

**DRAFT**

**Initial Study/Mitigated Negative Declaration**

**ADELANTO SWITCHING STATION EXPANSION PROJECT**



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

**February 2021**



**CEQA Initial Study and Mitigated Negative Declaration  
Adelanto Switching Station Expansion Project**

February 2021

General Manager and Chief Engineer  
Martin L. Adams

Senior Assistant General Manager – Power System Construction, Maintenance, and Operations  
Andrew C. Kendall

Senior Assistant General Manager – External and Regulatory Affairs and Chief Sustainability Officer  
Nancy H. Sutley

Director of Environmental Affairs  
Mark J. Sedlacek

Manager of Environmental Planning and Assessment  
Charles C. Holloway

Prepared by:  
Los Angeles Department of Water and Power  
111 North Hope Street, Room 1044  
Los Angeles, CA 90012

Technical Assistance Provided by:  
POWER Engineers, Inc.  
731 East Ball Road, Suite 100  
Anaheim, CA 92805

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## 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 NEED AND OBJECTIVES.....	2
1.4	ENVIRONMENTAL DOCUMENT FORMAT AND CONTENT.....	2
1.5	IMPACT TERMINOLOGY .....	3
1.6	INITIAL STUDY ORGANIZATION AND CONTENTS.....	3
<b>2.0</b>	<b>PROJECT DESCRIPTION .....</b>	<b>5</b>
2.1	EXISTING CONDITIONS AND SURROUNDING LAND USES .....	5
2.1.1	Existing Site Conditions.....	5
2.1.2	Existing General Plan and Zoning .....	5
2.1.3	Surrounding Land Uses.....	6
2.2	PROPOSED PROJECT .....	6
2.3	PROJECT COMPONENTS .....	15
2.4	PROJECT CONSTRUCTION.....	15
2.5	PROJECT OPERATIONS AND MAINTENANCE .....	19
2.6	PERMITS AND APPROVALS .....	20
<b>3.0</b>	<b>INITIAL STUDY CHECKLIST AND ENVIRONMENTAL EVALUATION.....</b>	<b>21</b>
3.1	AESTHETICS .....	25
3.1.1	Affected Environment.....	25
3.1.2	Impact Assessment.....	26
3.1.3	Mitigation Measures .....	27
3.2	AGRICULTURAL AND FOREST RESOURCES .....	28
3.2.1	Affected Environment.....	28
3.2.2	Impact Assessment.....	29
3.2.3	Mitigation Measures .....	29
3.3	AIR QUALITY.....	30
3.3.1	Affected Environment and Regulatory Framework.....	30
3.3.2	Methodology .....	35
3.3.3	Impact Assessment.....	36
3.3.4	Mitigation Measures .....	39
3.4	BIOLOGICAL RESOURCES .....	40
3.4.1	Affected Environment.....	40
3.4.2	Impact Assessment.....	41
3.4.3	Mitigation Measures .....	61
3.5	CULTURAL RESOURCES .....	63
3.5.1	Affected Environment.....	63
3.5.2	Impact Assessment.....	64
3.5.3	Mitigation Measures .....	68
3.6	ENERGY.....	69
3.6.1	Affected Environment.....	69
3.6.2	Impact Assessment.....	69
3.6.3	Mitigation Measures .....	70
3.7	GEOLOGY AND SOILS .....	71
3.7.1	Affected Environment.....	71
3.7.2	Impact Assessment.....	72

3.7.3	Mitigation Measures .....	75
3.8	GREENHOUSE GAS EMISSIONS .....	76
3.8.1	Affected Environment and Regulatory Framework .....	76
3.8.2	Methodology .....	80
3.8.3	Impact Assessment.....	80
3.8.4	Mitigation Measures .....	82
3.9	HAZARDS AND HAZARDOUS MATERIALS .....	83
3.9.1	Affected Environment.....	83
3.9.2	Impact Assessment.....	84
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 .....	92
3.11	LAND USE AND PLANNING.....	93
3.11.1	Affected Environment.....	93
3.11.2	Impact Assessment.....	93
3.11.3	Mitigation Measures .....	94
3.12	MINERAL RESOURCES .....	95
3.12.1	Affected Environment.....	95
3.12.2	Impact Assessment.....	95
3.12.3	Mitigation Measures .....	95
3.13	NOISE .....	96
3.13.1	Affected Environment and Regulatory Framework .....	96
3.13.2	Impact Assessment.....	99
3.13.3	Mitigation Measures .....	106
3.14	POPULATION AND HOUSING.....	107
3.14.1	Affected Environment.....	107
3.14.2	Impact Assessment.....	107
3.14.3	Mitigation Measures .....	108
3.15	PUBLIC SERVICES.....	109
3.15.1	Affected Environment.....	109
3.15.2	Impact Assessment.....	110
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.....	115
3.17.3	Mitigation Measures .....	118
3.18	TRIBAL CULTURAL RESOURCES .....	120
3.18.1	Affected Environment.....	120
3.18.2	Impact Assessment.....	121
3.18.3	Mitigation Measures .....	122
3.19	UTILITIES AND SERVICE SYSTEMS .....	123
3.19.1	Affected Environment.....	123
3.19.2	Impact Assessment.....	123
3.19.3	Mitigation Measures .....	125
3.20	WILDFIRE .....	126

3.20.1	Affected Environment.....	126
3.20.2	Impact Assessment.....	126
3.20.3	Mitigation Measures .....	127
3.21	MANDATORY FINDINGS OF SIGNIFICANCE .....	128
<b>4.0</b>	<b>LIST OF PREPARERS AND CONTRIBUTORS.....</b>	<b>131</b>
4.1	PREPARERS.....	131
4.2	CONTRIBUTORS .....	131
<b>5.0</b>	<b>REFERENCES.....</b>	<b>133</b>

## FIGURES

FIGURE 2-1	REGIONAL LOCATION.....	9
FIGURE 2-2	SITE VICINITY .....	11
FIGURE 2-3	SURROUNDING LAND USES.....	13
FIGURE 2-4	CONCEPTUAL SITE PLAN .....	17
FIGURE 3-1	BIOLOGICAL STUDY AREA.....	43
FIGURE 3-2	VEGETATION COMMUNITIES.....	45
FIGURE 3-3	JOSHUA TREE LOCATIONS.....	47
FIGURE 3-4	JURISDICTIONAL RESOURCES .....	59
FIGURE 3-5	CULTURAL RESOURCES SURVEY AREA .....	65
FIGURE 3-6	FLOOD ZONE MAP.....	89
FIGURE 3-7	SENSITIVE RECEPTORS.....	101

## TABLES

TABLE 2-1	OVERVIEW OF PROJECT CONSTRUCTION .....	16
TABLE 3-1	AMBIENT AIR QUALITY AND ATTAINMENT STATUS DESIGNATIONS.....	32
TABLE 3-2	AMBIENT AIR QUALITY AND ATTAINMENT STATUS DESIGNATIONS.....	34
TABLE 3-3	ESTIMATED CONSTRUCTION EMISSIONS .....	38
TABLE 3-4	VEGETATION COMMUNITIES WITHIN THE PROJECT SITE AND STUDY AREA .....	42
TABLE 3-5	SPECIAL-STATUS PLANT SPECIES AND THEIR POTENTIAL TO OCCUR WITHIN THE BIOLOGICAL STUDY AREA.....	50
TABLE 3-6	SPECIAL-STATUS WILDLIFE SPECIES AND THEIR POTENTIAL TO OCCUR WITHIN THE BIOLOGICAL STUDY AREA.....	54
TABLE 3-7	SUMMARY OF JURISDICTIONAL RESOURCES IN THE PROJECT SITE .....	57
TABLE 3-8	SUMMARY OF WETLAND SAMPLING POINT DATA.....	58
TABLE 3-9	KNOWN CULTURAL RESOURCES LOCATED WITHIN ONE MILE OF THE PROJECT.....	67
TABLE 3-10	GLOBAL WARMING POTENTIAL FOR VARIOUS GREENHOUSE GASES.....	77
TABLE 3-11	ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS .....	81
TABLE 3-12	LAND USE COMPATIBILITY GUIDELINES RELATED TO NOISE EXPOSURE ..	98
TABLE 3-13	NOISE LEVEL RANGES OF TYPICAL CONSTRUCTION EQUIPMENT .....	100
TABLE 3-14	TYPICAL OUTDOOR CONSTRUCTION NOISE LEVELS.....	100
TABLE 3-15	TYPICAL CONSTRUCTION NOISE LEVELS AT RECEPTORS .....	103
TABLE 3-16	IMPACT PILE DRIVER CONSTRUCTION NOISE LEVELS AT RECEPTORS.....	103
TABLE 3-17	EARLY MORNING/NIGHTTIME CONSTRUCTION NOISE LEVELS AT RECEPTORS.....	103

TABLE 3-18	MITIGATED EARLY MORNING/NIGHTTIME CONSTRUCTION NOISE LEVELS AT RECEPTORS .....	104
TABLE 3-19	VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT .....	105
TABLE 3-20	VIBRATION LEVELS AT PROPERTY LINE .....	106
TABLE 3-21	TRUCK TRIP CALCULATIONS .....	114
TABLE 3-22	PROJECT CONSTRUCTION WEEKDAY TRIP GENERATION .....	114
TABLE 3-23	EXISTING COUNTS AND SOURCES .....	115
TABLE 3-24	EXISTING (2020) CONDITIONS .....	116
TABLE 3-25	FUTURE BASELINE (2023) CONDITIONS – NO PROJECT .....	116
TABLE 3-26	FUTURE POST-PROJECT (2023) CONDITIONS .....	117
TABLE 3-27	STUDY ROADWAY SEGMENTS IMPACT ANALYSIS .....	119

## **APPENDICES**

APPENDIX A	AIR QUALITY ASSESSMENT
APPENDIX B1	BIOLOGICAL RESOURCES HABITAT ASSESSMENT
APPENDIX B2	WESTERN JOSHUA TREE CENSUS REPORT
APPENDIX B3	JURISDICTIONAL DELINEATION
APPENDIX C	CULTURAL RESOURCES ASSESSMENT
APPENDIX D1	GEOHAZARD REPORT
APPENDIX D2	GEOTECHNICAL DESIGN REPORT
APPENDIX E	GREENHOUSE GAS EMISSIONS IMPACTS ASSESSMENT
APPENDIX F	NOISE AND VIBRATION IMPACTS ASSESSMENT
APPENDIX G	TRAFFIC STUDY

## ACRONYMS AND ABBREVIATIONS

AC	alternating current
AMC	City of Adelanto Municipal Code
bgs	below ground surface
biological study area	study area
BMP(s)	Best Management Practice(s)
Board	LADWP Board Commissioners
CAA	Clean Air Act
CCAA	California Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAL FIRE	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
Cal-IPC	California Invasive Plant Council
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
CESA	California Endangered Species Act
CH <sub>4</sub>	Methane
CHP	California Highway Patrol
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalent
CPUC	California Public Utilities Commission
dB	decibels
dBA	A-weighted decibels
DC	direct current
DOC	California Department of Conservation
DTSC	California Department of Toxic Substances Control
E.O.	Executive Order
°F	Fahrenheit
FEMA	Federal Emergency Management Agency
FMMP	Farmland Mapping and Monitoring Program
GHG	greenhouse gas
GIS	geographic information system
GLO	General Land Office
H <sub>2</sub> S	Hydrogen Sulfide

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HFC	hydrofluorocarbon
HVDC	high voltage direct current
I-15	Interstate 15
IPA	Intermountain Power Agency
IPP	Intermountain Power Project
ITP	Incidental Take Permit
kV	kilovolt
LADWP	Los Angeles Department of Water and Power
L <sub>eq</sub>	Equivalent Noise Level
LOS	level of service
MDAB	Mojave Desert Air Basin
MDAQMD	Mojave Desert Air Quality Management District
mg/m <sup>3</sup>	milligrams per cubic meter
MLD	Most Likely Descendant
MMs	mitigation measures
MND	Mitigated Negative Declaration
mph	miles per hour
MPOs	Metropolitan Planning Organizations
MRZ	Mineral Resource Zones
MTCO <sub>2e</sub>	metric tons of carbon dioxide equivalent
MW	megawatt
N <sub>2</sub> O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	California Native American Heritage Commission
NLR	Noise Level Reduction
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxide
NPDES	National Pollutant Discharge Elimination System
O <sub>3</sub>	ozone
OHWM	ordinary high water mark
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
ppb	parts per billion
ppm	parts per million
PPV	peak particle velocity
POWER	POWER Engineers, Inc.
PRC	California Public Resources Code
Project	Adelanto Switching Station Expansion and New Converter Station
RMS	root mean square

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ROW(s)	right(s)-of-way
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board, Lahontan – Region 6
SBCFD	The San Bernardino County Fire Department
SCCIC	South Central Coastal Information Center
SCLA	Southern California Logistics Airport
SCS	Sustainable Communities Strategy
SF <sub>6</sub>	sulfur hexafluoride
Sheriff's Department	San Bernardino County Sheriff's Department
SIP	State Implementation Plan
SMARA	State Mining and Reclamation Act of 1975
SMBMI	San Manuel Band of Mission Indians
SO <sub>2</sub>	Sulfur dioxide
SO <sub>x</sub>	Sulfur oxide
SPCC	Spill Prevention, Control, and Countermeasure
SR-18	State Route 18
Study Area	Biological Study Area
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TACs	Toxic air contaminants
TAHA	Terry A. Hayes Associates, Inc.
µg/m <sup>3</sup>	micrograms per cubic meter
US-395	United States Highway 395
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VdB	decibel notation
VMT	Vehicle miles traveled
VOC	volatile organic compounds
WEAP	Worker Environmental Awareness Program
WECC	Western Electricity Coordinating Council
WOTUS	Waters of the United States
WRCOG	Western Riverside Council of Governments

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## 1.0 INTRODUCTION

### 1.1 Overview of the Proposed Project

The Los Angeles Department of Water and Power (LADWP) proposes the expansion of the Adelanto Switching Station and construction of a new Converter Station (Project) located at the existing Adelanto Station in the City of Adelanto in San Bernardino County. The expansion would occur within the existing approximate 315-acre fenced Adelanto property. The property and switching station are owned by LADWP and the converter station is owned by the Intermountain Power Agency (IPA), a political subdivision of the state of Utah. As part of the proposed Project, a new converter station would be built adjacent to the existing converter station in order to upgrade and replace aging infrastructure. The existing converter station would be demolished once the new converter station is operational. The switching station will also be expanded to accommodate the new converter station and associated equipment. In addition, other Project components include transmission line relocation, construction of new towers, site preparation, and demolition of existing structures. The proposed Project is needed to upgrade and replace aging infrastructure and to allow LADWP greater control in managing the energy transfer along the existing high voltage transmission lines and improve long-term reliability.

### 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 Need and Objectives

### Project Need

The expansion Project is necessary to replace aging infrastructure and improve long-term reliability and meet current and future transmission demand in the region in order to continue safe and reliable electric service to customers, and to meet contractual obligations with electrical customers. The basic objectives of the proposed Project are as follows.

### Project Objectives

- **Upgrade aging equipment:** The existing switching station would be expanded and a new converter station would be constructed in conformance with LADWP's internal design standards (based on industry best practices) as well as with Institute of Electrical and Electronic Engineers' safety standards.
- **Ensure long-term reliability of the system:** Aging facilities would be replaced and a new converter station would be built along with associated infrastructure.
- **Improve control of energy transfer management:** The expanded switching station and new converter station would allow LADWP to have greater control of the electrical transfer on the electrical system.
- **Meet electrical system demand:** Ensure that the system has adequate capacity to safely and reliably meet local and contractual system demand.

## 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 and Contributors** – 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.

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## **2.0 PROJECT DESCRIPTION**

### **2.1 Existing Conditions and Surrounding Land Uses**

#### **2.1.1 Existing Site Conditions**

The Project site is located on approximately 315 acres in the City of Adelanto, San Bernardino County, California. The Project site is completely fenced and is bounded by Raccoon Avenue to the west, Pansy Road to the south, and Daisy Road to the east. Rancho Road is located approximately 350 feet north of the Project site. Interstate 15 (I-15) is located approximately eight miles to the east of the Project site, United States Highway 395 (US-395) is approximately 1.5 miles to the east and State Route 18 (SR-18) is approximately 3.5 miles to the south (refer to Figure 2-1, Regional Location and Figure 2-2, Site Vicinity).

The Project site consists of the existing Adelanto Switching Station, owned and operated by LADWP, and the Adelanto Converter Station, owned and operated by the IPA; the Adelanto Station began operations in 1986. The Adelanto Converter Station is the southern terminus of the 2,400-megawatt (MW) Western Electricity Coordinating Council (WECC) Path 27 Intermountain Power Project (IPP) high voltage direct current (HVDC) transmission line. At the Adelanto Converter Station, power delivered over the  $\pm$  500-kilovolt (kV) HVDC Southern Transmission System from the Intermountain Converter Station in Utah is changed from direct current (DC) power to alternating current (AC) power to be transmitted to load centers throughout Southern California. The Adelanto Switching Station is the interface between the DC converter station and a regional AC transmission network that consists of five separate 500-kV transmission lines (refer to Figure 2-2).

The converter and switching station facilities are generally located in the central portion of the site. Solar panels occupy the southwestern portion of the Project site. Other facilities located on site include towers and other large-scale switching equipment, power transformers, operations and maintenance buildings, and two large converter equipment buildings. The area between the facilities and the fence line of the entire Adelanto Station is generally undeveloped except for several transmission towers and site drainage control structures consisting of earthen berms and channels. Some ancillary uses, such as materials storage, evaporation ponds, and a helipad, are also located within the Adelanto Station.

The Project site and vicinity are generally level with prominent topographic features. Topography in the vicinity gently slopes down towards the north and the Project site occurs at a low topographic point within the local vicinity. Elevation of the Project site ranges from approximately 2,950 feet above mean sea level at the northern portion of the site to 3,000 feet above mean sea level at the southern portion of the Project site.

The Project site contains two earthen berms; one berm is located on the south and western portions of the site. The second berm is located on the south and eastern portions of the site with a low flow channel. Vegetative cover in the Project site consists of sparse desert scrub, characterized by creosote bush scrub habitat and Joshua trees scattered throughout the limits of the Project site.

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

Land use and development within the Project area is governed by the City of Adelanto General Plan and Zoning. The Project site is located in a sparsely developed section of the City of Adelanto with land use and zoning designated as Public Utilities (City of Adelanto 2018).

### **2.1.3 Surrounding Land Uses**

The fenced Project site is bordered by paved roads. Surrounding land uses are zoned for Manufacturing/Industrial (City of Adelanto 2018). Adjacent uses are primarily undeveloped; vacant property and a manufacturing facility are located to the east, vacant property and a former San Bernardino County sludge composting facility are located to the south. Land uses farther to the north, across Rancho Road, include San Bernardino County Fire Station 322, the Adelanto Community Correctional Facility, and a California Department Correctional facility. Industrial facilities are also located to the northwest and west of the Project site. A few isolated residences are located within approximately 0.5 mile to the east of the Adelanto Station; otherwise, the nearest residential developments to the Project site are located over a mile to the north, southeast, and south (refer to Figure 2-3).

The City of San Bernardino is located approximately 30 miles southeast of the site; the City of Barstow is located approximately 32 miles northeast of the site; the cities of Victorville and Apple Valley are located approximately eight and 14 miles southeast from the site, respectively. Southern California Logistics Airport (SCLA) (also known as Victorville Airport), is a public airport located in the City of Victorville approximately 3.5 miles northeast of the Project site. From 1941 to 1992, prior to its civil use, the airport facility was known as George Air Force Base.

## **2.2 Proposed Project**

The Project involves the expansion of the existing switching station and construction of a new converter station and associated facilities within the existing fenced 315-acre Adelanto Station. Construction would generally occur in three phases consisting of the following major elements:

### **Phase 1**

- Remove a portion of the solar panels (northwest portion of the solar field) in order to rebuild the earthen berm located on the west and south portions of the site.
- Construction of new 500-kV AC transmission towers.
- Remove/relocate AC transmission lines onto the newly constructed towers.
- Demolition of 500-kV AC transmission towers.
- Remove and relocate the southwest and west berms.
- Construction of new internal access roads.
- Begin expansion of the switching station.
- Begin construction of the new converter station.
- Fill and grade evaporation ponds in preparation of the new converter station.
- Construction of the new entrance gate via Pansy Road.
- Construction of a new entrance gate via Raccoon Avenue.
- Demolition of the Static Var Compensator building and equipment.

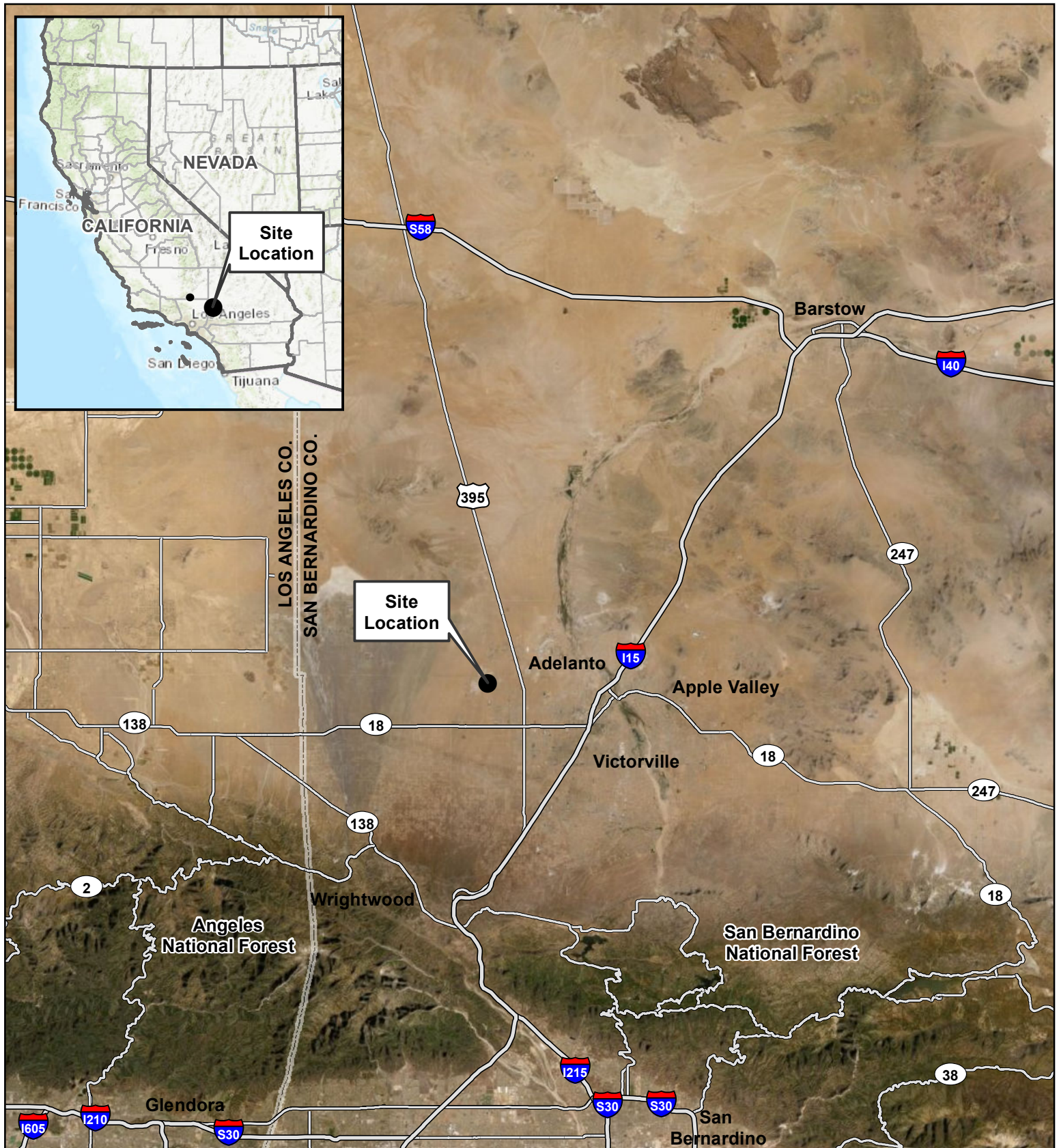
### **Phase 2**

- Complete expansion of the existing switching station.
- Complete construction of the new converter station and associated facilities.
- Construction of new  $\pm$  500-kV DC transmission tower(s) to interface the DC transmission line with the new converter station.
- Remove/relocate  $\pm$  500-kV DC transmission lines onto the newly constructed towers.
- Demolition of  $\pm$  500-kV DC transmission towers.
- Interconnection of existing and planned electrical power lines.
- Construction of new operation, administration, and maintenance building.

**Phase 3**

- Demolition of the existing converter station once the new facilities are operational.
- Relocation of the helipad.
- Reinstallation of solar panels removed in Phase 1.

