aesthetics, agriculture and forestry resources, air quality, energy, greenhouse gas emissions, land use and planning, mineral resources, noise, population and housing, recreation, and utilities and service systems. Therefore, the Project would not substantially contribute to any potential cumulative impacts for the topical issues analyzed in Checklist Responses 3.1 through 3.20.

All environmental impacts that could occur as a result of the Project would be reduced to less than significant level through the implementation of the mitigation measures recommended in this Initial Study/MND. Implementation of these measures would ensure that the impacts of the Project would be below established thresholds of significance and that these impacts would not combine with the impacts of other cumulative projects to result in a cumulatively considerable impact on the environment as a result of Project implementation.

**c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

**Less Than Significant With Mitigation.** As described in the previous sections of this Initial Study, Checklist Responses 3.1 through 3.20, the proposed Project would result in less than significant impacts with incorporation of mitigation measures for biological resources, cultural resources, geology and soils, hazards/hazardous wastes, hydrology and water quality, public services, transportation, tribal cultural resources, and wildfire. Implementation of mitigation measures identified in the aforementioned resource areas of this Initial Study are required to reduce impacts to a less than significant level. Therefore, after implementation of the measures, the proposed Project would result in a less than significant impact on human beings.

*THIS PAGE INTENTIONALLY LEFT BLANK*

## **4.0 LIST OF PREPARERS**

### **Los Angeles Department of Water and Power**

Aiden Leong, Environmental Project Manager

### **POWER Engineers, Inc.**

Mike Strand, Environmental Project Manager

Brent Miyazaki, Senior Project Manager

Kim Quinn, Project Coordinator

Ken McDonald, Biologist

Michael Dice, Cultural Resources Manager

Rebekka Knierim, Cultural Resources Specialist

Jeff Cramer, GIS Analyst

Heidi Horner, Technical Editor

Jackie Graff, Document Production

*THIS PAGE INTENTIONALLY LEFT BLANK*

## 5.0 REFERENCES

- California Department of Conservation (DOC). 2012. Farmland Mapping and Monitoring Program Farmland Map: Orange County, California. Sacramento, CA: FMMP. Accessed November 2019.
- California Department of Forestry and Fire Protection (CAL FIRE). 2007. Office of the State Fire Marshall. Fire Hazard Severity Zones Maps. <https://osfm.fire.ca.gov/divisions/wildfire-prevention-planning-engineering/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>. Accessed November 2019.
- California Department of Transportation (Caltrans). 2019. California Scenic Highway Mapping System. Sacramento, CA: Caltrans. Available on the internet: [http://www.dot.ca.gov/hq/LandArch/16\\_livability/scenic\\_highways/index.htm](http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm). Accessed January 2019.
- California Department of Water Resources. 2019. California's Groundwater Bulletin #18-Antelope Valley Groundwater Basin. Available on the internet: [https://water.ca.gov/LegacyFiles/pubs/groundwater/bulletin\\_118/basindescriptions/6-44.pdf](https://water.ca.gov/LegacyFiles/pubs/groundwater/bulletin_118/basindescriptions/6-44.pdf). Accessed September 2019.
- California Geological Survey (CGS). 2012a. California Geomorphic Provinces. Available on the internet: [https://www.coastal.ca.gov/coastalvoices/resources/California\\_Geomorphic\\_Provinces.pdf](https://www.coastal.ca.gov/coastalvoices/resources/California_Geomorphic_Provinces.pdf). Accessed. September 2019.
- \_\_\_\_\_. 2012b. California Geological Survey, Preliminary Geologic Map of the Little Buttes 7.5' Quadrangle Los Angeles and Kern Counties, California: A Digital Database. California Department of Conservation. Available on the internet: [http://www.science.earthjays.com/instruction/CR\\_eureka/2016\\_spring/GEO\\_02/field\\_trips/patrick\\_s\\_point/Little\\_Buttes\\_24k\\_v1-0.pdf](http://www.science.earthjays.com/instruction/CR_eureka/2016_spring/GEO_02/field_trips/patrick_s_point/Little_Buttes_24k_v1-0.pdf). Accessed November 2019.
- \_\_\_\_\_. 2015. California Geological Survey, Mineral Lands Classification. California Department of Conservation. Available on the internet: <https://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=mlc>. Accessed November 2019.
- \_\_\_\_\_. 2019. Seismic Hazards Program. Sacramento, CA. California Department of Conservation. <https://www.conservation.ca.gov/cgs/shp>. Accessed November 2019.
- California Public Utilities Commission (CPUC). 2019. CPUC FireMap. Available on the internet: <https://ia.cpuc.ca.gov/firemap/#>. Accessed March 2020.
- California State Water Resources Control Board (SWRCB). 2019. Water Boards. Sacramento, CA: SWRCB. [https://www.waterboards.ca.gov/waterboards\\_map.html](https://www.waterboards.ca.gov/waterboards_map.html). Accessed November 2019.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California (California Department of Fish and Game the Resources Agency, ed.). Sacramento, CA.
- Kern County. 1992. *Willow Springs Specific Plan*. Available on the internet: [https://www.kerncounty.com/planning/pdfs/SPs/WillowSprings\\_SP.pdf](https://www.kerncounty.com/planning/pdfs/SPs/WillowSprings_SP.pdf). Accessed September 2018.