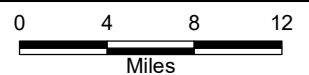
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● Site Location

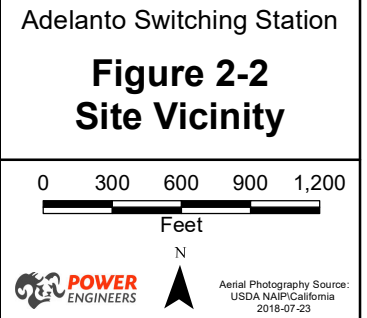
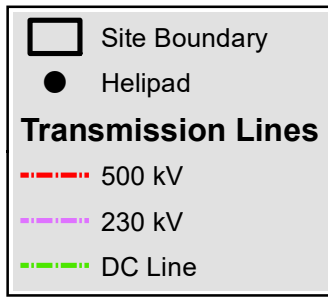
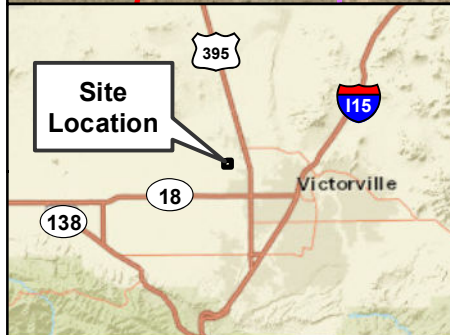
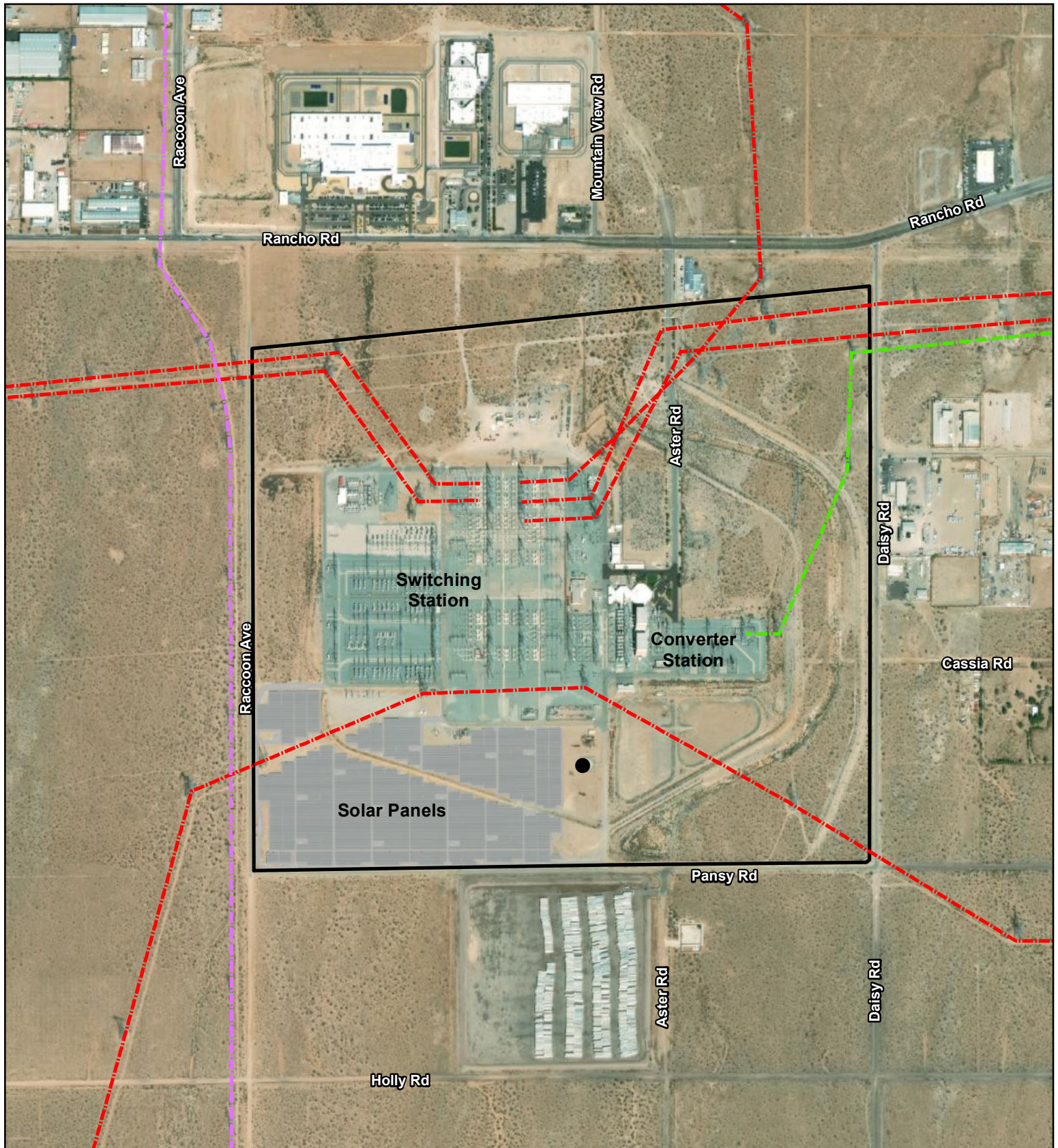
Adelanto Switching Station

**Figure 2-1  
Regional Location**

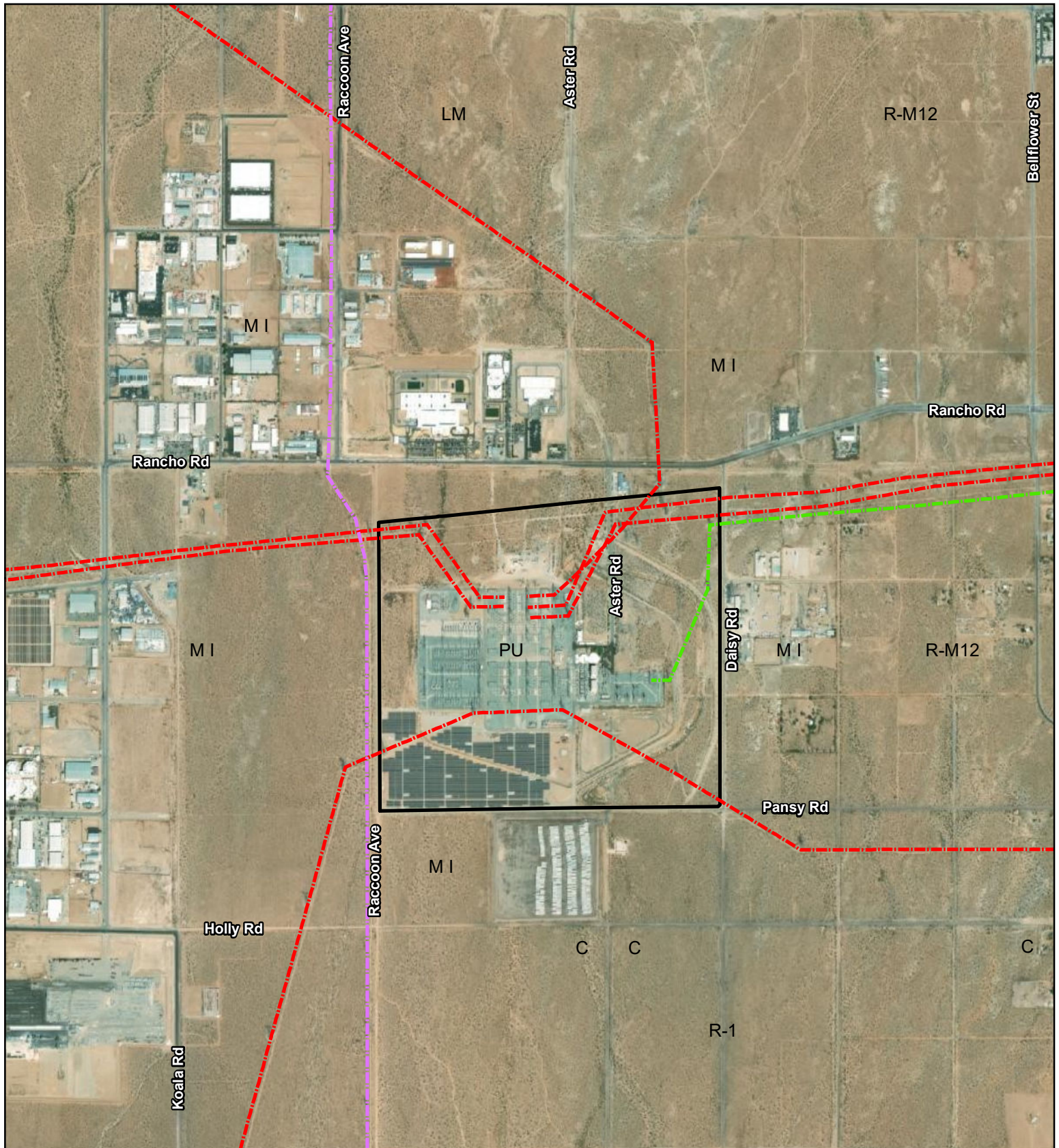


Sources: ESRI,  
HERE, Garmin, USGS,  
OpenStreetMap  
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Land Use & Zoning Designations	
Site Boundary	Commercial (C)
500 kV	Light Manufacturing (LM)
230 kV	Manufacturing/Industrial (MI)
DC Line	Public Utilities (PU)
	Medium Density Residential (R-M12)
	Single Family Residential (R-1)

Adelanto Switching Station

## Figure 2-3 Surrounding Land Uses

0 800 1,600 2,400  
Feet

N

POWER ENGINEERS

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

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## **2.3 Project Components**

### **Switching Station and Converter Station**

The existing switchyard is 1,600 feet long and 750 feet wide. The expansion of the switchyard would not increase the existing footprint as it would equip positions in areas previously developed for the switchyard. The switching station footprint would accommodate the necessary circuit positions, including steel support structures, circuit breakers, and disconnect switches. The proposed converter station, approximately 1,000 feet long and 700 feet wide, would be constructed within the Project boundary on approximately 12.5 acres (refer to Figure 2-4, Conceptual Site Plan).

### **Transmission Line**

A 500-kV AC transmission line that currently passes through the switching station would be relocated to clear the area for the switching station expansion. Installation of new towers would be necessary as part of the switching station upgrade. It is anticipated that three new lattice steel towers would be installed and three existing towers would be removed to reconfigure AC transmission lines through the Adelanto Switching Station. New towers would be constructed entirely within the fenced Project boundary.

The  $\pm$  500-kV DC transmission line that currently connects to the existing converter station would be relocated and connect to the new converter station. It is anticipated that four new lattice steel towers would be installed and two existing towers would be removed to reconfigure DC transmission lines through the Adelanto Switching Station. New towers would be constructed entirely within the fenced Project boundary.

### **Access Roads**

Site access from the regional transportation network is provided via I-15, SR-18, and US-395 (refer to Figure 2-1). Rancho Road located just north of the Project site, and Aster Road would provide local access to the site. New entrances to the site would be constructed via Pansy Road and Raccoon Avenue (refer to Figure 2-2). The new entrance gates would be set back from the street to allow for large trailer turn radius; turning radius would be determined during final design. These roadways would provide access for both construction and operation of the proposed Project. A new paved internal road would provide access to site facilities, internal road widths would range from 18 to 20 feet. Primary site access during construction and operation would be from Rancho Road and Aster Road for LADWP personnel and Pansy Road for contractor personnel.

## **2.4 Project Construction**

The proposed Project would be constructed in phases with the start of construction anticipated in spring of 2021. Decommissioning of the existing converter station is not anticipated to begin until the third quarter of 2027. Table 2-1 presents an overview of the approximate start and end dates for construction of Project components, as well as a brief description of the activities involved. Construction of the proposed Project is anticipated to take approximately seven years to complete. Project construction activities would typically occur Monday through Saturday, from 7:00 a.m. to 6:00 p.m. It is not anticipated that nighttime, Sunday or holiday work would occur; however, the work schedule may be modified throughout the year based on electrical system conditions and 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).

**TABLE 2-1 OVERVIEW OF PROJECT CONSTRUCTION**

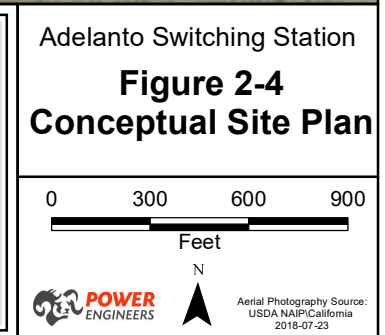
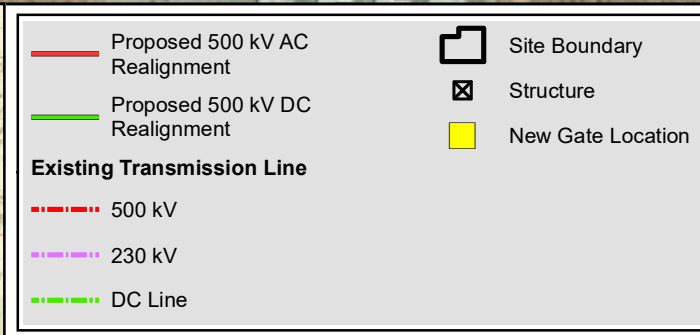
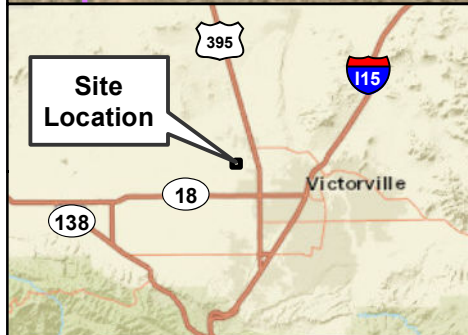
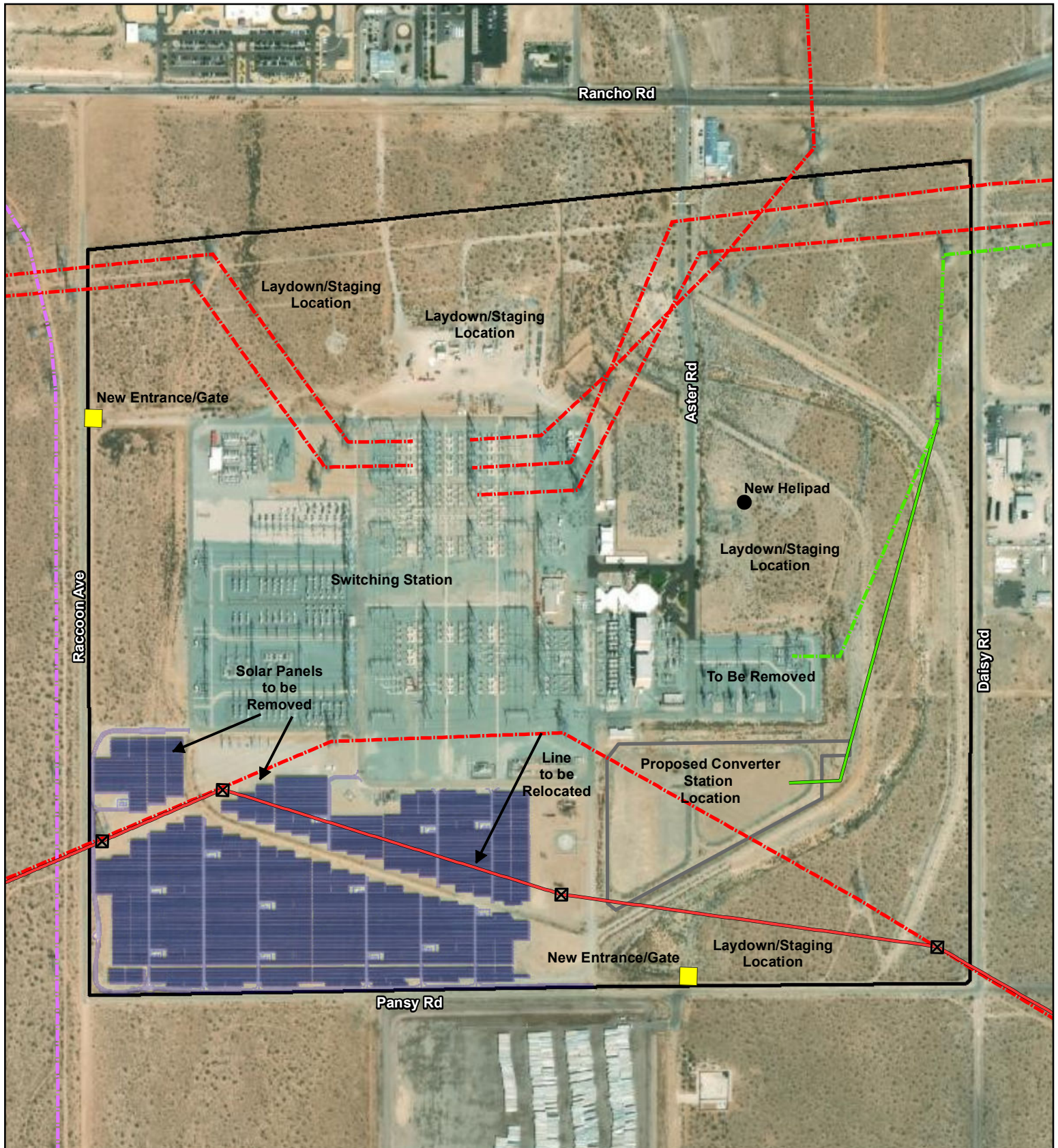
PROJECT COMPONENT	APPROXIMATE START DATE	APPROXIMATE END DATE	ANTICIPATED CONSTRUCTION ACTIVITIES
Site Preparation	2 <sup>nd</sup> Quarter 2021	2 <sup>nd</sup> Quarter 2023	Mobilization, grading, clearing/grubbing, excavation, placement and compaction of engineered fill.
AC Transmission Line Relocation	2 <sup>nd</sup> Quarter 2021	1 <sup>st</sup> Quarter 2022	Remove and relocated existing AC transmission lines.
Switching Station Expansion	1 <sup>st</sup> Quarter 2023	4 <sup>th</sup> Quarter 2024	General Construction: pier drilling, trenching, excavation, foundations Electrical Construction: transmission line and switchyard structures.
Converter Station Construction	2 <sup>nd</sup> Quarter 2023	2 <sup>nd</sup> Quarter 2026	Earthwork and utilities, mechanical and electrical, pile driving, conduit and grounding, structural steel erection.
DC Transmission Line Relocation	2 <sup>nd</sup> Quarter 2025	1 <sup>st</sup> Quarter 2026	Remove and relocated existing DC transmission line.
Decommissioning	3 <sup>rd</sup> Quarter 2027	4 <sup>th</sup> Quarter 2029	Remove existing converter station and waste disposal.

The number of workers on the Project site and the number of equipment and vehicles in use will vary throughout the construction period, as several activities for different components would occur simultaneously at various stages throughout construction. During peak construction activities, up to 275 workers would be on-site. During switchyard and converter station construction, the average daily crew size would be approximately 140 workers. During periods where less overlap occurs, average daily crew size would be approximately 40 workers. 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.

The first phase would consist of removing the northwest portion of the solar field in order to rebuild the earthen berm located on the west and south portions of the site, construction of new internal access roads, and relocation of the Victorville-Rinaldi 500-kV line. Expansion of the switching station and construction of the converter station would begin in Phase 1. During Phase 2, construction of the switching station, relocation of the Intermountain-Adelanto 500-kV line, and converter station would be completed. The final phase would consist of demolition of the existing converter station once the new facilities are operational. The timing of implementation of each phase would be determined by LADWP.

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 (as necessary), and creating laydown and material storage areas.

Temporary construction staging and material laydown areas would occur entirely within the fenced 315-acre Project boundary and would be near the area(s) of active construction. Construction laydown/staging area(s) would be stabilized with crushed-rock aggregate where needed. The planned laydown/material staging areas on-site would facilitate the construction process; these areas are shown on Figure 2-4. 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, workshops, and temporary lighting.



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Site preparation work for the Project would include clearing and grubbing, excavation, placement and compaction of engineered fill to provide stabilized subgrade for switching station and converter 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). The Project site would 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, bob cat, scrapers, sheep's foot compactors, front end loaders, concrete trucks and pumps, 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. Native vegetation would be re-established where possible in the laydown and material staging areas, in accordance with fire prevention vegetation control.

A Worker Environmental Awareness Program (WEAP) would be prepared and presented to all construction crews and contractors prior to starting work on the Project. The WEAP training would include, but is not limited to, a review of the special-status species and other sensitive resources that could occur on the Project site, the locations of any existing sensitive resources, their legal status and protections, and measures to be implemented for avoidance of these sensitive resources.

In addition, a Health and Safety Plan would be prepared and made available once a contractor is procured for the construction of the proposed Project. The plan would include, but may not be limited to, information on the appropriate personal protective equipment to be used during construction. Some portions of the site contain high voltage lines and conductors, which present a safety hazard. Construction crews and contractors would be made aware of these hazard areas during the construction tailgate meeting prior to starting work on the Project site.

## **2.5 Project Operations and Maintenance**

Existing operation and maintenance crews would operate and maintain the expanded switching station, new converter station, and the transmission lines as part of their current operation and maintenance activities.

Routine inspection of transmission lines, substations, instrumentation and controls, and support systems is critical for safe, efficient, and economical operation. Early identification of equipment needing maintenance, repair, or replacement would assure continued safe operation of the Project. Existing operation and maintenance crews would access the switching station and converter station site and transmission lines via internal roads by vehicle and on foot.

Routine maintenance is expected to occur during daytime hours. Maintenance activities would consist of the following activities, but would not be limited to, regular inspections of equipment and electrical lines, support systems and control systems, weed abatement, and responding to issues as they arise.

## 2.6 Permits and Approvals

Although LADWP is exempt from obtaining approvals for Project construction from local agencies, LADWP routinely coordinates with local agencies during construction for the following:

- Grading permits and drainage control
- Water Use permit
- Roadway encroachment permits for work done in City of Adelanto rights-of-way (ROWs)
- Native vegetation removal permit (Joshua trees)
- Observance of local truck routes
- Water Quality Management Plan

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 (USFWS)

### State Agencies

- California Department of Fish and Wildlife (CDFW)
- California Native American Heritage Commission (NAHC)
- California Department of Transportation (Caltrans), District 8

### Regional Agencies

- Regional Water Quality Control Board (RWQCB), Lahontan – Region 6
- Mojave Desert Air Quality Management District (MDAQMD)

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

- Adoption of the MND by the Los Angeles Department of Water and Power Board of Commissioners (Board)
- Approval of the proposed Project by the Board

### Local Agencies

City of Adelanto

### **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:**

Adelanto Switching Station Expansion Project

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

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

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

Eduardo Cuevas  
Environmental Engineering Associate  
Environmental Planning and Assessment  
Los Angeles Department of Water and Power  
(213) 367-3553

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

The Project site is located on approximately 315 acres in the City of Adelanto, San Bernardino County, California. The Project site is completely fenced and is bounded by Raccoon Avenue to the west, Pansy Road to the south and Daisy Road to the east. Rancho Road is located approximately 350 feet north of the Project site. I-15 is located approximately eight miles to the east of the Project site, US-395 is approximately 1.5 miles to the east and SR-18 is approximately 3.5 miles to the south.

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

Same as Lead Agency

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

The Project site is located in a sparsely developed section of the City of Adelanto with land use and zoning designated as Public Utilities.

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

Public Utilities

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

LADWP proposes the expansion of the Adelanto Switching Station. The expansion would occur within the existing approximate 315-acre fenced Adelanto property. As part of the proposed Project, a new converter station would be built adjacent to the existing converter station in order to upgrade and replace aging infrastructure. The switching station would be expanded to accommodate the new converter station and associated equipment. In addition, other Project components include transmission line relocations, construction of new towers, site preparation, and demolition of existing structures. The proposed Project is needed to upgrade and replace aging infrastructure and to allow LADWP greater control in managing the energy transfer along the existing high voltage transmission lines and improve long-term reliability.

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

The Project site is bordered by paved roads. Adjacent uses are primarily undeveloped; vacant property and a manufacturing facility are located to the east, and vacant property and a former San Bernardino County sludge composting facility is located to the south. Land uses farther to the north, across Rancho Road, include San Bernardino County Fire Station 322, the Adelanto Community Correctional Facility, and a California Department Correctional facility. Industrial facilities are also located to the northwest and west of the Project site. A few isolated residences are located within approximately 0.5 mile to the east of the Adelanto Station; otherwise, the nearest residential developments to the Project site are located over a mile to the north, southeast, and south.

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

- United States Fish and Wildlife Service (USFWS)
- California Department of Fish and Wildlife (CDFW)
- California Native American Heritage Commission (NAHC)
- California Department of Transportation (Caltrans), District 8
- Regional Water Quality Control Board (RWQCB), Lahontan – Region 6
- Mojave Desert Air Quality Management District (MDAQMD)

## **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.

*Nadia Parker* for Charles C. Holloway, Manager of Env.  
Planning and Assessment  
Signature

2-2-21

Date

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### 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 site is located in the southwestern portion of the Mojave Desert in the Victor Valley High Desert region of San Bernardino County. The Project site is completely fenced and is bounded by Raccoon Avenue to the west, Pansy Road to the south and Daisy Road to the east. Rancho Road is located approximately 350 feet north of the Project site. I-15 is located approximately eight miles to the east of the Project site, US-395 is approximately 1.5 miles to the east and SR-18 is approximately 3.5 miles to the south (refer to Figure 2-1, Regional Location and Figure 2-2, Vicinity Map).

The dominant features in the Project area that are considered to be viewsheds include the San Bernardino and San Gabriel Mountains, located approximately 20 miles southeast and southwest, respectively of the site. South-facing views of the San Bernardino Mountains and the San Gabriel Mountains are limited from the Project site and from the adjacent roadways due to their distance from the Project site. The *City of Adelanto 2035 Comprehensive Sustainable Plan* (City of Adelanto 2014) identifies prominent viewsheds within the City. These viewsheds are comprised primarily of undeveloped desert land, the Mojave River and distant views of the mountains.

The approximate 315-acre Project site is entirely fenced and consists of the existing Adelanto Switching Station and the Adelanto Converter Station. The converter and switching station facilities are generally located in the central portion of the site. Solar panels occupy the southwestern portion of the Project site. Other facilities located on-site include towers and other large-scale switching equipment, power transformers, operations and maintenance buildings, and two large converter equipment buildings. The area between the facilities and the fence line of the entire Adelanto Station is generally undeveloped except for several transmission towers and site drainage control structures consisting of earthen berms and

channels. Some ancillary uses, such as materials storage, evaporation ponds, and a helipad, are also located within the Adelanto Station.

The Project site and vicinity are generally level. Topography in the vicinity gently slopes down towards the north and the Project site occurs at a low topographic point within the local vicinity. Elevation of the Project site ranges from approximately 2,950 feet above mean sea level at the northern portion of the site to 3,000 feet above mean sea level at the southern portion of the Project site.

The Project site contains two earthen berms; one berm is located on the south and western portions of the site. The second berm is located on the south and eastern portions of the site with a low flow channel. Vegetative cover in the Project site consists of sparse desert scrub, characterized by creosote bush scrub habitat and Joshua trees scattered throughout the limits of the Project site.

### **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 the Project Vicinity (Caltrans 2020). The Project site is not located within or near the viewshed of any eligible scenic highways. In addition, there are no Designated State Scenic Highways located within the City of Adelanto. There are neither rock outcroppings nor historic buildings located on-site. Joshua trees are located within the Project site. This vegetation community was very disturbed by the presence of Sahara mustard, which dominated the understory. Any tree relocation would adhere to the regulations listed within Chapter 17.57 – Biotic Resources of the City of Adelanto's Municipal Code and San Bernardino County Joshua tree ordinance (Title 8, Division 8, Section 88.01.050 of the San Bernardino County Code). Coordination with California Department of Fish and Wildlife (CDFW) would also be required. Impacts related to Joshua trees are discussed further in Checklist Response 3.4.2 (a and e).

Because the Project site is not located with a state scenic highway, 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 consists of the existing Adelanto switching station and converter station, undeveloped and vacant land, disturbed lands, industrial uses, rural residential uses, and open space with desert vegetation. Project improvements would be entirely contained within the existing approximate 315-acre Adelanto switching station and DC

converter station, the perimeter of which is entirely fenced. The station is located in a sparsely developed section of Adelanto zoned for manufacturing and industrial use. The station property is surrounded by paved roads, which receive minimal traffic on the west, south, and east, and light traffic on the north. Based on the scale of the Project facilities, their location within an existing switching/converter station, the minimal views of the Project site that would generally be available, and the general setting and land use designation in the Project vicinity, the Project would not degrade the existing visual character or quality of the site. Impacts 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.** Project construction activities would typically occur Monday through Saturday, from 7:00 a.m. to 6:00 p.m. It is not anticipated that nighttime, Sunday or holiday work would occur; however, the work schedule may be modified throughout the year based on electrical system conditions and 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). In the event that nighttime construction becomes necessary, construction crews would use 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. Therefore, impacts related to nightlight for construction purposes would be less than significant.

Project construction is planned to 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 approximate 315-acre fenced Project site. 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, construction-related glare impacts would be less than significant.

Night lighting would be installed for safety, security, and maintenance purposes. The level of lighting that would be required would be no greater than currently utilized at the station. Security lighting would also be directed downward and shielded to focus on the desired areas only and to minimize light spillage off-site.

Based on the location of the Project in relation to adjacent uses and more distant uses, the proposed Project would not create new sources of substantial light or glare that would result in a significant impact relative to day or nighttime views in the area.

### **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 site and surrounding area are located in a sparsely developed section of the City of Adelanto. The site is designated as public utilities and consist of electrical switching station, converter station, and associated facilities. The properties immediately surrounding the site are zoned for manufacturing and industrial uses and consist of undeveloped/vacant land or manufacturing and industrial uses. There are no agricultural and forestry resources located on or proximate to the Project site.

### 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.** The California Department of Conservation's Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data used for analyzing impacts on California's agricultural resources. The Project site does not contain areas classified as Prime Farmland, Unique Farmland, Farmland of Statewide Importance, or Farmland of Local Importance as mapped by the FMMP (California Department of Conservation [DOC] 2020). No impact would occur and no mitigation is required.

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

**No Impact.** The Project site is designated as public utilities and the immediate surrounding land uses are zoned for manufacturing and industrial use. There are no agricultural uses on the site and there are no agricultural land uses or property under Williamson Act contract on or adjacent to the site. The proposed Project would not conflict with existing zoning for agricultural use of a Williamson Act 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); therefore, the proposed Project would not conflict with existing zoning for forest land, timberland, or timberland production. No impact 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 consists of an electrical switching station, converter station, and associated facilities. There are no areas zoned as forest land or timberland within or adjacent to the Project boundaries. Implementation of the proposed Project would not result in the loss of forest land or conversion of forest land to non-forest use; therefore, no impact would occur and no mitigation is required.

- 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.** Project improvements would occur within the 315-acre fenced site. The Project site does not include, nor is it proximate to, agricultural uses or forest land. Therefore, the Project would not directly or indirectly result in the conversion of farmland to non-agricultural use or result in the conversion of forest land to non-forest uses. 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 technical memorandum, *Air Quality Assessment for the Adelanto Switching Station Expansion Project*, prepared by Terry A. Hayes Associates, Inc. ([TAHA] 2021a) provided in Appendix A.

#### 3.3.1 Affected Environment and Regulatory Framework

##### Air Quality Topical Information

Air quality is a general characterization of how levels of air pollution and other atmospheric conditions can affect public health and the environment. Through decades of rigorous scientific research, the United States Environmental Protection Agency (USEPA) identified seven specific air pollutants that are environmentally prevalent and produced by human activities to be of concern with respect to health and welfare of the public.

These specific pollutants, known as criteria air pollutants, are pollutants for which the federal and State governments have established ambient air quality standards—or criteria—for outdoor concentrations to protect public health. These pollutants are common byproducts of human activities and have been documented through scientific research to cause various adverse health effect outcomes. The federal ambient concentration criteria are known as the National Ambient Air Quality Standards (NAAQS), and the California ambient concentration criteria are referred to as the California Ambient Air Quality Standards (CAAQS). The criteria air pollutants regulated at the federal jurisdiction include ground-level ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), respirable particulate matter ten microns or less in diameter (PM<sub>10</sub>), fine particulate matter 2.5 microns or less in diameter (PM<sub>2.5</sub>), and lead. In addition to the federal criteria pollutants, the State regulates visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride.

In addition to the criteria pollutants, other classes of air pollutants have been identified, studied, and determined to cause adverse health effects. Toxic air contaminants (TACs) are generally defined as those contaminants that are known or suspected to cause serious health problems, but do not have a corresponding ambient air quality standard. Some TACs are also defined as an air pollutant that may increase a person's risk of developing cancer and/or other serious health effects; however, the emission of a toxic chemical does not automatically create a health hazard. Carcinogenic risks resulting from TAC exposure, for example, are typically evaluated over an exposure period of decades. Air toxics include, but are not limited to, diesel PM, metals, gases absorbed by particles, and certain vapors from fuels and other sources. Sources of substantial TAC emissions typically include large stationary industrial facilities such as petroleum refineries and locations of concentrated mobile sources such as distribution centers and heavily trafficked highways that are used by a large number of diesel-fueled vehicles.

## **Regulatory Framework**

### ***Federal***

The Clean Air Act (CAA) governs air quality at the national level and the USEPA is responsible for administering the provisions in the CAA. The USEPA promulgates the NAAQS to set protective limits on concentrations of air pollutants in ambient air. Enforcement of the NAAQS is required under the 1977 CAA and subsequent amendments. The CAA grants the USEPA authority to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and pending attainment) for each criteria pollutant based on whether ambient concentrations have been consistently below the corresponding NAAQS on a regional scale. The USEPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards through emissions control strategies. The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution at the state and regional scale, using a combination of performance standards and market-based programs within the timeframe identified in the SIP. The proposed Project is located in the San Bernardino County portion of the Mojave Desert Air Basin (MDAB) SIP area (northwest region of San Bernardino County). Table 3-1 presents the NAAQS for each criteria pollutant along with the averaging periods and the attainment statuses of the San Bernardino County portion of the MDAB.

### ***State***

Air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). The CCAA is administered by the California Air Resources Board (CARB) at the State level and by the air quality management districts at the regional and local levels. The CCAA requires all areas of the State to achieve and maintain the CAAQS by the earliest feasible date, which is determined in the most recent SIP based on existing emissions and reasonably foreseeable control measures that will be implemented in the future. The CAAQS are also summarized in Table 3-1, which also presents the attainment status designations for MDAB under the State's criteria.

The CARB's statewide comprehensive air toxics program was established in the early 1980s. The Toxic Air Contaminant Identification and Control Act created California's program to reduce exposure to air toxics. Under the Toxic Air Contaminant Identification and Control Act, the CARB is required to prioritize the identification and control of air toxics emissions. In selecting substances for review, the CARB must consider criteria relating to the risk of harm to public health, such as amount or potential amount of emissions, manner of and exposure to usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community.

**TABLE 3-1 AMBIENT AIR QUALITY AND ATTAINMENT STATUS DESIGNATIONS**

Pollutant	Averaging Time	California Standards		Federal Standards	
		Standards (CAAQS)	Attainment Status	Standards (NAAQS)	Attainment Status
Ozone (O <sub>3</sub> )	1 Hour	0.09 ppm (180 µg/m <sup>3</sup> )	Non-attainment	-	Non-attainment*
	8 Hour	0.070 ppm (137 µg/m <sup>3</sup> )		0.070 ppm (137 µg/m <sup>3</sup> )	
Respirable Particulate Matter (PM <sub>10</sub> )	24 Hour	50 µg/m <sup>3</sup>	Non-attainment	150 µg/m <sup>3</sup>	Non-attainment***
	Annual Arithmetic Mean	20 µg/m <sup>3</sup>		-	
Fine Particulate Matter (PM <sub>2.5</sub> )	24 Hour	-	-	35 µg/m <sup>3</sup>	Unclassified/Attainment
	Annual Arithmetic Mean	12 µg/m <sup>3</sup>	Non-attainment*	12 µg/m <sup>3</sup>	
Carbon Monoxide (CO)	8 Hour	9.0 ppm (10 mg/m <sup>3</sup> )	Attainment	9 ppm (10 mg/m <sup>3</sup> )	Unclassified/Attainment
	1 Hour	20 ppm (23 mg/m <sup>3</sup> )		35 ppm (40 mg/m <sup>3</sup> )	
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Arithmetic Mean	0.030 ppb (57 µg/m <sup>3</sup> )	Attainment	0.053 ppm (100 µg/m <sup>3</sup> )	Unclassified/Attainment
	1 Hour	0.18 ppm (330 µg/m <sup>3</sup> )		100 ppm (196 µg/m <sup>3</sup> )	
Sulfur Dioxide (SO <sub>2</sub> )	Annual Arithmetic Mean	-	Attainment	0.030 ppm (80 µg/m <sup>3</sup> )	Unclassified/Attainment
	24 Hour	0.04 ppm (105 µg/m <sup>3</sup> )		0.14 ppm (365 µg/m <sup>3</sup> )	
	3 Hour	-		0.5 ppm (1300 µg/m <sup>3</sup> )	
	1 Hour	0.25 ppm (655 µg/m <sup>3</sup> )		75 ppb (196 µg/m <sup>3</sup> )	
Lead (Pb)	30 Day Average	1.5 µg/m <sup>3</sup>	Attainment	-	Unclassified/Attainment
	Calendar Quarter	-		1.5 µg/m <sup>3</sup>	
	3 Month Average	-		0.15 µg/m <sup>3</sup>	
Visibility Reducing Particles	8 Hour	Extinction Coefficient of 0.24 per kilometer****	Unclassified	No Federal Standards	
Sulfates	24 Hour	25 µg/m <sup>3</sup>	Attainment		
Hydrogen Sulfide (H <sub>2</sub> S)	1 Hour	0.03 ppm (42 µg/m <sup>3</sup> )	Non-attainment**		
Vinyl Chloride	24 Hour	0.01 ppm (26 µg/m <sup>3</sup> )	Unclassified		

Source: TAHA 2021a.

CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard; ppm = parts per million;

µg/m<sup>3</sup> = micrograms per cubic meter; mg/m<sup>3</sup> = milligrams per cubic meter; ppm = parts per million; ppb = parts per billion

\* Southwest corner of desert portion of San Bernardino County only

\*\*Searles Valley (northwest corner of San Bernardino County) only

\*\*\*San Bernardino County portion only

\*\*\*\*Visibility of 10 miles or more due to particles when relative humidity is less than 70 percent

## ***Regional***

California Assembly Bill 2522 established the Mojave Desert Air Quality Management District (MDAQMD) in 1992. The MDAQMD is geographically the second largest of the State's 35 air districts, encompassing over 22,000 square miles over the desert portion of San Bernardino County and the far eastern end of Riverside County. The primary responsibility of the MDAQMD is regulating stationary sources of air pollution located within its jurisdictional boundaries. The MDAQMD has adopted a variety of attainment plans for a variety of nonattainment pollutants. The pollutants Nitrogen Oxide (NO<sub>x</sub>) and volatile organic compounds (VOC) are targeted for attainment by the Federal 8-Hour Ozone Attainment Plan, the 2004 Ozone Attainment Plan, the Triennial Revision to the 1991 Air Quality Attainment Plan, the Post 1996 Attainment Demonstration and Reasonable Further Progress Plan, the Reasonable Further Progress Rate-of-Progress Plan, and the 1991 Air Quality Attainment Plan. The southwest corner of the desert portion of San Bernardino County is designated as a nonattainment area for the 8-hour ozone NAAQS and San Bernardino County is designated as nonattainment for PM<sub>10</sub>.

In addition to the plans listed above, the MDAQMD maintains a set of rules and regulations to improve and maintain air quality in the MDAB. The proposed Project proponent shall comply with all applicable MDAQMD Rules and Regulations pertaining to construction activities, including, but not limited to:

- Rule 402 (Nuisance) states, "A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule shall not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals."
- Rule 403 (Fugitive Dust) controls fugitive dust through various requirements including, but not limited to, limiting emissions of particulate matter to not exceed 100 micrograms per cubic meter (µg/m<sup>3</sup>), limiting the emissions of fugitive dust so that dust does not remain visible in the atmosphere beyond the property line of the emission source, requiring every reasonable precaution to prevent visible particulate matter from being deposited upon public roadways as a direct result of project operations, use of periodic watering for short-term stabilization of Disturbed Surface Area, applying soil binders to uncovered areas, utilizing a wheel washing system before vehicles exit the project site, and limiting vehicle speeds on unpaved roads. Rule 403 also prohibits the release of fugitive dust emissions from any active operation, open storage piles, or disturbed surface area beyond the property line of the emission source and prohibits particulate matter deposits on public roadways.

Under CEQA, MDAQMD is an expert commenting agency on air quality and related matters within its jurisdiction and those impacting its jurisdiction. MDAQMD has dedicated assets to reviewing projects to ensure that they will not: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any federal attainment plan. Published by the District in 2016, CEQA And Federal Conformity Guidelines are intended to assist persons preparing environmental analysis or review documents for any project within the jurisdiction of the MDAQMD by providing background information and guidance on the preferred analysis approach.

The MDAQMD has established regional thresholds of significance for emissions sources subject to CEQA. Implementation of the proposed Project would generate pollutant emissions from sources involved in construction activities over the seven-year construction period. Due to the length of

construction activities and the fact that future operations would not substantially change from existing conditions due to introduction of a new permanent source of emissions, the air quality assessment focuses on annual emissions that would be generated during construction of the proposed Project. Table 3-2 presents MDAQMD's air quality significance thresholds - annual emissions. The MDAQMD Guidelines also includes daily significance thresholds that are derived by averaging the annual thresholds on a daily basis; however, the daily thresholds were designed to assess multi-phased projects with distinct construction and operational phases occurring within the same year, rather than individual activities within the construction schedule. The air quality assessment focused only on construction emissions and therefore did not apply the daily thresholds.

**TABLE 3-2 AMBIENT AIR QUALITY AND ATTAINMENT STATUS DESIGNATIONS**

CRITERIA POLLUTANT	ANNUAL THRESHOLD (TONS)
Carbon Monoxide (CO)	100
Oxides of Nitrogen (NOx)	25
Volatile Organic Compounds (VOC)	25
Oxides of Sulfur (SOx)	25
Particulate Matter (PM <sub>10</sub> )	15
Particulate Matter (PM <sub>2.5</sub> )	12
Hydrogen Sulfide (H <sub>2</sub> S)	10
Lead (Pb)	0.6

Source: TAHA 2021a.

### **Existing Setting**

The MDAB is an assemblage of mountain ranges interspersed with long broad valleys that often contain dry lakes. Many of the lower mountains which dot the vast terrain rise from 1,000 to 4,000 feet above the valley floor. Prevailing winds are out of the west and southwest. These prevailing winds are due to the proximity of the MDAB to coastal and central regions and the blocking nature of the Sierra Nevada mountains to the north; air masses pushed onshore in southern California by differential heating are channeled through the MDAB. The MDAB is separated from the southern California coastal and central California valley regions by mountains (highest elevation approximately 10,000 feet), whose passes form the main channels for these air masses. The Antelope Valley is bordered in the northwest by the Tehachapi Mountains, separated from the Sierra Nevada mountains in the north by the Tehachapi Pass (3,800 feet elevation). The Antelope Valley is bordered in the south by the San Gabriel Mountains, bisected by Soledad Canyon (3,300 feet). The Mojave Desert is bordered in the southwest by the San Bernardino Mountains, separated from the San Gabriel Mountains by the Cajon Pass (4,200 feet). A lesser channel lies between the San Bernardino Mountains and the Little San Bernardino Mountains (the Morongo Valley).

The Palo Verde Valley portion of the Mojave Desert lies in the low desert, at the eastern end of a series of valleys (notably the Coachella Valley) whose primary channel is the San Geronio Pass (2,300 feet) between the San Bernardino and San Jacinto Mountains. During the summer, the MDAB is generally influenced by a Pacific Subtropical High cell that sits off the coast, inhibiting cloud formation and encouraging daytime solar heating. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time they reach the desert. Most desert moisture arrives from infrequent warm, moist and unstable air masses from the south. The MDAB averages between three and seven inches of precipitation per year (from 16 to 30 days with at

least 0.01 inches of precipitation). The MDAB is classified as a dry-hot desert climate, with portions classified as dry-very hot desert, to indicate at least three months of high desert temperatures.

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. The CARB has identified the following groups who are most likely to experience adverse health effects due to exposure to air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to the MDAQMD CEQA Guidelines, land uses that constitute sensitive receptors include residences, schools, daycare centers, playgrounds and medical facilities to be sensitive receptor land uses.

The proposed Project is located in a rural, desert environment outside of central Adelanto. Residences are scattered in proximity to the Project area, including a single-family residence located approximately 1,000 feet east of the construction laydown area. Adelanto High School is located approximately 4,700 feet south of the Project site. Concentrations of dust and other air pollutants dissipate with distance from emissions sources. At a distance of greater than 1,000 feet from the sources of emissions, pollutant concentrations are typically reduced by up to 80 percent relative to concentrations within 100 feet. The distance between the sources of emissions and the closest receptors would prevent the occurrence of substantial pollutant concentrations reaching sensitive uses.

### **3.3.2 Methodology**

The air quality assessment conducted for the proposed Project is consistent with the methods described in the MDAQMD *CEQA And Federal Conformity Guidelines*. The guidelines recommend the use of the California Emissions Estimator Model (CalEEMod, version 2016.3.2) as a tool for quantifying emissions of air pollutants that will be generated by development projects under CEQA. CalEEMod is the preferred regulatory model for estimating air pollutant emissions from construction and operation of land use development projects in California. The model was developed using a compilation of robust land use survey data and CARB off-road and on-road mobile emission source inventories. CalEEMod relies on project-specific information and regional default parameters derived from the survey data and CARB models to characterize air pollutant emissions that would be generated by construction and operation of CEQA projects. As mentioned previously, the air quality assessment focused on emissions of air pollutants that would be generated over the approximately seven years of construction. CalEEMod produces estimated daily and annual emissions of VOC, NO<sub>x</sub>, CO, sulfur oxide (SO<sub>x</sub>), PM<sub>10</sub>, and PM<sub>2.5</sub> for construction projects based on the project location, construction schedule, and equipment and vehicle inventories. The air quality assessment produced and analyzed estimates of annual emissions in accordance with the MDAQMD Guidelines.

Construction of the proposed Project is anticipated to begin in spring of 2021 and comprises several general components and stages. Decommissioning of the existing substation facilities is not anticipated to begin until the third quarter of 2027. Table 2-1 in Section 2.4 of this Initial Study/MND presents an overview of the approximate start and end dates for each general component of proposed Project construction, as well as a brief description of the activities involved. The number of workers on the Project site and the number of equipment and vehicles in use will vary throughout the construction period, as several activities for different components will be occurring simultaneously at various stages throughout construction. During peak construction activities, up to 275 workers would be on-site. During switchyard and converter station construction, the average daily crew size would be approximately 140 workers. During periods where less overlap occurs, average daily crew size would be approximately 40 workers. Construction crews would implement carpooling to reduce vehicle trips to the Project site whenever possible.

The air quality emissions analysis quantified annual air pollutant emissions that would be generated during each year of construction using the schedule presented in Table 2-1 and equipment and vehicle inventories developed by LADWP for each of the components and activities. Sources of air pollutant emissions involved in construction activities would include combustion engine exhaust emissions from off-road construction equipment and on- and off-road vehicle travel and fugitive dust produced by ground disturbance, material loading, and vehicle travel. Vehicle trips during proposed Project construction would be associated with crews commuting to and from the site as well as on-site vehicle travel, which would comprise pickup trucks, dump trucks, buggies, flatbed trucks, and concrete trucks. On-site dumping trips were assumed to be approximately one-half mile in length on average based on the site configuration. The air quality emissions analysis accounted for on-site light- and heavy-duty truck trips using vehicle fleet information provided by LADWP.

The decommissioning phase of the proposed Project would generate approximately 21,805 cubic yards of waste material that would be disposed of off-site. Preliminary information determined that possible disposal locations could be located up to 40 miles away at the Mid-Valley Landfill located in Rialto. Hauling trips during the decommissioning phase were assumed to be 40 miles in length. Construction activities would disturb approximately 38 acres of the Project site. There are five planned laydown/material staging area on-site to facilitate the construction process. Best management practices for fugitive dust control would include water trucks to dampen disturbed areas and displaced materials, gravel on unpaved areas, and limiting vehicle speeds to 15 miles per hour when traveling unpaved surfaces. Native vegetation would be re-established where possible in the laydown and material staging areas. The detailed CalEEMod output files disclosing estimated air pollutant emissions can be found in the Appendix to the *Air Quality Impacts Assessment* technical memorandum (Appendix A of this Initial Study/MND).

### **3.3.3 Impact Assessment**

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

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

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

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

The applicable air quality plans for the proposed Project are prepared by MDAQMD as plans for improving air quality in the region. The MDAQMD has adopted several attainment plans for the pollutants that are in nonattainment in the region, such as the 2008 Federal 8-Hour Ozone Attainment Plan, 2004 State and Federal Ozone Attainment Plan, and the 1995 Federal PM<sub>10</sub> Attainment Plan. Consistency with the air quality plans is determined through evaluation of project-related air quality impacts and demonstration that project-related emissions would not increase the frequency or severity of existing violations or contribute to a new violation of the ambient air quality standards. As explained in the MDAQMD CEQA Guidelines, consistency with the MDAQMD attainment plans is also determined through consistency with the existing land use plan.

The proposed Project would involve construction-related activities, which are short term and temporary in nature. Assumptions surrounding off-road equipment emissions in the air quality plans were developed based on hours of activity and equipment population reported to CARB for rule compliance. The proposed Project is a typical utility infrastructure construction project and would be consistent with the assumptions regarding equipment activity and emissions in the air quality plans. Construction of the proposed Project would not produce a disproportionate magnitude of emissions and would not have the potential to delay attainment of the air quality standards on the schedules set forth by the air quality plans. Upgrades to the existing facility would be consistent with the existing land use and would not interfere

with future land uses proposed for the Project area. Implementation of the proposed Project would create temporary construction employment opportunities that would not induce substantial population growth to the Project area, and therefore would not significantly affect long-term growth projections for the region. As such, construction of the proposed Project would be consistent with the applicable MDAQMD attainment plans.