- \_\_\_\_\_. 2004. *Revised Update of the Kern County General Plan Update of the Kern-Recirculated Draft Environmental Impact Report*. Available on the internet: [https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP\\_RPEIR\\_vol1.pdf](https://psbweb.co.kern.ca.us/planning/pdfs/kcgp/KCGP_RPEIR_vol1.pdf). Accessed September 2018.
- \_\_\_\_\_. 2009. General Plan. Available on the internet: <https://kernplanning.com/planning/planning-documents/general-plans-elements/>. Accessed September 2018.
- \_\_\_\_\_. 2012. Airport Land Use Compatibility Plan. Available on the internet: <https://www.kerncounty.com/planning/pdfs/ALUCP2012.pdf>. November 2019.
- \_\_\_\_\_. 2016. *Final Consolidated Environmental Impact Report, Willow Springs Solar Array Project*. Bakersfield, CA. February 2016.
- \_\_\_\_\_. 2019a. Renewable Energy Projects. Available on the internet: <https://kernplanning.com/planning/renewable-energy/>. Accessed November 2019.
- \_\_\_\_\_. 2019b. Dark Skies Ordinance. Available on the internet: <https://kernplanning.com/dark-skies-ordinance-informational-guide/>. Accessed November 2019.
- \_\_\_\_\_. 2020. Public Health Department. Available on the internet: <https://kernpublichealth.com/septic-systems/>. Accessed February 2020.
- Kern County Fire Department (KCFD). 2019a. Fire Stations. <https://www.kerncountyfire.org/operations/fire-stations.html#34.9648148/-118.2507631/10/cats/16/hotspot/52>. Accessed September 2019.
- \_\_\_\_\_. 2019b. Emergency Operations Plan. Available on the internet: <https://www.kerncountyfire.org/operations/divisions/office-of-emergency-services/emergency-plans/emergency-operations-plan.html>. Accessed November 2019.
- Kern County Sheriff's Department. (Sheriff's Department). 2019. Law Enforcement. [http://www.kernsheriff.com/Law\\_Enforcement](http://www.kernsheriff.com/Law_Enforcement). Accessed September 2019.
- Kleinfelder. 2019. *Phase I Environmental Site Assessment, APN 359-051-11*. Los Angeles, CA. Kleinfelder. October 16, 2019.
- KOA. 2019. *Traffic Study for LADWP Rosamond Switching Station*. Monterey Park, CA. KOA. November 6, 2019.
- Los Angeles Department of Water and Power (LADWP). 2013. *Renewables Portfolio Standard Policy and Enforcement Program*. Los Angeles, CA. LADWP. December 2013.
- Odic Environmental. 2018. *Phase I Environmental Site Assessment*. Los Angeles, CA. Odic May 22, 2018.
- Pipeline and Hazardous Materials Safety Administration (PHMSA). 2019. United States Department of Transportation. Available on the internet: <https://www.phmsa.dot.gov/regulations/title49/section/173.185>. Accessed November 2019.
- POWER Engineers, Inc. (POWER). 2018. *Rosamond Switching Station Project –Phase I Archaeological Resources Survey*. Anaheim, CA. POWER Engineers, Inc. April 2018.

- \_\_\_\_\_. 2019a. *Rosamond Switching Station Project –Biological Resources Habitat Assessment*. Anaheim, CA. POWER Engineers, Inc. October 2019.
- \_\_\_\_\_. 2019b. *Rosamond Switching Station Project – Extended Phase I Archaeological Resource Survey*. Anaheim, CA. POWER Engineers, Inc. January 2019.
- \_\_\_\_\_. 2019c. *Rosamond Switching Station Project – Addendum to the Extended Phase I Archaeological Resources Survey*. Anaheim, CA. POWER Engineers, Inc. October 2019.
- Terry Hayes Associates Inc. (TAHA). 2019a. *Rosamond Switching Station Project – Air Quality and Greenhouse Gas Emissions Impacts Assessment*. Culver City, CA. TAHA. November 4, 2019.
- \_\_\_\_\_. 2019b. *Rosamond Switching Station Project – Noise and Vibration Impacts Assessment*. Culver City, CA. TAHA. November 4, 2019.
- United States Army Corps of Engineers (USACE). 2019. Jurisdiction. Available on the internet: <https://www.nwp.usace.army.mil/Missions/Regulatory/Jurisdiction.aspx>. Accessed November 2019.
- United States Census Bureau. 2019. 2013-2017 American Community Survey 5-Year Estimates. Available on the internet: <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>. Accessed September 2019.
- United States Geologic Survey. 2019. Mojave Groundwater Resources. Available on the internet: <https://ca.water.usgs.gov/mojave/mojave-groundwater-data-visualizations.html>. Accessed September 2019.

*THIS PAGE INTENTIONALLY LEFT BLANK*



**APPENDIX A**

**AIR QUALITY AND GREENHOUSE GAS  
EMISSIONS IMPACT ASSESSMENT**

*THIS PAGE INTENTIONALLY LEFT BLANK*

**APPENDIX B**

**BIOLOGICAL RESOURCES HABITAT ASSESSMENT**

*THIS PAGE INTENTIONALLY LEFT BLANK*

**APPENDIX C**

**NOISE AND VIBRATION IMPACTS ASSESSMENT**

*THIS PAGE INTENTIONALLY LEFT BLANK*

**APPENDIX D**  
**TRAFFIC STUDY**

*THIS PAGE INTENTIONALLY LEFT BLANK*