### ***Operations***

After construction is complete, ongoing maintenance and operation activities would be similar to those under existing conditions on the Project site. Since the proposed Project would be consistent with the existing land uses and would not increase the construction activity or emissions above assumptions in the applicable air quality attainment plans, operation of the proposed Project would not impede achieving the air quality goals of the region. Operational activities would be subject to compliance with regulations to control air pollutant emissions from electrical substation facilities. Therefore, the proposed Project would not conflict with or obstruct implementation of the applicable air quality plans. This impact would be less than significant, and no mitigation is 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 of the MDAB is currently designated nonattainment of the State and/or federal air quality standards for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Thus, there is an ongoing cumulatively significant air quality condition in the region. The cumulative analysis of construction and operational emissions focuses on whether a specific project would result in a cumulatively considerable increase in emissions. By its very nature, air pollution is largely a cumulative impact. The nonattainment status of regional pollutants is a result of past and present development, and this regional impact is cumulative rather than attributable to any one source. For projects to be determined to not have a significant cumulative air quality impact, consistency with the applicable air quality plans and mitigation requirements must be shown. The air quality assessment focused on annual emissions that would be generated during each year of construction between 2021–2029. Table 3-3 shows the total construction emissions estimates and the annual MDAQMD significance thresholds for ozone precursors and criteria pollutants.

**TABLE 3-3 ESTIMATED CONSTRUCTION EMISSIONS**

YEAR	ANNUAL EMISSIONS (TONS)					
	VOC	NOX	CO	SOX	PM10	PM2.5
2021	0.57	8.27	4.21	0.01	2.33	0.53
2022	0.08	0.70	0.61	<0.01	0.09	0.04
2023	0.50	6.69	4.77	0.02	4.07	0.59
2024	0.85	8.99	8.23	0.03	3.23	0.64
2025	1.09	10.54	11.53	0.03	3.22	0.71
2026	0.07	0.86	1.11	<0.01	0.07	0.03
2027	0.21	1.89	2.51	<0.01	0.31	0.12
2028	0.44	3.92	5.50	0.01	0.47	0.21
2029	0.43	3.83	5.09	0.01	0.46	0.21
<b>IMPACT ANALYSIS</b>						
Maximum Annual Emissions	<b>1.09</b>	<b>10.54</b>	<b>11.53</b>	<b>0.03</b>	<b>4.07</b>	<b>0.71</b>
Significance Threshold	25	25	100	25	15	12
Exceed Threshold?	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>No</b>

Source: TAHA 2021a.

Note: Emissions modeling files can be found in the air quality assessment appendix (Appendix A of this Initial Study/MND).

SOURCE: TAHA, 2020.

Construction emissions would not exceed the annual significance thresholds established by the MDAQMD in any year. These thresholds are designed to identify those projects that would result in significant levels of air pollution and to assist the region in attaining the applicable State and federal ambient air quality standards. Projects that would not exceed the thresholds of significance would not contribute a considerable amount of criteria air pollutant emissions to the region's emissions profile and would not impede attainment and maintenance of ambient air quality standards. A project with emission rates below these thresholds is considered to have a less than significant impact on regional air quality. As shown in Table 3-3, construction of the proposed Project would not generate emissions of any ozone precursor or criteria pollutant in excess of the applicable threshold and therefore would not result in a cumulatively considerable net increase of any nonattainment pollutant.

### **Operations**

After construction, ongoing maintenance-related activities are not expected to significantly increase above existing conditions with implementation of the proposed Project. Therefore, operation of the proposed Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. This impact would be less than significant, and no mitigation is required.

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

**Less Than Significant Impact.** The proposed Project is located in a rural environment with few sensitive receptors near construction areas. No sensitive receptors were identified within 1,000 feet of the facility boundary. Research has demonstrated that pollutant concentrations dissipate with distance from emissions sources, and it is unlikely that sensitive receptors would be impacted by pollutant concentrations emanating from construction of the proposed Project. With regards to concentrations of criteria air pollutants, the annual MDAQMD thresholds are designed to prevent the occurrence of emissions of sufficient magnitude that would raise regional and localized pollutant concentrations to unhealthy levels.

The rural setting of the proposed Project creates enhanced atmospheric dispersion mechanisms that would lower pollutant concentrations substantially with distance from the construction site.

Sources of TAC emissions are heavily regulated by the CARB. Operation of heavy-duty diesel-powered equipment and trucks that produce diesel particulate matter (diesel PM), a prevalent TAC, would be subject to the provisions of the Airborne Toxics Control Measure for mobile source diesel engines to control emissions during use to the maximum extent feasible. TAC exposures can be characterized for both cancer-causing (carcinogenic) risks and non-carcinogenic hazards. Carcinogenic risks are typically assessed for long-term exposures to pollutant concentrations at locations near substantial sources of emissions. No sensitive receptors were identified within 1,000 feet of the facility boundary, and therefore concentrations of diesel PM and other less prevalent TACs would dissipate before reaching any sensitive populations. There is no potential for construction of the proposed Project to generate substantial concentrations of TACs at sensitive receptor locations that could induce adverse health effects.

After construction, ongoing maintenance-related activities are not expected to significantly increase above existing conditions with implementation of the proposed Project. Therefore, the proposed Project would not expose sensitive receptors to substantial pollutant concentrations. Thus, this impact would be less than significant, and no mitigation is required.

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

**Less Than Significant Impact.** Emissions leading to odors are the only other type of emissions requiring further assessment as fugitive dust has been addressed through the emissions analysis presented above. The occurrence and severity of odor impacts depends on numerous factors, including the nature, frequency, and intensity of the source; wind speed and direction; and the presence of sensitive receptors. While offensive odors rarely cause any physical harm, they still can be very unpleasant, leading to considerable distress and often generating citizen complaints to local governments and regulatory agencies. As described in more detail above, the proposed Project is located in a rural environment with few sensitive receptors near construction areas.

The proposed Project is not expected to generate any notable sources of odors. Potential construction-related sources of odors include diesel construction. Heavy-duty trucks and off-road equipment would emit diesel exhaust odors. However, because of the number and types of equipment, the temporary nature of these emissions, and the highly diffusive properties of diesel exhaust, nearby receptors would not be affected by odors associated with Project construction. Operation of the proposed Project would not add any new odor sources. As a result, the proposed Project would not create objectionable odors affecting a substantial number of people. Therefore, impacts associated with odors during construction or operation would be considered less than significant and no mitigation is required.

### **3.3.4 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 *Adelanto Switching Station Project – Biological Resources Habitat Assessment* prepared by POWER Engineers, Inc. ([POWER] 2020a) provided in Appendix B1, the *Western Joshua Tree Census Report* prepared by POWER (2020), and the *Jurisdictional Delineation Report* prepared by Psomas (2020) is provided in Appendix B2.

### 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 (CNPS) and the California Natural Diversity Database (CNDDDB) records, previous reports pertaining to the Project site (POWER 2010b), and previous CDFW issued Incidental Take Permit (ITP) 2081-2011-0511-06 (2011) for the Project site. 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).

A reconnaissance-level biological resource survey was conducted by POWER biologist, Ken McDonald on June 11, 2020. The biological Study Area (Study Area) that was assessed is approximately 120 acres and is shown in Figure 3-1. This area comprises the areas of temporary and permanent disturbance due to Project construction plus a 100-foot buffer. The survey included vegetation mapping as well as general botanical and wildlife inventories within Study Area and was conducted by driving to various points within the Project site and then walking within representative areas and recording detected species. 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). Because the reconnaissance-level survey was not conducted during an optimum time of year to detect presence of all special-status plant species with potential to occur, focused floral surveys may be required prior to construction and during the appropriate blooming period(s), as close to the actual construction date as feasible.

The elevation of the site ranges from approximately 2,950 to 3,000 feet above mean sea level and has relatively flat topography. The area is vegetated with native and non-native plant species, with large portions of the area that have been previously mechanically disturbed by human activities. The converter and switching station facilities are generally located in the central portion of the site. Solar panels occupy the southwestern portion of the Project site. Other facilities located on site include towers and other large-scale switching equipment, power transformers, operations and maintenance buildings, and two large converter equipment buildings. The area between the facilities and the fence line of the entire Adelanto Station is generally undeveloped except for several transmission towers and site drainage control structures consisting of earthen berms. Some ancillary uses, such as materials storage, evaporation ponds, and a helipad, are also located within the Adelanto Station.

### **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 entire Project site is heavily disturbed by the presence of non-native plant species, including the Study Area. Vegetation communities in the Study Area consisted mostly of Joshua tree woodland. A more detailed description of these vegetation communities is provided below (refer to Figure 3-2, Vegetation Communities). The Joshua trees became a candidate species under the California Endangered Species Act (CESA) on October 9, 2020. As a candidate species, Joshua trees have full protection under CESA and any take of the species (including removal of Joshua tree or similar actions) would require authorization under CESA.

No other special-status plant species or vegetation communities were observed during the field survey. Appendix A of the *Biological Resources Habitat Assessment* (Appendix B1 of this Initial Study/MND) provides a list of plant species observed during the field survey. Table 3-4 provides the approximate vegetation community acreages identified within the Project Site and Study Area during the 2020 field survey.

**TABLE 3-4 VEGETATION COMMUNITIES WITHIN THE PROJECT SITE AND STUDY AREA**

VEGETATION COMMUNITY	PROJECT SITE ACRES	STUDY AREA ACRES
Joshua Tree Woodland	138.2	57.6
Mojave Creosote Bush Scrub	11.0	7.5
Saltbush Scrub	4.5	4.4
Disturbed	37.4	30.0
Developed	123.6	21.0
<b>TOTAL ACRES</b>	<b>314.7</b>	<b>120.5</b>

Source: POWER 2010a.

### ***Joshua Tree Woodland***

Joshua tree woodland is an open woodland with Joshua trees (*Yucca brevifolia*), up to 12 feet in height, as the only arborescent<sup>1</sup> species, with many other shrub and cactus species in the understory. This vegetation type typically occupies well-drained, gentle alluvial slopes, with sandy, loamy or gravelly substrates.

Within the Study Area, scattered Joshua trees form the overstory where this community was present. This vegetation community was very disturbed by the presence of Sahara mustard, which dominated the understory. Native shrub species were comprised of creosote, rabbitbrush, and burrobrush, with occasional cholla, with abundant Mediterranean grass in the herbaceous layer.

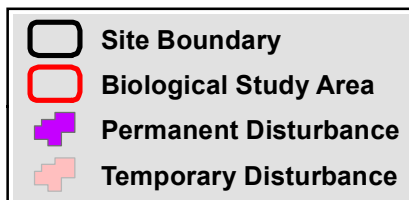
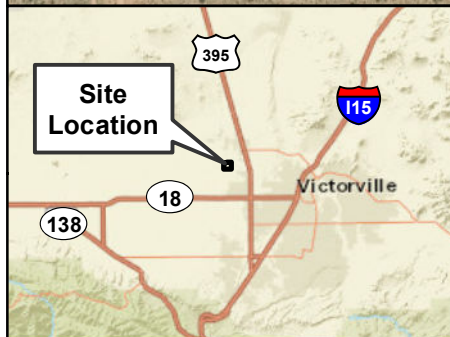
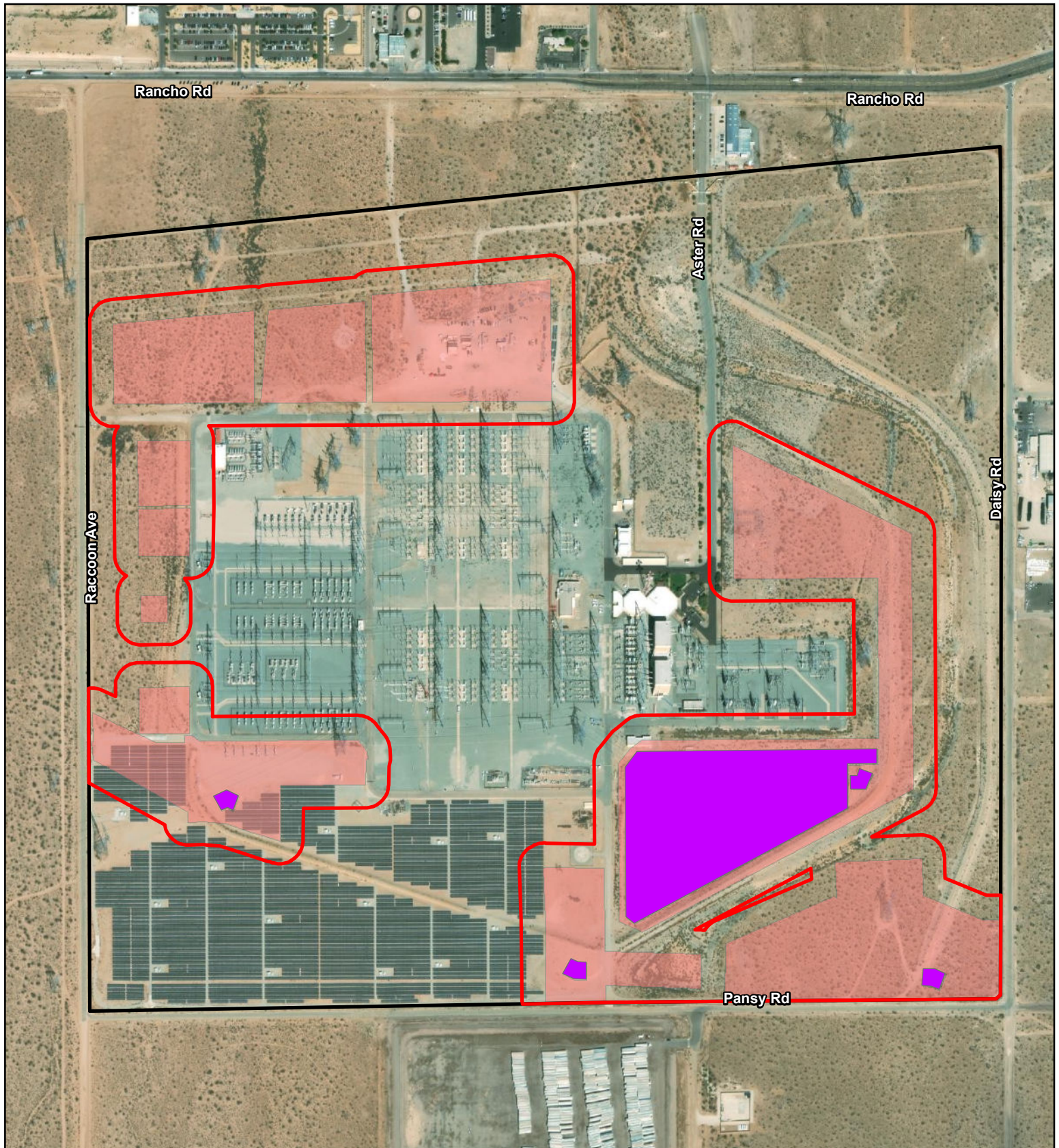
The locations of Joshua trees within the Project site are shown on Figure 3-3. A total of 162 Joshua trees of various ages and sizes are located within the Project boundary. Of that total, 93 Joshua trees are located within the temporary and permanent construction disturbance areas.

### ***Mojave Creosote Bush Scrub***

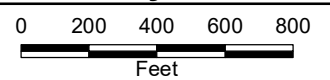
Mojave Creosote Bush Scrub is the predominant vegetation type of the valleys, alluvial fans and the lower mountain slopes of the Mojave Desert. It is composed of widely spaced evergreen and drought-deciduous shrubs, cacti and yucca that range in height from one to nine feet. Creosote bush (*Larrea tridentata*) is the dominant shrub and indicator species for this vegetation type. Burrobrush (*Ambrosia dumosa*) is a common associated species. Soils are typically well-drained, non-alkaline and non-saline, and sandy to gravelly.

Mojave Creosote Bush Scrub within the Study Area was dominated by creosote bush and Sahara mustard. Burrobrush and occasional rabbitbrush occurred in the shrub layer, with Mediterranean grass common in the herbaceous layer. This community was observed on the western portion of the Study Area.

<sup>1</sup> Resembling a tree in growth or appearance.

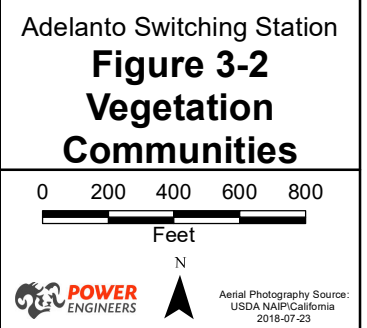
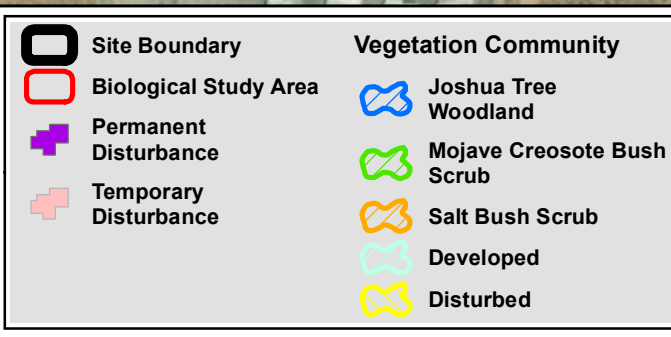
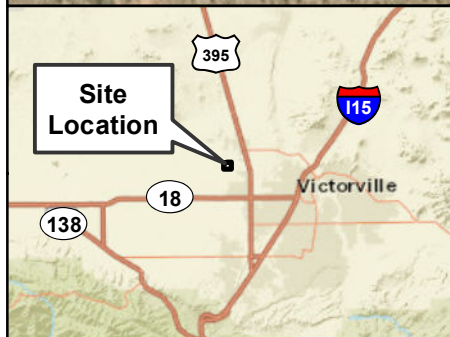
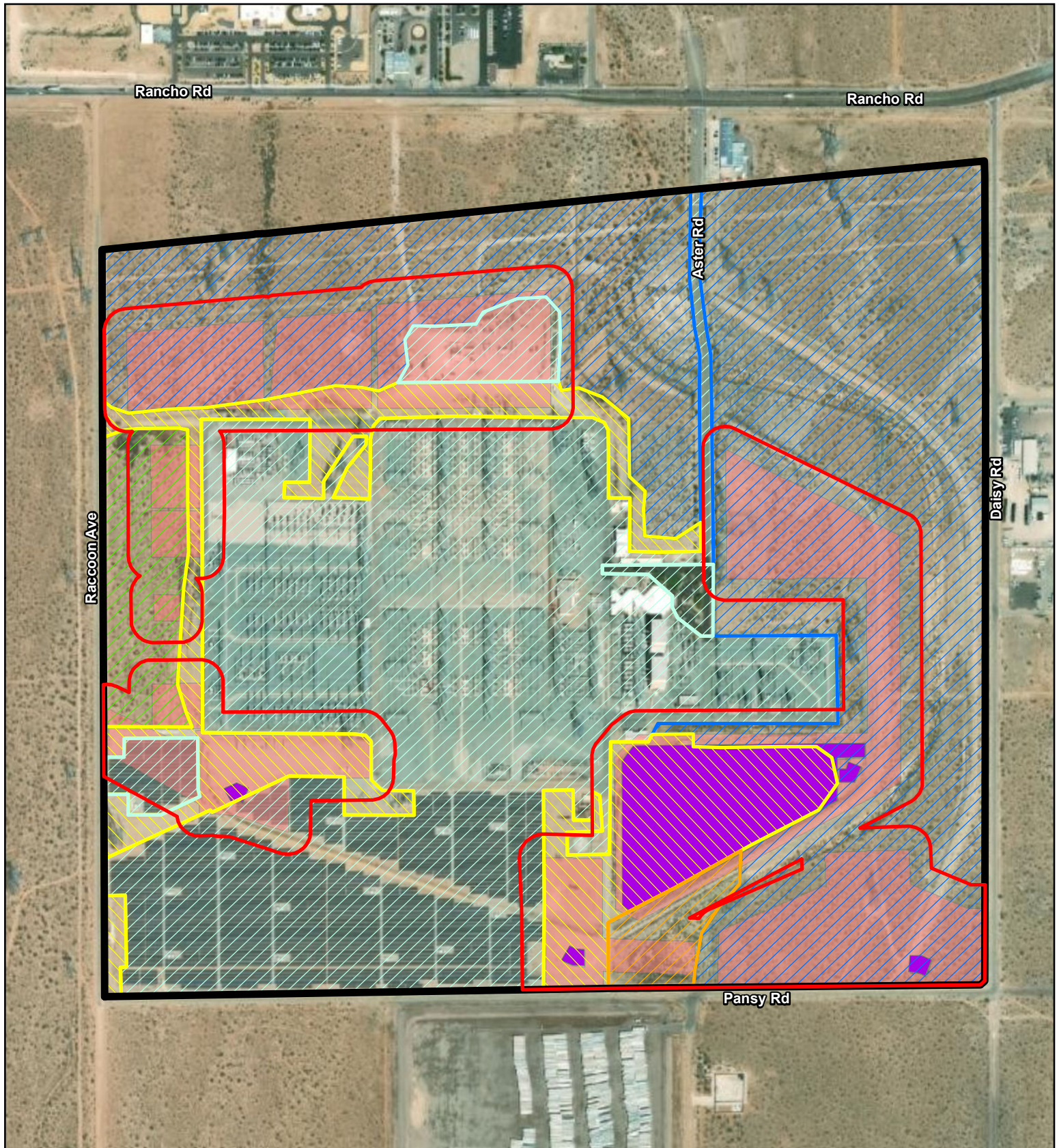


Adelanto Switching Station  
**Figure 3-1**  
**Biological**  
**Study Area**

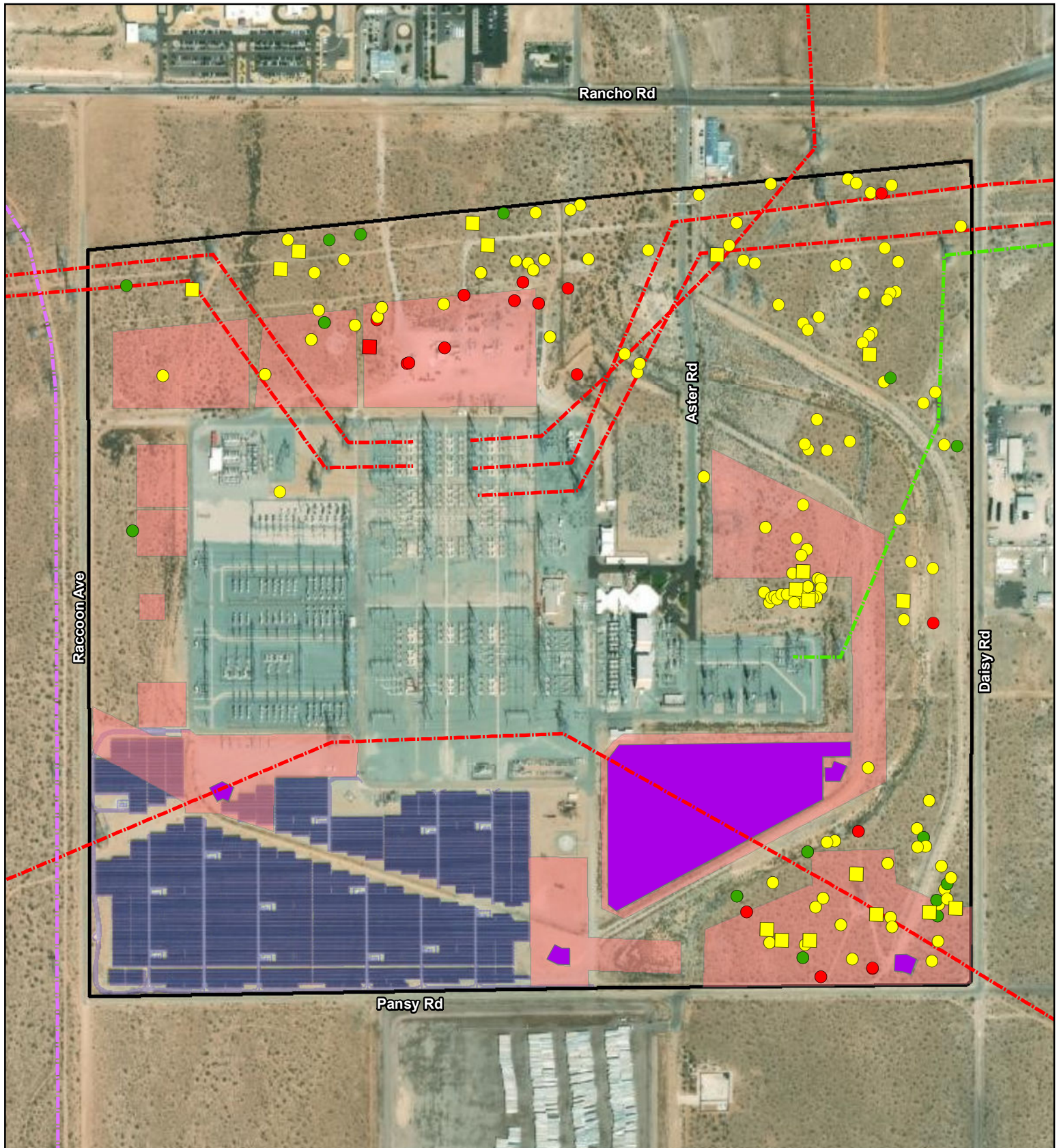


Aerial Photography Source:  
 USDA NAIP/California  
 2018-07-23

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#### Height Class

- 1 - Less than 1 Meter
- 2 - 1 to 5 Meters
- 3 - Greater than 5 Meters
- 2 (Clonal Clump) - 1 to 5 Meters
- 3 (Clonal Clump) - Greater than 5 Meters



Site Boundary



Permanent Disturbance



Temporary Disturbance

#### Existing Transmission Line

--- 500 kV

--- 230 kV

--- DC Line

### Adelanto Switching Station Figure 3-3 Joshua Tree Locations

0 300 600 900

Feet

N



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

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### ***Saltbush Scrub***

Saltbush scrub is comprised of low, grayish, microphyllous shrubs, 0.3 to 1.0 meter tall, with occasional succulent species, matching the Holland type desert saltbush scrub community. Overall cover is often low, with bare ground surrounded widely spaced shrubs. Stands of desert saltbush scrub as usually dominated by a single species of saltbush (*Atriplex* spp.). Site characteristics include finely textured, poorly drained soils (Holland 1986). A small amount of this vegetation community was observed on the southern portion of the Study Area.

### ***Disturbed***

Disturbed areas include cleared or graded lands. Disturbed areas are typically characterized by heavily compacted soils that have been frequently or recently disturbed. They are often devoid of vegetation or possess only a sparse cover or are vegetated by weedy plant species adapted to disturbance.

Within the Study Area, disturbed areas ranged from completely bare of all vegetation to sparse amounts of non-native plant species, mostly Sahara mustard and Mediterranean grass. This community was observed throughout the Study Area.

### ***Developed***

Developed area include roads, man-made structures, and associated infrastructure. Areas generally considered developed include dirt and paved roads, transmission lines, underground pipelines, railroads, and any other permanent structures. Ornamental vegetation may occur within developed areas, and may include native plant species, as well as non-native plant species and turf grass. Developed areas occur throughout the Study Area.

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

Three special-status plant species were determined by the literature review to potentially occur within the Study Area and are described below. The three plant species were considered to have a moderate potential to occur within the Study Area. Potential for occurrence was based on habitat, elevation, soil, and proximity to known recorded occurrences of a species. The accounts for these species with known occurrences within the Adelanto USGS 7.5' quadrangle are discussed below. Their habitat description, status, and potential for occurrence within the survey area are provided in Table 3-5.

As noted above, Joshua trees became a candidate species under the CESA on October 9, 2020. As a candidate species, Joshua trees have full protection under CESA and any take of the species (including removal of Joshua tree or similar actions) would require authorization under CESA. This species' habitat description, status, and potential for occurrence within the survey area are provided in Table 3-5.

### ***White Pygmy-poppy***

White pygmy-poppy (*Canbya candida*) is included on List 4.2 of the CNPS online inventory (CNPS 2020). It is a white-flowered with yellow anther annual herb in the Poppy Family (*Papaveraceae*). This species occurs in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland on gravelly, sandy, and granitic soils. It ranges from 1,460 to 4,790 feet in elevation, and blooms from March to June. White pygmy-poppy is threatened by habitat loss. Suitable habitat for this species occurs within the Study Area. White pygmy-poppy has a moderate potential to occur.

### Mojave Spineflower

Mojave spineflower (*Chorizanthe spinosa*) is included on List 4.2 of the CNPS online Inventory (CNPS 2020). It is a white-flowered annual herb in the Buckwheat Family (*Polygonaceae*). This species occurs in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and playas, occasionally on alkaline soils. It ranges from 1,300 to 4,265 feet in elevation, and blooms from March to July. Suitable habitat for this species occurs within the Study Area. Mojave spineflower has a moderate potential to occur.

### Crowned Muilla

Crowned muilla (*Muilla coronata*) is included on List 4.2 of the CNPS online Inventory (CNPS 2020). It is a white to blue-flowered perennial bulbiferous herb in the Brodiaea Family (*Themidaceae*). This species occurs in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland, usually in sand or gravel. It ranges from 1,960 to 6,430 feet in elevation, and blooms from March to April. Suitable habitat for this species occurs within the Study Area. Crowned muilla has a moderate potential to occur.

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

SPECIES <sup>1</sup>	STATUS <sup>2</sup>	HABITAT <sup>2</sup>	BLOOMING PERIOD <sup>2</sup>	POTENTIAL FOR OCCURRENCE
<i>Canbya candida</i> white pygmy poppy	Fed: None State: None CNPS: 4.2	Annual herb occurring in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland, on gravelly, sandy, and granitic soils. From 1,460 to 4,790 feet in elevation.	March – June	<b>Moderate.</b> Suitable habitat occurs on site.
<i>Chorizanthe spinosa</i> Mojave spineflower	Fed: None State: None CNPS: 4.2	Annual herb occurring in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and playas, sometimes on alkaline soils. From 1,300 to 4,265 feet in elevation.	March – July	<b>Moderate.</b> Suitable habitat occurs on site.
<i>Muilla coronata</i> crowned muilla	Fed: None State: None CNPS: 4.2	<i>Perennial bulbiferous herb occurring in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland. From 1,960 to 6,430 feet in elevation.</i>	March – April	<b>Moderate.</b> Suitable habitat occurs on site.
<i>Yucca brevifolia</i> Joshua Tree <sup>3</sup>	Fed: None State: Threatened CNPS: 3.2	<i>Gentle alluvial fans, ridges, gentle to moderate slopes. Soils are coarse sands, very fine silts, gravel, or sandy loams. Many sites have bimodal soils with both coarse sands and fine silts.</i>	Dependent on climate and rainfall	<b>High.</b> Suitable habitat occurs on site.

Source: POWER 2020a.

**Notes:**

<sup>1</sup> Sources of scientific names and common names are: Hickman (1993), CNPS (2020), and CalFlora (2020).

<sup>2</sup> Sources of habitat characteristics and flowering times are: CNDDB (CDFW 2020) and CNPS (2020).

<sup>3</sup> On October 9, 2020, the western Joshua tree became a candidate species under the CESA.

**CNPS (State Rare Plant Rank)**

<sup>4</sup> Plants of Limited Distribution - A Watch List

**Threat Ranks/ Decimal notations: A CNPS extension added to the State Rare Plant Rank**

<sup>2</sup> Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

**Occurrence Code:**

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

**High:** Joshua trees observed on site.

### ***Non-native Plant Species***

A comprehensive plant inventory, including non-native species, was taken during the reconnaissance surveys and is included in Appendix A of the *Biological Resources Habitat Assessment* (Appendix B1 of this Initial Study/MND). Non-native plants are rated by the California Invasive Plant Council (Cal-IPC) as falling into one of three categories (Cal-IPC 2020):

- **High** – These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically.
- **Moderate** – These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread.
- **Limited** – These species are invasive, but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic.

Some species are not currently rated due to lack of adequate information or lack of significant impacts on native communities.

The non-native plant species that were detected during reconnaissance surveys and are rated by Cal-IPC as follows:

- cheat grass (*Bromus tectorum*) – rated as High
- tamarisk (*Tamarix ramossissima*) – rated as High
- Sahara mustard (*Brassica tournefortii*) – rated at High
- redstem filaree (*Erodium cicutarium*) – rated as Limited
- Mediterranean grass (*Schismus barbatus*) – rated as Limited

### **Botanical Impacts**

Special-status botanical species were not detected during the field survey, 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. However, the Study Area provides habitat that could support special-status species. 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 white pygmy-poppy, Mojave spineflower, and crowned muilla, 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.

Approximately 162 Joshua trees of various and ages and sizes are located within the Project boundary. Of that total, 93 Joshua trees are located with the temporary and permanent construction disturbance areas. While removal of Joshua trees typically requires a permit from local and state agencies, the removal by a

municipal agency or public utility when acting in the performance of its obligations to provide service to the public would not be subject to the ordinances (Chapter 17.57 – Biotic Resources of the City of Adelanto’s Municipal Code and San Bernardino County Joshua tree ordinance [Title 8, Division 8, Section 88.01.050 of the San Bernardino County Code]).

Joshua trees became a candidate species under the CESA; therefore, Joshua trees have full protection under CESA and any take of the species (including removal of Joshua tree or similar actions) would require authorization under CESA.

Joshua trees located within temporary and permanent construction disturbance areas would be avoided based on current design plans. If there are any design changes that would potentially impact Joshua trees, LADWP would consult with CDFW to secure CESA authorization and permits as necessary. Furthermore, LADWP would evaluate Joshua trees within the construction footprint for feasibility of relocating them to another location within the Project site and would relocate suitable trees.

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

A total of five special-status wildlife species were determined by the literature review to potentially occur within the Study Area. Of the five wildlife species considered to have a potential to occur within the vicinity, one was determined to have a high potential for occurrence within the Study Area, two had a moderate potential, and the rest were determined to be absent. Their habitat description, status, and potential for occurrence within the Study Area are provided in Table 3-6. The accounts below provide greater detail of the special-status species initially determined to have a potential to occur within Study Area.

#### ***Burrowing Owl***

The burrowing owl (*Athene cunicularia*) is a BLM Sensitive Species, CDFW Species of Special Concern, and United States Fish and Wildlife Service (USFWS) Bird of Conservation Concern. It typically inhabits lowlands, including those in the Central Valley, northeastern plateau, southeastern deserts, and coastal areas. For shelters, the burrowing owl uses rodent burrows in sparse grassland, desert, and agricultural habitats. Nesting begins in late March and April. Burrowing owls are typically active at dusk and dawn but can also be active at night.

Suitable habitat occurs within the Study Area. There are multiple recent sightings of burrowing owl in the vicinity, with one sighting within two miles from the Study Area (CDFW 2020), giving this species a moderate potential for occurrence.

#### ***Swainson’s Hawk***

Swainson’s hawk (*Buteo swainsonii*) is State-listed as Threatened and a BLM Sensitive Species, as well as a USFWS Bird of Conservation Concern. Its breeding habitat includes grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural fields and ranches. Swainson’s hawk also requires adjacent suitable foraging areas, such as grasslands or alfalfa or grain fields, which support rodent populations. During winter and migration, or for nonbreeding individuals in summer, this raptor forages primarily on insects. Hawks are restricted to portions of the Central Valley and Great Basin regions where suitable nesting and foraging habitat is still available. The loss of agricultural lands to various residential and commercial developments is a serious threat to this hawk throughout California.

Only marginal suitable habitat occurs within the developed portions of the Study Area, and no observations of the species has been made within the past 80 years. Swainson’s hawk is determined to be absent from the Study Area.

### ***Le Conte's Thrasher***

Le Conte's thrasher (*Toxostoma lecontei*) is a California Species of Special Concern and is endemic to the southwestern United States and northwestern Mexico. The northern breeding limits are central California from the Carrizo Plain of eastern San Luis Obispo County; the San Joaquin Valley of Fresno and Kern Counties, and east of the Sierra Nevada north to Mono County; and southern Nevada and southwestern Utah (Sheppard 1996). It occupies open desert scrub habitats, particularly saltbush and creosote in association with sandy washes. Suitable habitat occurs within the Study Area, with observations within four miles (CDFW 2020), giving this species a moderate potential to occur.

### ***Mohave Ground Squirrel***

Mohave ground squirrel (*Xerospermophilus mohavensis*) is a State-listed as Threatened species. It is a small ground squirrel that is morphologically distinguished from the more common antelope ground squirrel (*Ammospermophilus leucurus*) by the absence of stripes or spots. It occurs in the Mojave Desert and in parts of Inyo, Kern, Los Angeles, and San Bernardino Counties. It is most commonly found in creosote scrub, but also in Joshua tree woodland, desert saltbush scrub, desert sink scrub, desert greasewood scrub, and shadscale scrub. Mohave ground squirrels dig burrows in sandy and gravelly soils on flat to moderately sloping terrain. The burrows are used to avoid predators and high temperatures, and for aestivating during the winter months. Mohave ground squirrels are active only during spring and summer and spend most of the year (approximately seven months) below ground. The Study Area provides suitable habitat for this species. Previous surveys have detected this species within the Study Area (CDFW 2020), hence the previously issued ITP (CDFW 2011) for an earlier project. Mohave ground squirrel is considered to have a high potential to occur within the Study Area.

### ***Desert Tortoise***

The desert tortoise (*Gopherus agassizii*) is listed by USFWS as Threatened in 1990 (55 Federal Register 12178) and CDFW listed the species as Threatened in 1989 within the CESA (CDFW 2020). The threats detailed in the listing continue to affect the species with the most obvious threats being those that result in mortality and permanent habitat loss across large areas.

The desert tortoise occupies a variety of habitats from flats and slopes within creosote bush scrub at lower elevations, to rocky slopes in blackbrush (*Coleogyne* sp.) scrub and juniper (*Juniperus* sp.) woodland ecotones at high elevations. Its range includes the Mojave Desert. It is most common in desert scrub, creosote bush scrub, desert wash, and Joshua tree habitats, though it occurs in almost every desert habitat below 3,530 feet in elevation. Tortoises typically inhabit soft sandy loams and loamy sands, although they are also found on rocky slopes and in rimrock that provide natural-cover sites in crevices. It requires friable soil for burrowing and nest construction.

Diets typically consist of herbs, grasses, cactus, and wildflowers, and foraging occurs in the spring before aestivation in the summer. Desert tortoises emerge again in the fall with the cooler weather, absorbing water from their bladders if no major thunderstorms have occurred lately. Aestivation occurs again in the winter. Mating season peaks from August to October. Because this long-lived species requires 13 to 20 years to reach sexual maturity and has low reproductive rates, it is especially subject to external threats. Therefore, it is crucial that projects minimize their impacts to this species to mitigate additional threats to its survival.

Although suitable habitat occurs within the Study Area, the LADWP property in which the Project site occurs has been fenced and regularly monitored and maintained since 1985, with no sign observed during that time. Additionally, the previously issued ITP (CDFW 2011) does not indicate that desert tortoise are present or an issue for the Project site. Desert tortoise is determined to be absent from the Study Area.

**TABLE 3-6 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>Moderate.</b> Suitable foraging and nesting habitat for this species occurs within the study area, with records of occurrences within 2 miles of the Study Area, but no observations for more than 10 years (CDFW 2020).
<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>Absent.</b> Suitable habitat for nesting occurs immediately adjacent to consistently utilized buildings, which would preclude nesting activities of this easily disturbed nester. One recorded observation within 2 miles of the Study Area exists from more than 80 years ago (CDFW 2020).
<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>Moderate.</b> Suitable foraging and nesting habitat for this species occurs within the Study Area, with records of observation within three miles of the Study Area, but no observations within the last 20 years (CDFW 2020).
<i>Xerospermophilus mohavensis</i> Mohave ground squirrel	Fed: None State: <b>THR</b> BLM: S	Occurs in chenopod scrub, Joshua tree woodland, and Mojavean desert scrub.	<b>High.</b> Suitable habitat to support this species occurs within the Study Area and one onsite observation in 2011 (CDFW 2020).
<i>Gopherus agassizii</i> desert tortoise	Fed: <b>THR</b> State: <b>THR</b> BLM: None	Occurs in Joshua tree woodland, Mojavean desert scrub, and Sonoran desert scrub.	<b>Absent.</b> Suitable habitat to support this species occurs within the Study Area, but the site is fenced and patrolled weekly with no observations since the construction of the switching station. One record within 3.5 miles of the Study Area exists, but no observation within the last 13 years (CDFW 2020).

**Absent:** Habitat or conditions on the site are not sufficient to support the species.

**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.

**Federal Status**

THR = listed as Threatened

**State Status**

THR = listed as Threatened under the California Endangered Species Act

SSC = designated as a Species of Concern

**BLM Status**

S = designated as a Sensitive species

## **Wildlife Impacts**

No special-status wildlife species were detected during the field survey. A few wildlife species were observed within the Study Area, but wildlife sign was observed more frequently. Burrows of varying sizes were present intermittently throughout the Study Area, primarily small rodent burrows. While no special-status wildlife species were detected during the field survey, the Le Conte's thrasher and burrowing owl have a moderate potential to occur on site and the Mohave ground squirrel has a high potential to occur on site.

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 Le Conte's thrasher and other raptors. Suitable foraging habitat for these species occurs primarily in open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Although no individual Le Conte's thrasher or nests were detected within the Study Area during the field survey, due to suitable habitat present on-site and in the surrounding area, the Project could have the potential to impact Le Conte's thrasher through mortality or injury. Loss of individual Le Conte's thrasher, 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.

Mohave ground squirrel is a state-threatened species and has the potential to occur on site. The Study Area and surrounding area provides suitable habitat for this species. Previous surveys have detected this species within the Study Area (CDFW 2020), and CDFW issued an ITP (CDFW 2011) for an earlier project. If present, construction activities have the potential impact this species. With implementation of MM BIO-2, MM BIO-3, and MM-BIO-9, impacts would be less than significant.

Small terrestrial animals (e.g., squirrels, lizards, snakes) may also utilize the Study Area and adjacent 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 and rodents. Implementation of MM BIO-11 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?**

**Less Than Significant Impact with Mitigation.** Existing site drainage structures on site include an earthen berm, which was installed at the time that the switching station was built to redirect natural sheet flow around the switching station and converter station. Several drainage features exist on site as shown on Figure 3-4. Those drainages that exhibit notable features are discussed below (Psomas 2020).

- Drainage 3: Traverses a low point in the topography near the northern edge of the property and fans out to establish a distinguishable bank area that benches up to a higher point beyond which erosion and scour are not as evident.
- Drainage 6: Curves along the eastern edge of the Project site along a constructed berm, begins as a narrow feature at the south of the site; however, as it reaches the center of the property where it passes beneath Aster Road via a box culvert, this feature's morphology changes as it becomes a wider feature with adjacent high flow terraces and channels. This appears to be caused primarily from the fact that Drainage 6 picks up additional sheet flow from Aster Road, adjacent slopes, and Drainage 5 beginning at this location, which likely leads to more flooding and erosion during extreme precipitation events than the areas further upstream in Drainage 6 would be exposed to.
- Drainages 7 and 8: Convey stormwater from the Adelanto Converter Station site towards Drainage 6; however, they are impeded from connecting at the surface and instead appear to evaporate south/southwest of a berm that protects the site and conveys stormwater through this area within Drainage 6.
- Drainage 9: Three sampling points (Sampling Points 1, 2, and 3) were collected and analyzed to determine if wetland conditions are present in Drainage 9, which is the only potential wetland location within the survey area (refer to Table 3-7 and Figure 3-4). The soil pits were dug adjacent to a building within the Adelanto Converter Station. After less than 100 feet, wetland indicator vegetation disappears, likely due to a mix of evaporation and infiltration into the soil. Three soil pits were dug at edges of the suspected wetland to confirm the limits. Downstream areas in the drainage were not investigated beyond the soil pits because no wetland indicator vegetation occurred in these areas. Vegetation observed for all three soil pits includes: cattail (*Typha latifolia*) with small black willow (*Salix gooddingii*) trying to also establish in this small patch.
- Drainages 11 and 2: Receive flows from off-site via a culvert, before they join just north of the solar panels on the Project site. This combined drainage, Drainage 2, follows the foot of a berm that was constructed on the west side of the switching station.

Two evaporation ponds were observed on site and are shown on Figure 3-4 (Psomas 2020). These two ponds are adjacent to Drainage 6, but they are separated by a berm that was constructed concurrently along with the ponds during the original construction of the Adelanto Converter Station. The ponds were designed to be evaporation ponds that were designed and tested to receive and allow for the evaporation of process water from the converter station. The bottom of the ponds are sealed to encourage evaporation, rather than percolation. No hydraulic connections between the ponds and any other drainage features were observed during the site visit. These evaporation ponds would be backfilled and graded for construction laydown and the new converter station.

## Jurisdictional Analysis

The Project site contains a total of nine features that exhibit ordinary high water mark (OHWM) indicators and other evidence of flow (refer to Figure 3-4). Details on resource agency jurisdiction over these drainages are summarized in Table 3-7 and described below.

**TABLE 3-7 SUMMARY OF JURISDICTIONAL RESOURCES IN THE PROJECT SITE**

FEATURE ID	LATITUDE/LONGITUDE OF DRAINAGE CENTERPOINT	OHWM WIDTH RANGE (FEET)	AREA OF USACE JURISDICTION		AREA OF RWQCB JURISDICTION (ACRES)		AREA OF CDFW JURISDICTION (ACRES) <sup>a</sup>
			NON-WETLAND	WETLAND	NON-WETLAND	WETLAND	
1	34.555435, -117.443062	2-3	-	-	0.006	-	0.017
2	34.547226, -117.442709	3-5	-	-	0.110	-	0.303
3	34.555391, -117.44095	2-24	-	-	0.106	-	0.637
4	34.555835, -117.437623	1-2	-	-	0.004	-	0.012
5	34.55507, -117.435969	2-8	-	-	0.023	-	0.039
6	34.5543, -117.433931	15-95	-	-	5.125	-	6.089
7	34.554335, -117.436182	1-3	-	-	0.009	-	0.018
8	34.553713, -117.435728	12-16	-	-	0.089	-	0.177
9	34.549895, -117.433507	1-3	-	-	0.164	0.006	0.345
10	34.549287, -117.442122	3-4	-	-	0.009	-	0.027
11	34.548084, -117.44315	4-5	-	-	0.037	-	0.064
<b>TOTAL JURISDICTIONAL AREA</b>			<b>0.00</b>	<b>0.00</b>	<b>5.681</b>	<b>0.006</b>	<b>7.729</b>

Source: Psomas 2020.

OHWM: Ordinary High Water Mark; USACE: United States Army Corps of Engineers; RWQCB: Regional Water Quality Control Board; CDFW: California Department of Fish and Wildlife.

<sup>a</sup> Represents the maximum extent of CDFW jurisdiction as indicated by top of bank or outer edge of riparian dipline, whichever is wider.

Given that no water was observed in any of the drainages that occur in the Project site and due to the limited land areas that flow to these drainages, all the drainages are considered ephemeral, and none of the drainage features surveys are considered waters of the United States. A total of 5.687 acre of jurisdictional “waters of the State” were identified in the Project site, of which 0.006 acres are wetland and 5.681 acres are non-wetland. A total of 7.729 acres of jurisdictional streambeds were identified in the Project site (as shown on Table 3-7 and Figure 3-4).

Psomas collected and analyzed three sampling points (Sampling Points 1, 2, and 3) to determine if wetland conditions are present in Drainage 9, which is the only potential wetland location within the Project site (refer to Table 3-8). The soil pits were dug adjacent to a building within the Adelanto Converter Station. After less than 100 feet, wetland indicator vegetation disappears, likely due to a mix of evaporation and infiltration into the soil. Three soil pits were dug at edges of the suspected wetland to confirm the limits. Downstream areas in the drainage were not investigated beyond the soil pits because no wetland indicator vegetation occurred in these areas. Vegetation observed for all three soil pits includes: cattail (*Typha latifolia*) with small black willow (*Salix gooddingii*) trying to also establish in this small patch.

**TABLE 3-8 SUMMARY OF WETLAND SAMPLING POINT DATA**

SAMPLING POINT	VEGETATED	DOMINANCE TEST RESULT	PREVALENCE INDEX RESULT	HYDROPHYTIC VEGETATION PRESENT	HYDRIC SOILS INDICATORS	WETLAND HYDROLOGY INDICATORS	WETLAND?
1	Yes	100%	1.5	Yes	S1	B1, B6	Yes
2	Yes	100%	1.5	Yes	S1	B1, B6	Yes
3	Yes	100%	1.5	Yes	S1	B1, B6	Yes

Source: Psomas 2020.

\* Percent of dominant species that are OBL, FACW or FAC.

B1: Water Marks; B6: Surface Soil Cracks; S1: Sandy Mucky Mineral.

As shown in Table 3-7, impacts to drainage features on-site would occur as a result of Project construction. On-site restoration would involve reseeded to pre-disturbance levels, as feasible, with a native seed mixture similar to what is in place in adjacent areas (refer to BIO-4). As discussed in Checklist Response 3.11.2(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. After construction, exposed areas of the site would be stabilized with gravel, plant material, or other permeable cover to prevent significant erosion, siltation, and runoff. Implementation of MM HYD-1 would reduce impacts to existing drainages.

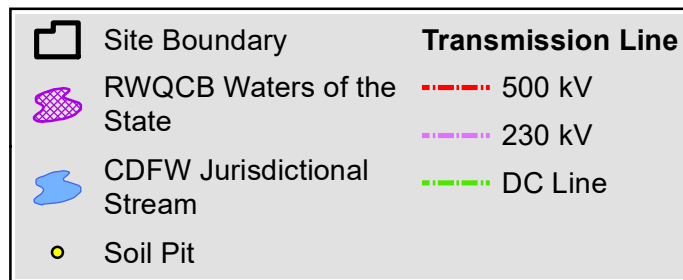
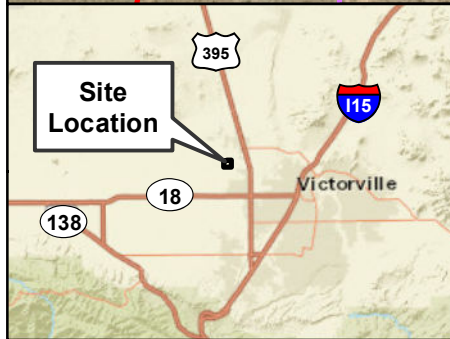
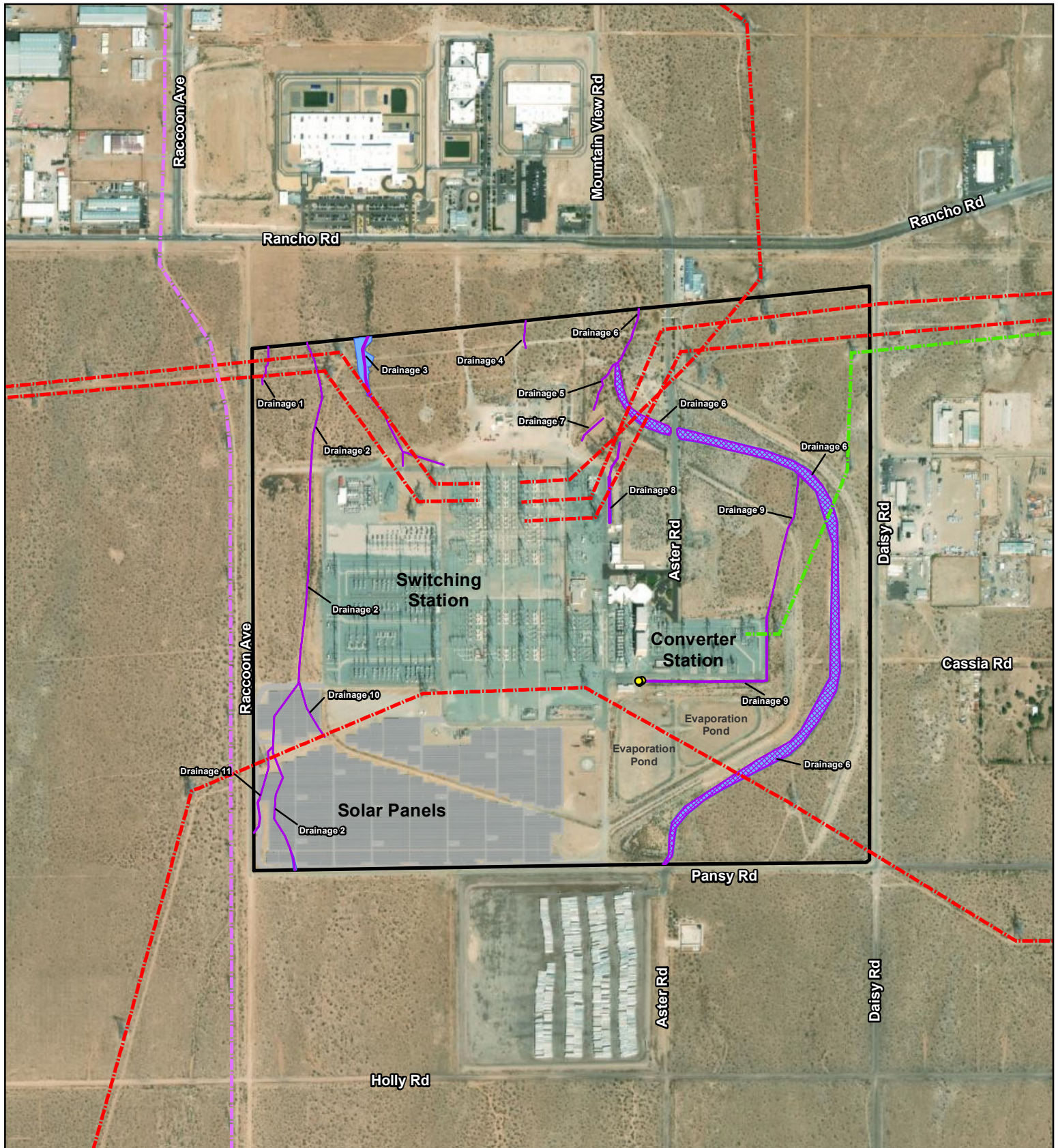
Where impacts cannot be avoided, prior to undertaking ground-disturbing activities, LADWP would consult with the appropriate responsible resource agencies to verify delineation results, and secure all obligatory discretionary permits and authorizations. Implementation of MMs BIO-4 and HYD-1 would minimize adverse effects to existing drainage features.

**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?**

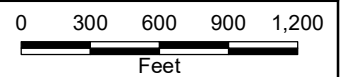
**Less Than Significant Impact with Mitigation.** No impacts to vernal pools or fairy shrimp would occur as both were determined to be absent from the Study Area. Please also refer to Checklist Response 3.4.2 (b), above, regarding Project-related impacts to drainage features subject to the regulatory jurisdiction of the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and CDFW. Implementation of MMs BIO-4, and HYD-1 would minimize adverse effects to existing drainage features.

**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.** The Project site is developed with an existing high voltage switching station, converter station and associated facilities. Use of the Project site by wildlife species occurs within the vegetated portions of the site and the Project. While the site may provide migratory opportunities, the Project site is entirely fenced in with a six-foot-high link fence, limiting substantial movement of species. No major wildlife movement corridors, linkages, or wildlife nursery sites were identified within the Study Area or adjacent area during the biological reconnaissance field survey. Implementation of the Project would not interfere with wildlife movement or impede the use of a wildlife nursery site. Impacts would be less than significant and no mitigation is required.



Adelanto Switching Station  
**Figure 3-4**  
**Jurisdictional Resources**



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

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

**Less Than Significant Impact.** As stated above in Checklist Response 3.4(a), scattered Joshua trees are located within the Study Area and form the overstory where this community was present. This vegetation community was very disturbed by the presence of Sahara mustard, which dominated the understory. Native shrub species were comprised of creosote, rabbitbrush, and burrobush, with occasional cholla, with abundant Mediterranean grass in the herbaceous layer. This community was observed mainly on the northern and western portions of the Study Area.

As stated in Checklist Response 3.4.2 (a), Joshua trees became a candidate species under the CESA; and therefore, would require authorization under CESA prior to being removed or otherwise impacted. Based on current design plans, Joshua trees within temporary and permanent construction disturbance areas would be avoided. If there are any design changes that would potentially impact Joshua Trees, LADWP would consult with regulatory agencies and obtain necessary permits and authorizations as necessary. Furthermore, LADWP would evaluate Joshua trees within the construction footprint for feasibility of relocating them to another location within the Project site and would relocate suitable trees. Therefore, impacts would be less than significant.

**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 site. 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 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 white pygmy-poppy, Mojave spineflower, and crowned muilla which bloom from April to June.

BIO-2 A qualified biologist(s) will 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, in coordination with the foreman or construction supervisor, will stop or redirect work in the event there is the likelihood of imminent take of special-status species. The biological monitor will 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 will also conduct periodic surveys in and around work 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 will be minimized to the extent feasible. Access to sites will be via pre-existing access routes, to the greatest extent possible, and the work area boundaries will be delineated with staking, flagging, or other comparable markings to minimize surface disturbance associated with vehicle straying. Signs and/or fencing will be placed around the Project footprint to restrict access to Project-related vehicles.

- BIO-4 Upon Project completion, any disturbance will 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 will be revegetated (reseeded) to pre-disturbance levels.
- BIO-5 Only certified weed-free straw and hay bales will be used, as necessary, during construction and weed-free seed for post-construction revegetation.
- BIO-6 Conduct pre-construction focused burrowing owl surveys within the Project footprint to determine presence/absence of the species. Surveys will 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, will 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. Occupied burrows will not be disturbed during the owl nesting season, February 1 and August 31. Eviction will not occur during the nesting season.
- BIO-7 If construction occurs between February 15 and August 15, the time period typically referenced in California for the general bird nesting season, pre-construction nesting surveys will 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 will 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 will 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 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 shall 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 also 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 will be cleaned (pressure wash or compressed air) prior to entering the Project site 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 will be clear of debris, where possible. All food-related trash items will be enclosed in sealed containers and regularly removed from the Project site.

## 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 *Adelanto Switching Station - Phase I Cultural Resource Survey* report (POWER 2020c) provided in Appendix C.

### 3.5.1 Affected Environment

In June 2020, POWER performed a Phase I cultural resource survey on certain undeveloped areas within the perimeter of an existing high voltage switching station, converter station and associated facilities. The area surveyed by POWER staff covered more ground than might be necessary to accomplish the construction work. The fieldwork was larger than needed to provide a buffer zone for flexibility should revisions in construction design be needed in the future. While in the field, the survey excluded all previously disturbed and built upon ground within the inventory areas depicted in Figure 3-5.

Historic maps of the Victorville area have been produced by the United States Geological Survey (USGS) since the early twentieth century and are available for review on the Historic Aerials (Nationwide Environmental Title Research 2020) as well as the USGS Historical Topographic Map collection site (USGS 2020). In addition, the on-line Bureau of Land Management's General Land Office (GLO) website was accessed in order to determine if any early historic-era homesteading records for the Project area have been stored within the archives of the Bureau of Land Management.

Aerial photos taken between 1938 and about 1982, as shown on the University of California – Santa Barbara's *Framefinder* website (UCSB Library 2020) show that the Project site had not been actively farmed or developed at all between those years. Development of the Adelanto station occurred in the 1980s with completion of the station in 1986 and prior to this the only regional development was in the form of roads, LADWP transmission lines, and buried high pressure natural gas lines. Cattle ranches were rare and highly separated because the only water available was along the Mojave River. Prior to this, Line 3 from the Boulder powerhouse passed through the Project area (built 1939-1940) after connecting with a substation overlooking the Mojave River at Victorville.

The GO website showed that the northeast quarter (160 acres) of Section 6 in T5N/R5W, was patented by one Raymond Green on November 22, 1923 in Los Angeles. A historical background review of this landholder revealed no significant historical notes. Most of the parcels in this area were claimed by individuals between 1910 and 1929 under the Desert Land Act, which had been passed by Congress on March 3, 1877 with the purpose to encourage and promote the economic development of the arid and semiarid public lands of the Western states. Through the Act, individuals could apply for a desert-land entry to irrigate and reclaim the land, but in this area the economic viability of land was almost nonexistent. The Southern Pacific Railroad held title to most of the odd-numbered sections in this area officially as of 1918 but sold their properties once the railroad right of ways became established.

### 3.5.2 Impact Assessment

#### Would the Project:

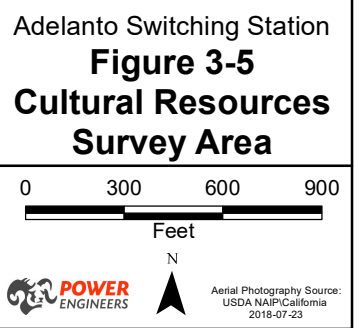
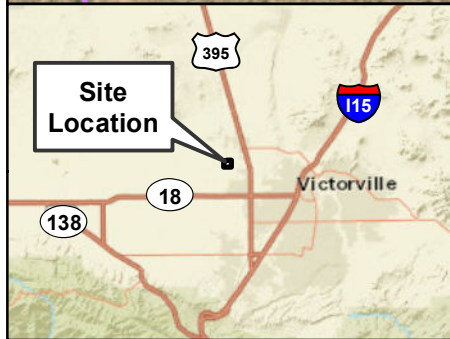
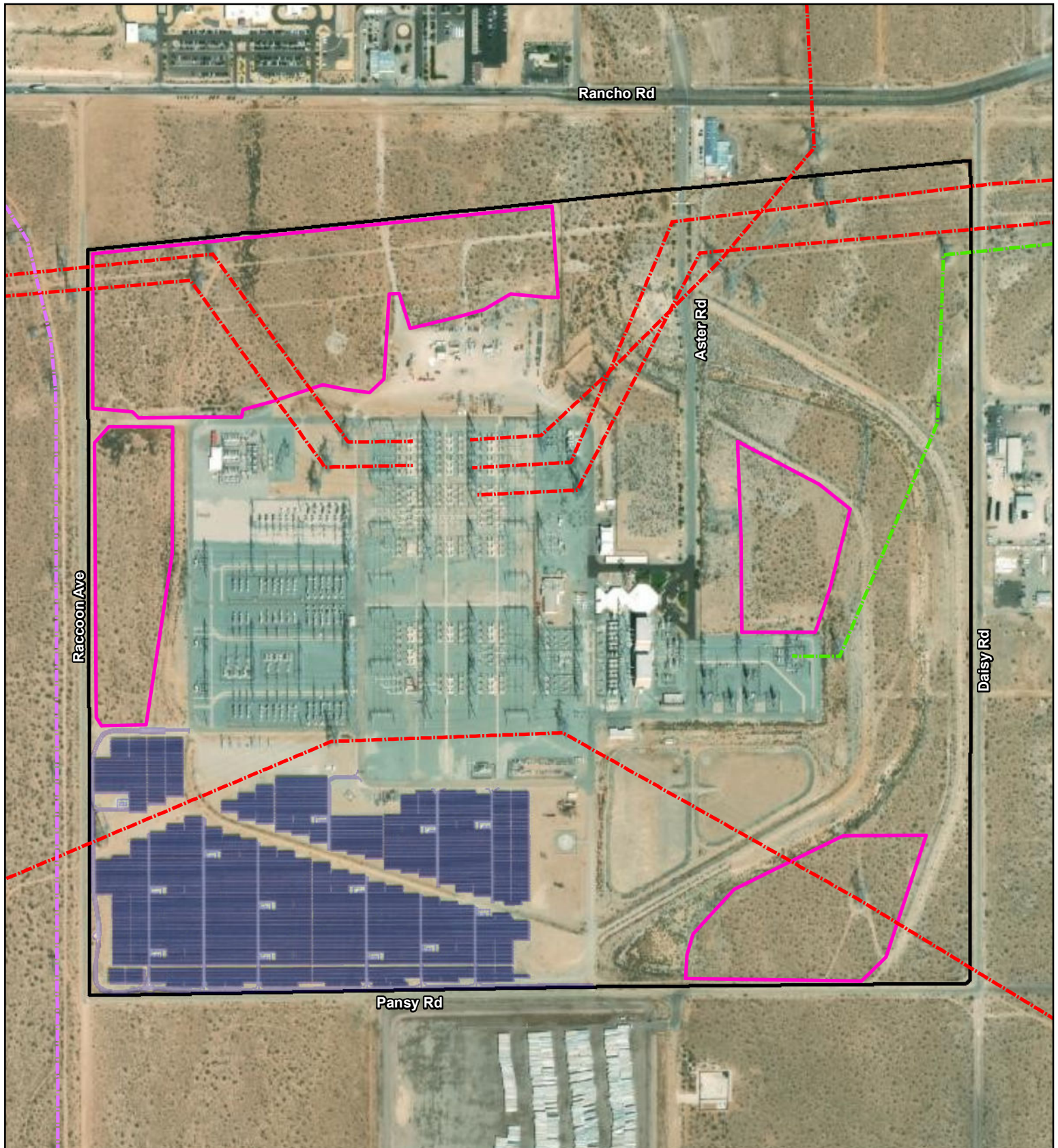
##### a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

**Less Than Significant Impact with Mitigation.** A literature and records search was conducted at the South Central Coastal Information Center (SCCIC) on July 2, 2020. Records consulted at the SCCIC included the inventory of the National Register of Historic Places, the California Register Historical Resources, the 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-mile search radius was utilized.

This research effort indicated that several cultural resources were located within one mile of the Project area (refer to Table 3-9), while few surveys in this region have occurred. The most recent and only SCCIC-filed survey on the Project site was conducted in 1985 for the last major LADWP transmission project, the Mead-Adelanto Project; most of the station parcel was surveyed previously by Dames and Moore archaeological staff in support of that project. Although the SCCIC files show that the rest of the Project area has not been surveyed previously and that no cultural resources have been detected inside the footprint of the Adelanto Switching Station, POWER archaeologists did survey the footprint of the solar panel installations in 2010 as part of the Adelanto Solar Power Project (POWER 2010d).

The records search also shows that few of the parcels near the Project have been surveyed by professional archaeologists in the last 40 years as part of CEQA-related compliance efforts.

The peripheral area has not been plowed by farmers for agriculture due to a lack of ground water, but home development has been on the rise for the last 30 years, and home construction would have typically required CEQA-mandated cultural resource surveys. Given that few cultural resources are known for this area and the site has been previously graded and/or otherwise disturbed due to recent utility development within and adjacent to the LADWP and Southern California Edison easements and along Rancho Road, the potential for the discovery of cultural resources is considered low.



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**TABLE 3-9 KNOWN CULTURAL RESOURCES LOCATED WITHIN ONE MILE OF THE PROJECT**

P NUMBER	TRINOMIAL	PERIOD AND TYPE
36-006532	CA-SBR-006532H	Historic trash scatter
36-007561	CA-SBR-007561H	Historic trash scatter
36-007562	CA-SBR-007562H	Historic trash scatter
36-010392	CA-SBR-010392/H	Prehistoric site/Historic road
36-012463	CA-SBR-012255H	Historic trash scatter
36-012464	CA-SBR-012256H	Historic trash scatter
36-026763	None	Prehistoric site
36-026829	None	Prehistoric isolate
36-061239	None	Prehistoric isolate
36-061240	None	Prehistoric isolate
36-061241	None	Prehistoric isolate

Source: POWER 2020c.

The site survey resulted in the detection of one prehistoric isolate; and one granitic hammerstone with battering on one edge. The reddening of the granite hammerstone suggests that it may have been heated in a fire, but there are no other artifacts nor hearth features in this area. Isolates are not considered historic properties by California State Historic Preservation Office. The site survey did not detect any sites inside the Project area. Due to the more recent historical activities in the area, the likelihood of uncovering buried prehistoric archaeological materials is considered very low for this Project site.

The lack of encountered prehistoric and historic-era resources reinforces the fact that the potential for such resources should be considered low. The fact that no archaeological or historic-era sites were observed suggests that the chance that any will be found during construction is unlikely.

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 mitigation measures (MMs) CUL-1 through CUL-6 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 CUL-1 through CUL-6, 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 surveys. Given that the site has been previously graded and/or otherwise disturbed due to the existing active high voltage switching, the converter station, and associated facilities, 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-6 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 Prior to the start of ground-disturbing activities, LADWP shall retain a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (U.S. Department of the Interior 2012) to support the implementation of cultural resources mitigation measures.
- CUL-2 Prior to the start of ground-disturbing activities for each project phase, environmental awareness training, which would include cultural resources sensitivity training, shall be conducted for construction personnel. Construction personnel shall be informed of the types of archaeological resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. LADWP shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.
- CUL-3 In the event that cultural resources are discovered during Project activities, all work in the immediate vicinity of the find (within a 50-foot buffer) shall cease and a qualified archaeologist meeting Secretary of Interior standards shall assess the find. Work on the other portions of the Project outside of the buffered area may continue during this assessment period. LADWP shall consult with appropriate Native American representatives in determining treatment for prehistoric or Native American resources to ensure cultural values ascribed to the resource, beyond that which is scientifically important, are considered.
- CUL-4 If significant cultural resources, as defined by CEQA (as amended, 2015), are discovered and avoidance cannot be ensured, the archaeologist shall develop a Monitoring and Treatment Plan. The draft Monitoring and Treatment Plan shall be provided to appropriate Native American representatives who have been consulted with under AB 52 for review and comment. The archaeologist shall implement the Monitoring and Treatment Plan and monitor remaining Project activities accordingly. A Native American monitor from the Native American groups identified by the California Native American Heritage Commission (NAHC) as having affiliation with the project area shall also be invited to observe subsurface ground-disturbing activities associated with implementation of the Plan.
- CUL-5 If human remains or funerary objects are encountered during any activities associated with the Project, 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.
- CUL-6 Any and all archaeological and cultural documents created as a part of the project shall be shared with appropriate Native American representatives who have been consulted with under AB 52, if requested.

## 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 consists of the existing Adelanto Switching Station and the Adelanto Converter Station; the Adelanto Station began operations in 1986. The Adelanto Converter Station is the southern terminus of the 2,400-MW WECC Path 27 IPP HVDC Transmission Line. At the Adelanto Converter Station, power delivered over the  $\pm$  500-kV HVDC Southern Transmission System from the Intermountain Converter Station in Utah is changed from DC power to AC power to be transmitted to load centers throughout Southern California. The Adelanto Switching Station is the interface between the converter station and a regional AC transmission network that consists of five separate 500-kV transmission lines (refer to Figure 2-2).

The converter and switching station facilities are generally located in the central portion of the site. Solar panels occupy the southwestern portion of the Project site. Other facilities located on site include towers and other large-scale switching equipment, power transformers, operations and maintenance buildings, and two large converter equipment buildings. The area between the facilities and the fence line of the entire Adelanto Station is generally undeveloped except for several transmission towers and site drainage control structures consisting of earthen berms. Some ancillary uses, such as materials storage, evaporation ponds, and a helipad, are also located within the Adelanto Station. The Adelanto property is designated as public utilities and the immediate surrounding land uses are designated as manufacturing and industrial.

### 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.** The proposed expansion Project is necessary to replace aging infrastructure and improve long-term reliability and meet current and future transmission demand in the region in order to continue safe and reliable electric service to customers, and to meet contractual obligations with electrical customers.

Project construction would require the use of transportation fuels (diesel and gasoline). Heavy-duty construction equipment, vehicle trips used for transporting materials, and worker commute trips to and from the Project site would all consume energy. These are all considered necessary components of the

Project's construction phase and would not result in wasteful, inefficient, and unnecessary consumption of energy. Once completed, the Project would serve as an integral component of LADWP's power transmission system and would increase LADWP's overall capacity to transmit power to meet current and future demand. 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.** The proposed Project would improve long-term reliability and meet current and future transmission demand in the region in order to continue safe and reliable electric service to customers. Operation of the Project would not result in the demand new energy services and facilities nor 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 wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

The information in this section is based on the *Geohazard Report* prepared by Black & Veatch (2020a) and *Geotechnical Design Report* prepared by Black & Veatch (2020b) provided in Appendix D.

### 3.7.1 Affected Environment

The Project site is located the geographic subregion of the southwestern portion of the Mojave Desert in the Victor Valley High Desert region of San Bernardino County. Two primary fault sets that control the topography within the province include northwest-to-southeast faults with secondary east-west trending faults. The Garlock Fault is located to the north and the San Andreas Fault is located to the south and west. The Garlock Fault separates the Mojave Desert and the Basin-and-Range provinces. The San

Andreas Fault separates the Mojave Desert province from the Transverse Ranges and the Colorado Desert.

The Project site is not located within a designated Alquist-Priolo Earthquake Fault Zone. 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. The closest fault is the Mirage Valley Fault located about six miles to the northwest of the Project site (Black & Veatch 2020a).

### **Soils**

The Project site and surrounding area are on a series of alluvial fan deposits that are primarily formed sediments from the San Gabriel Mountains to the south. These sediments, primarily derived from volcanic and metamorphic rocks, were eroded from the mountains and transported by intermittent streams down the mountains where the intermittent streams would deposit much of their sediment load. More recent deposits, within the past few thousand years, near the Project site are primarily associated with erosion from sedimentary bedrock units near Cajon Canyon and mobilization of older alluvial fan deposits near Baldy Mesa south of the Project site (Black & Veatch 2020a).

Three types of soils are present in the Project area (Psomas 2020):

- 106: Bryman Loamy Fine Sand 2 to 5 percent slopes)
- 112: Cajon Sand (0 to 2 percent slopes)
- 133: Helendale-Bryman Loamy Sands (2 to 5 percent slopes)

### **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. As stated above, the Project site is not located within an Alquist-Priolo Earthquake Fault Zone. The closest fault is the Mirage Valley Fault located about six miles to the northwest of the Project site. 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 2018). The Project site, like much of southern California, would be subject to strong ground shaking in the event of a major earthquake.

However, the proposed Project would not exacerbate conditions related to strong seismic ground shaking. The proposed Project involves the expansion of facilities at the existing Adelanto site. The Project site is located in a sparsely developed area and is primarily surrounded by undeveloped/vacant land and manufacturing uses. In the event that strong seismic shaking were to occur, the potential to expose the public to injury would be similar to existing conditions.

Furthermore, the proposed Project would be designed and constructed to meet current requirements of San Bernardino County and City of Adelanto Building codes 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).

Because groundwater in the vicinity of the Project site is greater than 100 feet bgs (Black & Veatch 2020a), 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 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.** Construction activities 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, sandbags, straw wattles, and no work on high wind days. Implementation of MM HYD1 (Section 3.10.3, 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 MDAQMD 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, BIO-3, and adherence to MDAQMD 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. Because the Project site is located in a seismically active area and has the potential to be subjected to strong ground shaking which could contribute to unstable soil conditions on site.

The Project would be designed and engineered in compliance with current County and City Building Codes 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 Project's site specific *Geotechnical Design Report* (Black & Veatch 2020b). With adherence to all applicable building code regulations, the Project would avoid potential impacts to structures resulting from unstable soils, and therefore, 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. Soils at the Project site consist primarily of alluvium composed of sands, loamy sands, and gravelly sands that are well drained; the potential for expansive soils is considered low.

Because construction of the Project would comply with applicable County and City 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 wastewater disposal systems where sewers are not available for the disposal of wastewater?**

**No Impact.** The Project site is connected to the City of Adelanto sanitary sewer line located near Aster Road north of the site. No new personnel are anticipated in association with Project implementation. No changes to the existing sanitary waste system operations would occur such that septic tanks or alternative wastewater systems would be required. No impact would occur and no mitigation would be required.

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

**Less Than Significant Impact with Mitigation.** The surface deposits in the Project area are composed of younger Quaternary Alluvium. This younger Quaternary Alluvium is unlikely to contain significant vertebrate fossils, at least in the uppermost layers. The closest fossil vertebrate locality is LACM 7786, between Adelanto and the former George Air Force Base. This locality produced a fossil specimen of meadow vole, *Microtus*. The next closest vertebrate fossil locality from these deposits is LACM 1224, west of Spring Valley Lake, which produced a specimen of fossil camel, *Camelops*. Additionally, on the western side of the Mojave River below the bluffs, an otherwise unrecorded specimen of mammoth was collected in 1961 from older Quaternary Alluvium deposits (Blodgett Baylosis 2020).

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 MM HYD-1 in Section 3.10.3 (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 *Greenhouse Gas Emissions Impacts Assessment for the Adelanto Substation Expansion Project* prepared by TAHA (2021b) provided in Appendix E.

### 3.8.1 Affected Environment and Regulatory Framework

#### Greenhouse Gas Topical Information

Greenhouse gas (GHG) emissions refer to a group of emissions that are generally believed to affect global climate conditions. The greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass panes in a greenhouse let heat from sunlight in and reduce the amount of heat that escapes. GHGs, such as carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O), keep the average surface temperature of the Earth close to 60-degree Fahrenheit (°F).

In addition to CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O, GHGs include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), black carbon (black carbon is the most strongly light-absorbing component of particulate matter emitted from burning fuels such as coal, diesel, and biomass), and water vapor. CO<sub>2</sub> is the most abundant pollutant that contributes to climate change through fossil fuel combustion. The other GHGs are less abundant but have higher global warming potential than CO<sub>2</sub>. To account for this higher potential, emissions of other GHGs are frequently expressed in the equivalent of CO<sub>2</sub>, denoted as CO<sub>2</sub>e. CO<sub>2</sub>e is a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Table 3-10 shows various global warming potentials.

**TABLE 3-10 GLOBAL WARMING POTENTIAL FOR VARIOUS GREENHOUSE GASES**

POLLUTANT	LIFETIME (YEARS)	GLOBAL WARMING POTENTIAL (20-YEAR)	GLOBAL WARMING POTENTIAL (100-YEAR)
Carbon Dioxide (CO <sub>2</sub> )	--	1	1
Methane (CH <sub>4</sub> )	12	21	25
Nitrous Oxide (N <sub>2</sub> O)	114	310	298
Nitrogen Trifluoride	740	Unknown	17,200
Sulfur Hexafluoride (SF <sub>6</sub> )	3,200	23,900	22,800
Perfluorocarbons (PFCs)	2,600-50,000	6,500-9,200	7,390-12,200
Hydrofluorocarbons (HFCs)	1-270	140-11,700	124-14,800

Source: Taha 2021b.

### **Regulatory Framework**

In response to growing scientific and political concern with global climate change, a series of federal and state laws have been adopted to reduce GHG emissions. The following provides a brief summary of GHG regulations and policies. This is a not an exhaustive list of all regulations and policies.

#### ***Federal***

***Massachusetts vs. Environmental Protection Agency***, 127 S. Ct. 1438 (2007). A Supreme Court ruling that CO<sub>2</sub> and other GHGs are pollutants under the Clean Air Act.

**Energy Independence and Security Act.** This act set a Renewable Fuel Standard of 36 billion gallons of biofuel usage by 2022, increases Corporate Average Fuel Economy Standards of setting 35 miles per gallon of cars and light trucks by 2020 and sets new standards for lighting and residential and commercial appliance equipment.

**National Fuel Efficiency Policy and Fuel Economy Standards.** This 2009 policy was designed to increase fuel economy by more than five percent by 2016 starting with model year 2012 cars and trucks.

**Heavy-Duty Vehicle Program.** This 2011 program established the first fuel efficiency requirements for medium- and heavy-duty vehicles beginning with model year 2014.

#### ***State***

**Energy Efficiency Standards for Residential and Nonresidential Buildings (Title 24 of the California Code of Regulations).** Title 24 standards contain energy and water efficiency requirements (and indoor air quality requirements) for newly constructed buildings, additions to existing buildings, and alterations to existing buildings.

**California Green Building Code.** Also referred to as CalGreen, lays out minimum requirements for newly constructed buildings in California, which will reduce GHG emissions through improved efficiency and process improvements.

**Senate Bill 1078 (SB 1078), Senate Bill 107 (SB 107), and Executive Order (E.O.) S-14-08 (Renewables Portfolio Standard).** Signed on September 12, 2002, SB 1078 required California to generate 20 percent of its electricity from renewable energy by 2017. SB 107, signed on September 26, 2006 changed the due date for this goal from 2017 to 2010, which was achieved by the state. On November 17, 2008, E.O. S-14-08 established a Renewables Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020.

**Executive Order (E.O.) S-3-05.** E.O. S-3-05 set the following GHG emission reduction targets: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels.

**Assembly Bill 32.** The California Global Warming Solutions Act of 2006, also known as Assembly Bill 32, focuses on reducing GHG emissions in California and requires the CARB to adopt rules and regulations that would achieve GHG emissions equivalent to Statewide levels in 1990 by 2020. The 2020 target reductions were estimated to be 174 million metric tons of CO<sub>2</sub>e. In November 2017, CARB adopted the final 2017 Scoping Plan: The Strategy for Achieving California's 2030 GHG target (2017 Scoping Plan). The 2017 Scoping Plan incorporates, coordinates, and leverages many existing and ongoing efforts and identifies new policies and actions to accomplish the State's climate goals.

**Senate Bill 375 (SB 375).** Provides a means for achieving Assembly Bill 32 goals through the reduction in emissions by cars and light trucks. SB 375 requires regional transportation plans (RTPs) prepared by Metropolitan Planning Organizations (MPOs) to include Sustainable Communities Strategies (SCSs).

**Senate Bill 743 (SB 743).** Encourages land use and transportation planning decisions and investments that reduce vehicle miles traveled (VMT), which contribute to GHG emissions, as required by Assembly Bill 32.

**Executive Order (E.O.) B-30-15.** This policy set a goal to reduce GHG emissions 40 percent below their 1990 levels by 2030. The E.O. establishes GHG emissions reduction targets to reduce emissions to 80 percent below 1990 levels by 2050 and sets an interim target of emissions reductions for 2030 as being necessary to guide regulatory policy and investments in California and put California on the most cost-effective path for long-term emissions reductions.

**Senate Bill 32 (SB 32).** This bill required a commitment to reducing statewide GHG emissions by 2020 to 1990 levels and by 2030 to 40 percent less than 1990 levels.

### ***Regional***

**Southern California Association of Governments Connect SoCal 2020–2045 Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS).** Southern California Association of Governments the MPO for the six-county region that includes Los Angeles, Orange, Riverside, Ventura, San Bernardino and Imperial counties. The 2020–2045 RTP/SCS includes commitments to reduce emissions from transportation sources to comply with SB 375. Goals and policies included in the 2016–2045 RTP/SCS to reduce air pollution consist of adding density in proximity to transit stations, mixed-use development and encouraging active transportation (i.e., non-motorized transportation such as bicycling).

### ***Local***

**City of Adelanto Local Hazard Mitigation Plan.** The City of Adelanto has released a Local Hazard Mitigation Plan, which includes an estimate of the probability and severity of future climate change impacts as well as goals to mitigate potential risks or reduce and eliminate long-term risk of these impacts.

**MDAQMD Community Air Protection Program.** In response to Assembly Bill 617, CARB established the Community Air Protection Program. The Program's focus is to reduce exposure in communities most impacted by air pollution, including exposure to GHG emissions. The Program's projects are part of California Climate Investments, a statewide initiative that puts billions of Cap-and-Trade dollars to work reducing GHG emissions, strengthening the economy, and improving public health and the environment — particularly in disadvantaged communities.

**San Bernardino Regional Greenhouse Gas Reduction Plan.** The San Bernardino Association of Governments (now San Bernardino Council of Governments/San Bernardino County Transportation Authority [SBCOG/SBCTA]) prepared a 2008 GHG emissions inventory for each partnership city and forecasted each city's emissions to the year 2020, including for the City of Adelanto, in the Regional Reduction Plan. In addition to city-specific GHG emissions inventory, the Regional Reduction Plan includes a comprehensive list of measures applicable to the region that were developed by SBCOG/SBCTA and presented to each city to identify measures that would be feasible for implementation locally. Partnership cities provided a selection of potential GHG reduction strategies that were used to identify the level of reduction that would be achieved locally toward achieving a 2020 emissions reduction target. Through the Regional Reduction Plan, the City selected a goal to reduce community GHG emissions to a level 30 percent below 2008 GHG emissions by 2020.

**Resilient IE.** Western Riverside Council of Governments (WRCOG) in partnership with the SBCOG/SBCTA developed the Resilient IE program to support regional and local efforts to prepare for and mitigate risks associated with climate adaptation and transportation infrastructure. The Resilient IE program includes six primary components:

- Establish a regional climate collaborative, referred to as the Inland Southern California Climate Collaborative.
- Revise WRCOG's community vulnerability assessment and establish a vulnerability assessment for San Bernardino County.
- Develop city-level, climate-related transportation hazards and evacuation maps.
- Develop a climate resilient transportation infrastructure guidebook.
- Prepare a regional climate adaptation and resiliency general plan element template.
- Serve as a pilot project to assess the community cost of downed or damaged transportation assets.

Through the development of the San Bernardino County Vulnerability Assessment and Adaptation Strategies, the Resilient IE program includes a vulnerability assessment that summarizes projected climate change—related hazards that would affect the county and cities within it. The proposed Project also includes a summary of climate change adaptation measures developed through a regional context for consideration by local agencies to implement in their own general plans or other planning documents.

**Adelanto North 2035 Comprehensive Sustainable Plan.** The Plan is the result of the State of California Sustainable Communities Planning Grant and Incentives Program. The planning process created a framework facilitating collaboration between public and private entities to promote sustainable development approaches, protect environmental resources, and forge a strong physical and economic connection between SCLA jobs center and new mixed-use neighborhoods. The Plan establishes land use, transportation, infrastructure, economic development, and resource protection strategies that promote sustainable development approaches, particularly by reducing automobile usage and fuel consumption, and requiring cluster development approaches to protect and respect the sensitive desert environment. Well important to note for background information, the Plan is not particularly relevant to the switching station expansion.

### 3.8.2 Methodology

The GHG emissions analysis conducted for the proposed Project is consistent with the methods described in the MDAQMD *CEQA and Federal Conformity Guidelines*. The guidelines recommend the use of the CalEEMod, version 2016.3.2 as a tool for quantifying emissions of air pollutants that will be generated by development projects under CEQA. CalEEMod is the preferred regulatory model for estimating GHG emissions from construction and operation of land use development projects in California. The model was developed using a compilation of robust land use survey data and CARB off-road and on-road mobile emission source inventories. CalEEMod relies on project-specific information and regional default parameters derived from the survey data and CARB models to characterize air pollutant emissions that would be generated by construction and operation of CEQA projects. CalEEMod produces estimated annual emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O for construction projects based on the project location, construction schedule, and equipment and vehicle inventories. The GHG emissions analysis produced and analyzed estimates of annual GHG emissions in accordance with the MDAQMD guidance.

The GHG emissions analysis quantified annual emissions that would be generated during each year of construction using the schedule presented in Table 2-1 and equipment and vehicle inventories developed by LADWP for each of the components and activities. Sources of air pollutant emissions involved in construction activities would include combustion engine exhaust emissions from off-road construction equipment and on- and off-road vehicle travel. Vehicle trips during proposed Project construction would be associated with crews commuting to and from the site as well as on-site vehicle travel, which would comprise pickup trucks, dump trucks, buggies, flatbed trucks, and concrete trucks. On-site dumping trips were assumed to be approximately one-half mile in length on average based on the site configuration. The GHG emissions analysis accounted for on-site light- and heavy-duty truck trips using vehicle fleet information provided by LADWP. The decommissioning phase of the proposed Project would generate approximately 21,805 cubic yards of waste material that would be disposed of off-site. Preliminary information determined that possible disposal locations could be located up to 40 miles away at the Mid-Valley Landfill located in Rialto. Hauling trips during the decommissioning phase were assumed to be 40 miles in length. The detailed CalEEMod output files disclosing estimated GHG emissions can be found in the Appendix of the *Greenhouse Gas Emissions Impacts Assessment* technical memorandum (Appendix E of this Initial Study/MND).

Following completion of construction activities, the operational conditions of the proposed Project facilities would not substantially change from existing conditions. Implementation of the proposed Project would not introduce a new substantial long-term source of GHG emissions into the region. For this reason, the GHG emissions analysis focused on annual emissions that would be generated during the construction activities. LADWP maintains a rigorous and robust set of procedures and protocols to comply with all applicable regulations related to facility management. The assessment of operational GHG emissions associated with implementation of the proposed Project is qualitative in nature.

### 3.8.3 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.** Implementation of the proposed Project would generate GHG emissions predominantly from off- and on-road combustion engine exhaust during construction activities. The GHG emissions analysis focused on annual emissions that would be generated during each year of construction in the context of the MDAQMD CEQA guidelines. Table 3-11 presents the estimated emissions of GHGs

that would be released to the atmosphere on an annual basis throughout construction of the proposed Project. Construction of the proposed Project would produce approximately 12,125.7 metric tons of carbon dioxide equivalent (MTCO<sub>2</sub>e) over the entire duration, with a maximum annual emission rate of 2,915.3 MTCO<sub>2</sub>e and an average annual emission rate of 1,347.3 MTCO<sub>2</sub>e. The maximum annual mass emissions would be below the significance threshold of 10,000 MTCO<sub>2</sub>e per year. Furthermore, emissions would cease upon completion of construction activities and implementation of the proposed Project would not introduce a new substantial permanent source of GHG emissions to the Project area. The new facilities will be designed with enhanced energy efficiency features relative to existing structures and would not substantially affect operational energy consumption. Therefore, implementation of the proposed Project will result in a less than significant impact related to GHG emissions.

**TABLE 3-11 ESTIMATED ANNUAL GREENHOUSE GAS EMISSIONS**

YEAR	ONGOING ACTIVITIES	ANNUAL EMISSIONS (MTCO <sub>2</sub> e PER YEAR)
2021	Site Prep, Transmission Line	1,342.1
2022	Site Prep, Transmission Line	166.5
2023	Site Prep, Switchyard, Converter	1,897.9
2024	Switchyard, Converter	2,579.2
2025	Converter Station	2,915.0
2026	Converter Station	241.7
2027	Decommissioning	584.3
2028	Decommissioning	1,212.4
2029	Decommissioning	1,186.6
<b>Maximum Annual GHG Emissions</b>	<b>2,915.3</b>	
<b>Average Annual GHG Emissions</b>	<b>1,347.3</b>	
Significance Threshold	10,000	
Exceed Threshold?	No	

Source: TAHA 2021b.

MTCO<sub>2</sub>e = metric tons of carbon dioxide equivalent.

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

**Less Than Significant Impact.** There is no potential for the substation expansion to conflict with GHG emissions reduction plans. The existing switching station and existing converter station would be rebuilt in order to upgrade and replace aging infrastructure, thus allowing allow LADWP greater control in managing the energy transfer along the existing high voltage transmission lines and improve long-term reliability. As previously discussed, the proposed Project would not permanently increase emissions. GHG emissions are regionally cumulative in nature and it is highly unlikely construction of any individual project would generate GHG emissions of sufficient quantity to conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing GHG emissions. Standard construction procedures would be undertaken in accordance with MDAQMD and CARB regulations applicable to heavy duty construction equipment and diesel haul trucks. Adhering to requirements pertinent to construction equipment maintenance and inspections and emissions standards, as well as diesel fleet requirements, including idling time restrictions and maintenance, would ensure that construction of the proposed Project would not conflict with GHG emissions reductions efforts.

The proposed Project is required to reliably interconnect and integrate multiple renewable generation projects onto the electric grid. Renewable energy is a key component of all statewide, regional, and local GHG reduction plans. The proposed Project provides infrastructure to support renewable energy.

#### **3.8.4 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.9.1 Affected Environment

The site is developed within the existing high voltage switching station, converter station and associated facilities. The Project site is located in a sparsely developed section of the City of Adelanto with land use and zoning designated as Public Utilities. Adjacent land uses are primarily undeveloped; vacant property with a manufacturing and industrial zoning designation. A few isolated residences are located approximately 0.5 mile to the east of the Adelanto Station; otherwise, the nearest residential developments to the Project site are located over a mile to the north, southeast, and south.

SCLA, also known as Victorville Airport (formerly George Air Force Base/Victorville Air Force Base), is a public airport located in the City of Victorville in San Bernardino County, approximately 3.5 miles northeast of the Project's boundary. In addition to SCLA, two private airstrips are located in the Project

vicinity: Adelanto Airport, a private use airstrip, is located approximately 1.2 miles southwest of the Project site, and Krey Field, a private airstrip, is located approximately 6.5 miles west of the Project 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 MM 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.

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 and operation of the Project. However, as stated in the Checklist Response 3.9.2 (a), an 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; impacts would be reduced to a 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. Furthermore, the site is zoned for public facilities and the surrounding area is zone for manufacturing and industrial uses. No impacts are identified or are anticipated and no mitigation is required.

**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.** Government Code Section 65962.5 refers to the Hazardous Waste and Substances Site List, commonly known as the Cortese List. The Cortese List is a planning document used by the State and other local agencies to comply with CEQA requirements that require the provision of information regarding the location of hazardous materials release sites.

In October 2020, POWER reviewed information from the California Department of Toxic Substances Control's (DTSC) EnviroStor geographic information system (GIS) database, USEPA Superfund website, and the SWRCB GeoTracker website to identify any releases of regulated substances or petroleum products that occurred on or near the Project site. The Project site does not include any sites identified on a hazardous sites list compiled pursuant to California Government Code Section 65962.5. Review of the DTSC EnviroStor database did not identify any sites on or near the Project site (DTSC 2020). Review of the USEPA site did not identify any superfund sites (USEPA 2020a), Comprehensive Environmental Response, Compensation, and Liability Act sites (USEPA 2020b) or any sites on the National Priorities List (USEPA 2020c). SWRCB GeoTracker databases were also searched to help identify any sites in or near the Project area with previous hazardous material contamination. The SWRCB GeoTracker database did not identified any sites on the Project site or within one mile of the Project area (SWRCB 2020). No significant adverse impacts relative to hazardous materials sites would result with implementation of the proposed Project and no mitigation is 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 SCLA is a publicly-owned airport, also known as Victorville Airport, located in the City of Victorville, approximately 3.5 miles northeast of the Project's boundary. The eastern portion of the Project site is located within the SCLA Comprehensive Land Use Plan, as adopted September 2008. The Comprehensive Land Use Plan for SCLA is intended to protect and promote the safety and welfare of airport users, residents, and visitors to the Cities of Victorville and Adelanto, while promoting the continued operation of the airport (Coffman Associates, Inc. 2008).

According to SCLA Comprehensive Land Use Plan, the eastern portion of the Project site is located within Airport Planning Area – Compatibility Review Area 4. As shown in Table 3A of the Land Use Plan, the Project site and Utilities are an acceptable use in Compatibility Review Area 4; these are specified land uses which are satisfactory. Therefore, the proposed Project would not result in a safety hazard related to Project improvements. No impacts would occur and no mitigation is required.

**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 Rancho Road and Aster Road. Two new secondary access road would also be constructed off of Pansy

Road and Racoon Avenue. Rancho Road and Aster Road are designated as Major Arterials in the City of Adelanto General Plan, Circulation Element Map (City of Adelanto 2005). None of these roadways are 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 Aster Road, Pansy Road, or Racoon Avenue. 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 Traffic Control Plan would also include contact information for those agencies, assign responsibility for notifying the service providers, and specify coordination procedures. Copies of the Traffic Control Plan would be provided to all affected police departments, fire departments, and ambulance and paramedic services.

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.** The California Department of Forestry and Fire Protection (CAL FIRE) has mapped fire threat potential throughout California. CAL FIRE ranks fire threats based on the availability of fuel and the likelihood of an area burning (based on topography, fire history, and climate). The rankings include no fire threat, moderate, high, and very high fire threats. 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) and located entirely within the existing approximate 315-acre fenced site. During construction and operation, 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. 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.

### 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 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 located within RWQCB Region 6, the Lahontan Region. The SWRCB and the Lahontan RWQCB have adopted a Basin Plan for the Lahontan Region. The Basin Plan contains goals and policies, descriptions of conditions, and proposed solutions to surface and groundwater issues. The Basin Plan also establishes water quality standards for surface and groundwater resources and includes beneficial uses and levels of water quality that must be met and maintained to protect these uses. These water quality standards are implemented through various regulatory permits pursuant to Clean

Water Act, Section 401 for Water Quality Certifications and Section 402 for Report of Waste Discharge permits.

The Project site is located within Hydrologic Unit Number 625.00 (HU No. 625.00). More specifically, the Project site is located within Hydrologic Unit Code 12-180902080503 (Manzanita Wash). Drainage features that occur on the Project site and the nearby vicinity have hydrologic connectivity to Fremont Wash, which flows northeast to join the Mojave River just east of the community of Silver Lakes (Psomas 2020).

The Basin Plan provides water quality objectives applicable to all surface waters within the Basin, as described in more detail in Chapter 3 of the Basin Plan. Also, the Project occurs within the Mojave Hydrologic Unit and is subject to additional water quality objectives for this area (Psomas 2020).

### **Groundwater**

The Site is located within the South Lahontan/Upper Mojave River Valley. Groundwater table was not encountered at any of the borings drilled during the Black & Veatch 2020 subsurface investigations. Groundwater was observed during previous subsurface investigations by Ertec Wester, Inc. in 1981 and CH2M Hill in 1983; groundwater was observed at a depth of about 140 feet and 154 feet below grade in deep test wells (Black & Veatch 2020a).

### **Floodplains**

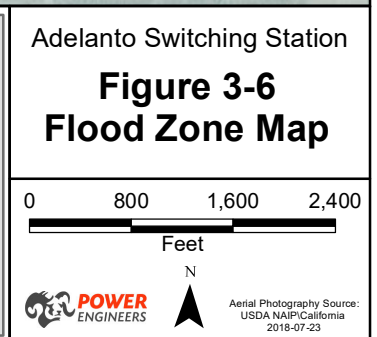
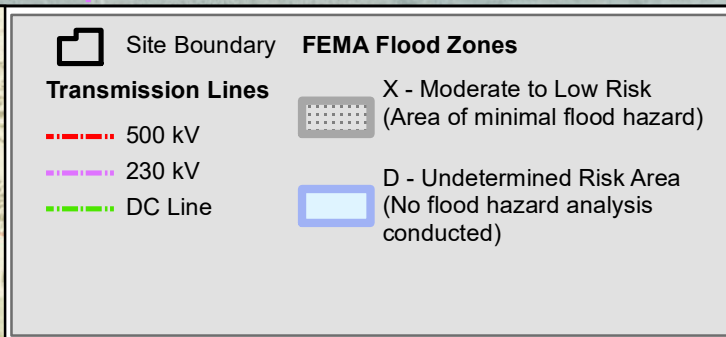
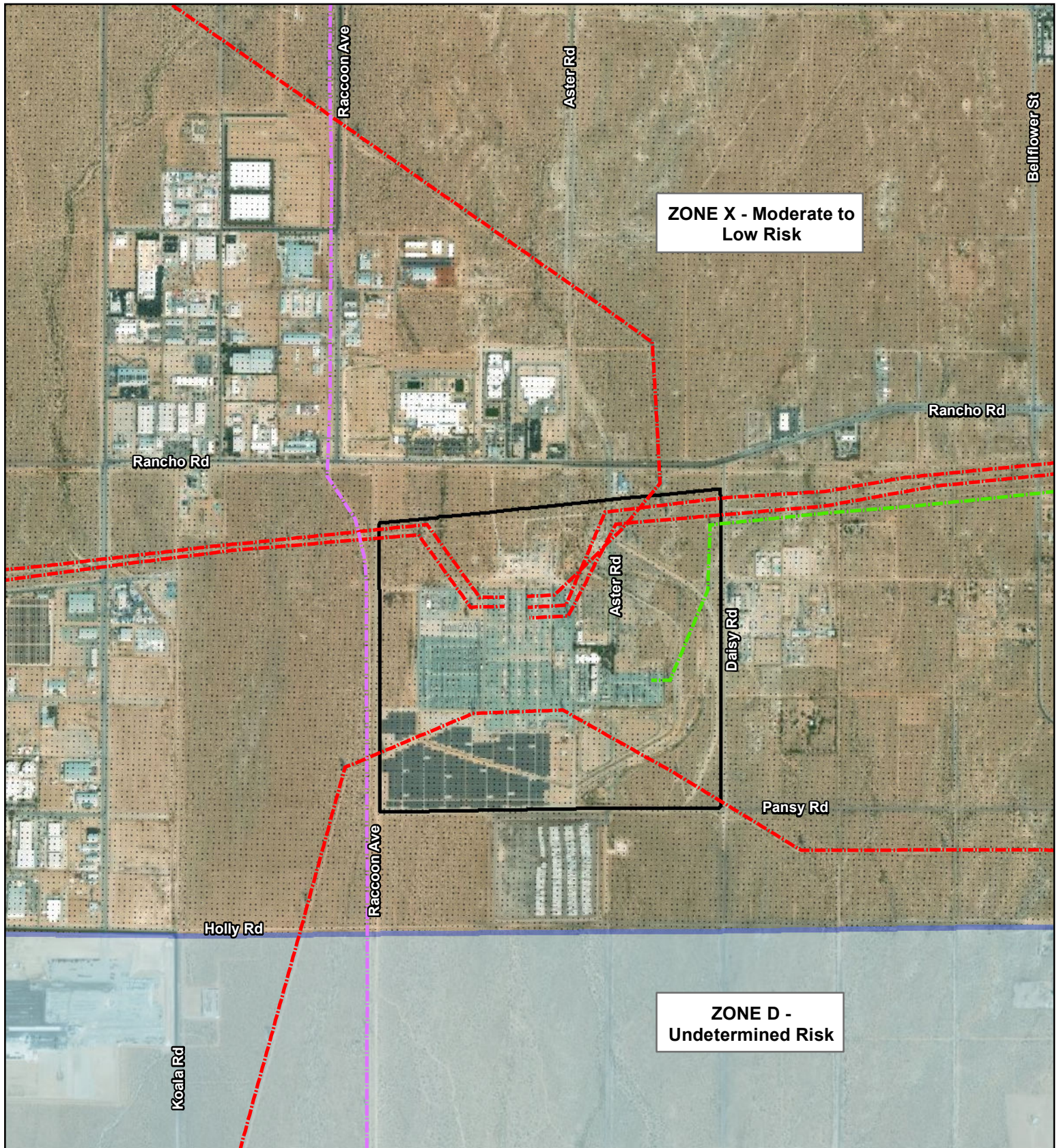
According to the Federal Emergency Management Agency (FEMA), the Project site is not located within a designated 100-year flood hazard area. According to the FEMA flood map, the Project site is located in Zone X (0.2 Percent Annual Chance Flood Hazard). Zone X, as defined by FEMA, is a “moderate to low risk of flooding,” properties located in Zone X are not located within a 100-year flood plain (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 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. Implementation of MM HYD-1 would reduce potential soil erosion during construction to a less than significant level. Operation of the Project would not involve activities that would contribute to a violation of a water quality standard or waste discharge requirement.



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**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 addition of paved surfaces associated with project facility foundations would not substantially decrease groundwater recharge in the area due to the amount of pervious areas in the Project site and surrounding area. The proposed Project would not involve direct withdrawal of groundwater. The proposed Project 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.** As discussed in Checklist Response 3.4.2 (b), existing site drainage structures onsite include an earthen berm, which was installed at the time that the switching station was built to redirect natural sheet flow around the switchyard. Several drainage features exist on site as shown on Figure 3-4 and described in Checklist Response 3.4.2 (b).

As part of Phase 1 construction, a portion of the solar panels (northwest portion of the solar field) would be removed in order to rebuild the earthen berm located on the west and south portions of the site. 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 3.11.2(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. After construction, exposed areas of the site would be stabilized with gravel, plant material, or other permeable cover to prevent significant erosion, siltation, and runoff. Implementation of MM HYD-1 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 X”, a moderate to low flooding risk. Construction of the proposed Project would require grading, which could alter local site drainage patterns. Mitigation measure HYD-1 would implement management measures and BMPs necessary to capture and/or treat any increase in stormwater runoff resulting from increased impervious surfaces at the switching station. The impacts of the proposed Project with respect to alteration of drainage patterns are discussed in Checklist Response 3.10.(c.) (i) and are applicable to potential for increases in the rate or amount of surface runoff. The Project’s impacts on flooding from altered drainage patterns would be less than significant.

**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. These measures would control stormwater flows, erosion, and protect

water quality during runoff events. After construction, a substantial portion of Project site would remain as pervious surfaces, allowing infiltration of precipitation and runoff. With implementation of MM HYD-1, 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?**

**No Impact.** 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 “Zone X”, a moderate to low flooding risk; properties located in Zone X are not located within a 100-year flood plain. No impact would occur and no mitigation is required.

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

**No Impact.** The Project site is located within RWQCB Region 6, the Lahontan Region. 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. 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.

### 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 type="checkbox"/>	<input checked="" type="checkbox"/>

#### 3.11.1 Affected Environment

The Project site is located on approximately 315 acres in the City of Adelanto, San Bernardino County, California. The Project site is completely fenced and is bounded by Raccoon Avenue to the west, Pansy Road to the south and Daisy Road to the east. Rancho Road is located approximately 350 feet north of the Project site. I-15 is located approximately eight miles to the east of the Project site, US-395 is approximately 1.5 miles to the east and SR-18 is approximately 3.5 miles to the south (refer to Figure 2-1, Regional Location and Figure 2-2, Vicinity Map).

Land use and development within the Project area is governed by the City of Adelanto General Plan and Zoning. The Project site is located in a sparsely developed section of the City of Adelanto with land use and zoning designation as Public Utilities.

The fenced Project site is bordered by paved roads. Surrounding land uses are zoned for manufacturing and industrial uses. Adjacent uses are primarily undeveloped; vacant property and a manufacturing facility are located to the east, and vacant property and a former San Bernardino County sludge composting facility to the south. Land uses farther to the north, across Rancho Road, include San Bernardino County Fire Station 322, the Adelanto Community Correctional Facility, and a California Department Correctional facility. Industrial facilities are also located to the northwest and west of the Project site. A few isolated residences are located approximately 0.5 mile to the east of the Adelanto Station; otherwise, the nearest residential developments to the Project site are located over a mile to the north, southeast, and south (refer to Figure 2-3).

#### 3.11.2 Impact Assessment

**Would the Project:**

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

**No Impact.** All Project improvements would be located entirely within the approximate 315-acre fenced Project site, which is zoned for public utilities. Existing land uses surrounding the site consist of undeveloped/vacant land and manufacturing/industrial uses. Scattered rural residences are located approximately 0.5 mile to the east. Implementation of the proposed Project would not alter or diminish access to adjacent properties. Construction and operation of the proposed Project would not physically divide an established community. 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?**

**No Impact.** According to the City of Adelanto General Plan Land Use and Zoning Map the Project site is designated as Public Utilities. The proposed Project is consistent with the General Plan land use and zoning designation of Public Utilities. 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, no impact would occur.

**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 (SMARA) identifies and protects California's mineral resources. The State Mining and Reclamation Act mandated the California Geological Survey to implement a classification-designation process. SMARA has developed mineral land classification maps and reports to assist in the protection and development of mineral resources. According to the SMARA, the following four mineral land use classifications are as follows:

- 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.** There are no known mineral resources on the Project site or in the immediate vicinity (California Geological Survey 2015). The proposed Project does not involve any use that would result in impacts to mineral resources. The Project site is currently developed with an existing switching station, converter station, and associated facilities. No impact would occur 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 checked="" type="checkbox"/>	<input 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 *Adelanto Switching Station Expansion Project – Noise and Vibration Impacts Assessment* prepared by TAHA (2021c) provided in Appendix F.

#### 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. The A-weighted 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 (Leq). Leq is the average noise level on an energy basis for any specific time period. The Leq 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. Leq 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 over a hard surface.

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 from the source since 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.

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of vibration are trains, buses on rough roads, and construction activities, such as rock blasting, pile driving, and heavy earth-moving equipment. High levels of vibration may cause physical personal injury or damage to buildings. However, vibration levels rarely affect human health. Instead, most people consider vibration to be an annoyance that may affect concentration or disturb sleep. In addition, high levels of vibration may damage fragile buildings or interfere with equipment that is highly sensitive to vibration (e.g., electron microscopes).

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to measure RMS. The VdB acts to compress the range of numbers required to describe vibration.

## **Regulatory Framework**

### ***Noise***

**Federal.** The Noise Control Act of 1972 established programs and guidelines to identify and address the effects of noise on public health, welfare, and the environment. In 1981, the USEPA determined that subjective issues such as noise would be better addressed at local levels of government, thereby allowing more individualized control for specific issues by designated federal, state, and local government agencies. Consequently, in 1982, responsibilities for regulating noise control policies were transferred to specific federal agencies, and state and local governments. However, noise control guidelines and regulations contained in the USEPA rulings in prior years remain in place.

**State.** The state of California has adopted noise standards in areas of regulation not preempted by the federal government. State standards regulate noise levels of motor vehicles, sound transmission through buildings, occupational noise control, and noise insulation. State regulations governing noise levels generated by individual motor vehicles and occupational noise control are not applicable to planning efforts, nor are these areas typically subject to CEQA analysis.

**Local.** The City of Adelanto has established policies and regulations concerning the generation and control of noise that could adversely affect its citizens and noise-sensitive land uses. Regarding construction, City of Adelanto Municipal Code (AMC) Section 17.90.020(c) exempt construction noise from the regulations of the noise ordinance as long as they are in compliance with Section 17.90.020(d). Construction practices related to noise include:

- Construction activity and equipment maintenance is limited to the hours between 7:00 a.m. to dusk on weekdays. Construction may not occur on weekends or State holidays, without prior consent of the Building Official. Non-noise generating activities (e.g., interior painting) are not subject to these restrictions. City and State construction projects, such as road re-building or

resurfacing, and any construction activity that is in response to an emergency, shall be exempt from this requirement.

- Stationary construction equipment that generates noise in excess of 65 dBA at the project boundaries must be acoustically shielded and located at least 100 feet from occupied residences. The equipment area with appropriate acoustic shielding shall be designated on building and grading plans. Equipment and shielding shall remain in the designated location throughout construction activities.
- Construction routes are limited to City of Adelanto designated truck routes.
- All grading equipment shall be kept in good working order per factory specifications.

AMC Section 17.90.020(b) states that the noise standards contained in Table VIII-2, “Land Use Compatibility Guidelines Related to Noise Exposure” in the Noise Element of the General Plan shall apply to land uses city-wide and shall be used to define acceptable and unacceptable noise levels. The noise standard plus 3.0 dBA for that receiving land use specified in Table VIII-2 of the General Plan Noise Element (refer to Table 3-12) for a cumulative period of more than 30 minutes in any hour; or the noise standard plus 5.0 dBA for a cumulative period of more than five minutes in any hour; the noise standard plus 10 dBA for a cumulative period of more than three minutes in any hour; the noise standard plus 15 dBA for a cumulative period of more than one minute in any hour; or the noise standard plus 20 dBA for any period of time.

**TABLE 3-12 LAND USE COMPATIBILITY GUIDELINES RELATED TO NOISE EXPOSURE**

LAND USE	NOISE LEVEL (dB, CNEL)		
	65-70	70-75	75 & Above
Residential other than mobile homes/transient lodging	NLR required	NLR required	Incompatible
Mobile Home Parks	Incompatible	Incompatible	Incompatible
Transient Lodgings	NLR required	NLR required	Incompatible

Source: TAHA 2021c.

CNEL: Community Noise Equivalent Level

NLR: Noise Level Reduction. NLR is used to denote the total amount of noise transmission loss in decibels required to reduce an exterior noise level in habitat interior spaces to 45 dB CNEL.

Incompatible: Generally, the land use is considered to be incompatible with outdoor noise exposure, even if special attenuating materials were to be used in the construction of the building.

If the measured ambient level exceeds any of the first four categories, the allowable noise exposure standard shall be increased to reflect the ambient noise level. If the alleged offense consists entirely of impact noise or simple tone noise, each of the noise levels shall be reduced by 5.0 dBA.

AMC Section 17.90.060 (Mechanical and Electrical Equipment) states that all such equipment, including air conditioners, antennas, pumps, transformers, and heating and ventilating equipment, shall be located and operated in a manner that does not disturb adjacent uses and activities.

### ***Vibration***

The City has established a significance threshold related to vibration. AMC Section 17.90.030 regulates vibration within the City and states that no ground vibration shall be permitted which can be felt without the aid of instruments at or beyond the property line, nor will any vibration be permitted which produces a particle velocity greater than or equal to 0.2 inch per second measure at or beyond the lot line.

### **Existing Setting**

The Project site is located in a rural environment with few substantial sources of noise. It is anticipated that audible noise includes occasional traffic, aircraft flyovers, and existing helipad noise. The nearest sensitive receptors are two residences located approximately 1,000 feet and 1,500 feet to the east of the site boundary. TAHA completed noise measurements in a similar rural environment for the LADWP Fairmont Treatment Plant Project. Those noise measurements indicate that rural noise levels typically range from 47.7 to 55.1 dBA  $L_{eq}$ . Sensitive receptors are shown in Figure 3-7.

### **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 with Mitigation.**

#### ***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 the use of numerous pieces of noise-generating equipment. Typical noise levels from various types of equipment that would be used during construction are listed in Table 3-13. Noise levels from individual pieces of equipment typically are between 67.7 and 81.9 dBA  $L_{eq}$  at 50 feet. Table 3-14 Typical Outdoor Construction Noise Levels, takes into account that multiple pieces of construction equipment would be operating simultaneously. When considered as an entire process with multiple pieces of equipment, construction activity (i.e., ground clearing and site preparation) would generate noise levels between 78 and 89 dBA  $L_{eq}$  at 50 feet.

**TABLE 3-13 NOISE LEVEL RANGES OF TYPICAL CONSTRUCTION EQUIPMENT**

CONSTRUCTION EQUIPMENT	NOISE LEVEL AT 50 FEET (DBA)
Auger Drill Rig	77.4
Backhoe	73.6
Compressor (Air)	73.7
Concrete Mixer truck	74.8
Concrete Pump Truck	74.4
Crane	72.6
Dozer	77.7
Dump Truck	72.5
Excavator	76.7
Flat Bed Truck	70.3
Front End Loader	75.1
Gradall	79.4
Grader	81.0
Impact Pile Driver	94.3
Jackhammer	81.9
Man Lift	67.7
Pickup Truck	71.0
Roller	73.0

Source: TAHA 2021c.

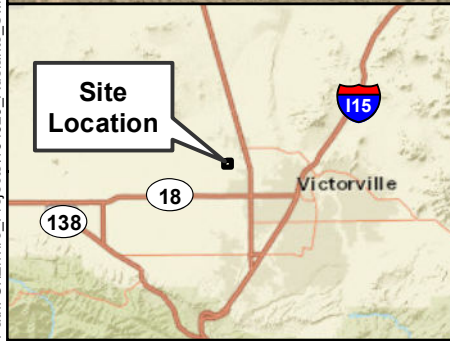
Table 3-13 takes into account that multiple pieces of construction equipment would be operating simultaneously. When considered as an entire process with multiple pieces of equipment, construction activity (i.e., ground clearing and site preparation) would generate noise levels between 78 and 89 dBA  $L_{eq}$  at 50 feet.



**TABLE 3-14 TYPICAL OUTDOOR CONSTRUCTION NOISE LEVELS**

CONSTRUCTION METHOD	NOISE LEVEL AT 50 FEET (DBA, $L_{eq}$ )
Ground Clearing	84
Site Preparation	89
Foundations	78
Structural	85
Finishing	89

Source: TAHA 2021c.

Construction activity would occur over approximately seven years with some overlapping construction. The analysis considers the closest construction activity that would occur as a conservative scenario. As construction occurs further interior to the site, construction noise levels would be decreased. Table 3-15 presents the estimated noise levels at the sensitive receptors nearest to the site for informational purposes. Construction noise related to typical use of construction equipment would result in a maximum increase of 1.8 dBA.




-  Site Boundary
-  Sensitive Receptors (Residential)

Adelanto Switching Station

### Figure 3-7 Sensitive Receptors

0 300 600 900 1,200  
Feet

N

 POWER ENGINEERS

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

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**TABLE 3-15 TYPICAL CONSTRUCTION NOISE LEVELS AT RECEPTORS**

SENSITIVE RECEPTOR	DISTANCE (feet) /a/	EXISTING NOISE LEVEL (dBA) /b/	NOISE LEVEL AT SENSITIVE RECEPTOR (dBA)	INCREASE (dBA)
Residence to the northeast	1,800	51.0	50.1	Not Noticeable
Residence to the southeast	1,500	51.0	52.1	1.1

Source: TAHA 2021c.

/a/ Distance to nearest construction activity.

/b/ Based on measured rural noise levels.

Construction of the converter station would require the use of impact driven piles. Impact pile drivers generate a noise level of approximately 94.3 dBA  $L_{eq}$  at 50 feet, which is an elevated noise level compared to typical construction equipment. The converter station would be constructed in the center of the site and the analysis has been conducted based upon the distance of this activity to the nearest sensitive receptors. As shown in Table 3-16, pile driving activity would result in a maximum increase of 2.2 dBA. For a noise increase to be audible and disruptive, typically the noise level must be 5.0 dBA above ambient. As construction noise would result in a less than 5.0 dBA increase, it is unlikely to result in a significant impact at nearby residences.

**TABLE 3-16 IMPACT PILE DRIVER CONSTRUCTION NOISE LEVELS AT RECEPTORS**

SENSITIVE RECEPTOR	DISTANCE (feet) /a/	EXISTING NOISE LEVEL (dBA) /b/	NOISE LEVEL AT SENSITIVE RECEPTOR (dBA)	INCREASE (dBA)
Residence to the northeast	3,500	51.0	48.2	Not Noticeable
Residence to the southeast	2,200	51.0	53.2	2.2

Source: TAHA 2021c.

/a/ Distance to pile driving activity.

/b/ Based on measured rural noise levels.

Early morning or nighttime construction may be required irregularly based on electrical system conditions and 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). Early morning and nighttime construction would be most similar to typical construction noise. Ambient noise levels are often quieter than daytime hours, therefore an existing noise level of 45 dBA has been used for the analysis. As shown in Table 3-17, early morning/nighttime noise may result in increase of 5 dBA or more over the early morning/nighttime ambient noise level.

**TABLE 3-17 EARLY MORNING/NIGHTTIME CONSTRUCTION NOISE LEVELS AT RECEPTORS**

SENSITIVE RECEPTOR	DISTANCE (feet) /a/	EXISTING NOISE LEVEL (dBA) /b/	NOISE LEVEL AT SENSITIVE RECEPTOR (dBA)	INCREASE (dBA)
Residence to the northeast	1,800	45.0	50.1	5.1
Residence to the southeast	1,500	45.0	52.1	7.1

Source: TAHA 2021c.

/a/ Distance to pile driving activity.

/b/ Based on measured rural noise levels.

The impact analysis is based on the regulations of the AMC. Construction activities would primarily occur Monday through Saturday. It is not anticipated that nighttime, Sunday or holiday work would occur; however, the work schedule may be modified throughout the year based on electrical system conditions and 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). For construction activities occurring on Saturdays and after dusk, LADWP would seek approval from the City of Adelanto Building Official, which would be in compliance with the AMC. Nonetheless, early morning and nighttime construction noise may result in increase of 5 dBA or more over the ambient noise level. Therefore, impacts related to on-site construction noise would be potentially significant.

Implementation of Mitigation Measure NOI-1 would reduce noise levels by limiting heavy equipment use and pile driving before 7:00 a.m. and after dusk. This would limit exposure of sensitive receptors to elevated noise levels during the more sensitive early morning and nighttime hours. After mitigation, early morning/nighttime construction noise levels would be similar to structural work, which has a reference noise level of approximately 85 dBA Leq at 50 feet. As shown in Table 3-18 the maximum increase would be 3.1 dBA, which would be less than 5 dBA. Therefore, with mitigation, the proposed Project would result in a less-than-significant impact related to on-site construction noise.

**TABLE 3-18 MITIGATED EARLY MORNING/NIGHTTIME CONSTRUCTION NOISE LEVELS AT RECEPTORS**

SENSITIVE RECEPTOR	DISTANCE (feet) /a/	EXISTING NOISE LEVEL (dBA) /b/	NOISE LEVEL AT SENSITIVE RECEPTOR (dBA)	INCREASE (dBA)
Residence to the northeast	1,800	45.0	46.11	1.1
Residence to the southeast	1,500	45.0	48.1	3.1

Source: TAHA 2021c.

/a/ Distance to pile driving activity.

/b/ Based on measured rural noise levels.

### **Operation**

Operational sources of noise would include helicopter noise, mechanical equipment and periodic maintenance activities. The proposed Project would relocate the existing helipad approximately 1,700 feet to the northeast on the site. Helicopter flight paths would not be significantly different from current flight paths and helicopter noise is not anticipated to be significantly different from that of existing helicopter noise. On-site operational noise related to mechanical equipment would be limited to low humming sounds from equipment, which would not be audible past the site boundary. Noise generated at the site would not be audible at the nearest residence, which is approximately 1,000 feet away from the site boundary. Therefore, the proposed Project would result in a less than significant impact related to operational noise and not mitigation is required.

**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). The results from 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. AMC Section 17.90.030 regulates vibration within the City and states that no ground vibration shall be permitted which can be felt without the aid of instruments at or beyond the property line, nor will any vibration be permitted which produces a particle velocity greater than or equal to 0.2 inch per second measure at or beyond the lot line.

The Federal Transit Administration provides vibration levels for various types of construction equipment with an average source level reported in terms of velocity.<sup>2</sup> Typical equipment anticipated to be used during construction and their associated vibration levels are shown in Table 3-19. The most vibration intensive equipment that would be utilized at the converter station site would be an impact pile driver. Pile drilling generates a vibration level of 1.518 inches per second at 25 feet in the upper range of activity and 0.644 inch per second more typically. Typical construction would utilize equipment similar to a large bulldozer, which generates a vibration level of 0.089 inches per second. As shown in Table 3-20, the 0.2 inch per second perception threshold would not be exceeded at any property line of the site. Therefore, the proposed Project would result in a less-than-significant impact related to on-site construction vibration.

**TABLE 3-19 VIBRATION LEVELS FOR CONSTRUCTION EQUIPMENT**

EQUIPMENT		VIBRATION LEVEL AT 25 FEET (INCHES/SECOND)
Impact Pile Driver	Upper Range	1.518
	Typical	0.644
Caisson Drilling		0.089
Loaded Trucks		0.076
Large Bulldozer		0.089
Small Bulldozer		0.003

Source: TAHA 2021c.

<sup>2</sup>Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, September 2018.

**TABLE 3-20 VIBRATION LEVELS AT PROPERTY LINE**

ACTIVITY	DISTANCE (feet) /a/	REFERENCE VIBRATION LEVEL (Inches/Second)	VIBRATION LEVEL AT PROPERTY LINE (Inches/Second)
Impact Pile Driver (Upper Range)	800	1.518	0.008
Large Bulldozer	100	0.089	0.011

Source: TAHA 2021c.  
/a/ Distance to nearest property line

### **Operations**

The proposed Project would not include significant operational sources of vibration. Mechanical equipment and associated maintenance activities would not generate perceptible vibration beyond the site. Therefore, the proposed Project would result in a less than significant impact related to operational vibration and no mitigation 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 site is not located within two miles of a public airport or private airstrip. The proposed Project is located within the Detailed Land Use Planning Area of the Southern California Logistics Airport but is located outside of the airport's noise contours (Coffman Associates, Inc. 2008). Therefore, no impact related to airport or airstrip noise would occur and no mitigation is required.

### **3.13.3 Mitigation Measures**

NOI-1 The use of heavy equipment and impact pile driving shall be prohibited before 7:00 a.m. and after dusk (approximately 5:30 p.m. during winter months and 6:30 p.m. during summer months)..

### 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

The California Department of Finance identifies that the City of Adelanto had a population of 35,663 persons and 9,593 dwelling units with an average 3.90 persons per household in January 2020. The County of San Bernardino population was estimated at 2,180,537, and the number of housing units in the County was estimated at 726,680 with an average household size of 3.31 in January 2020.

Land uses in the vicinity of the site include undeveloped and vacant land, industrial uses and rural residential. The Project area is sparsely populated with scattered rural single-family residences. A few isolated residences are located approximately 0.5 mile to the east of the Adelanto Station; otherwise, the nearest residential developments to the Project site are located over a mile to the north, southeast, and south.

#### 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 peak construction activities, up to 275 workers would be on-site. During switchyard and converter station construction, the average daily crew size would be approximately 140 workers. During periods where less overlap occurs, average daily crew size would be approximately 40 workers. It is anticipated that the majority of construction jobs for the proposed Project would be filled by workers from San Bernardino County as well as Los Angeles County communities. Some specialty trade contractors would likely come from the Los Angeles region.

Due to the nature of construction work and the location of the Project in San Bernardino County, 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 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 vacant housing and apartment units. It is anticipated that 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 involves the expansion of the existing Adelanto switching station, construction of a new converter station and associated facilities entirely within the fence in Project site. The existing site does not contain housing and therefore 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 San Bernardino County Fire Department (SBCFD) provides fire suppression and prevention, along with emergency medical services to the Project and surrounding area. SBCFD jurisdiction encompasses approximately 19,200 square miles of extremely diverse environments from the Los Angeles County line on the west, to the Colorado River on the east, to the Nevada State line and Kern and Inyo counties on the north. SBCFD provides services to more than 60 communities/cities and all unincorporated areas of the county (SBCFD 2020). The closest fire station to the Project is the Adelanto Station 322 located at 10370 Rancho Road, Adelanto, California 92301.

##### Police/Sheriff

San Bernardino County Sheriff's Department (Sheriff's Department) provides law enforcement for the Project area. The Sheriff's Department is the law enforcement agency for the largest geographical county in the nation. The department serves over 2.1 million residents, with 8 county and 14 contract patrol stations and approximately 3,900 employees. The Victor Valley Station is located at 11613 Bartlett Street in the City of Adelanto. This station provides contract law enforcement services to the City of Adelanto and has two substations; one in Lucerne Valley and the other in Phelan (Sheriff's Department 2020).

In addition, the California Highway Patrol (CHP) provides law enforcement through patrol of State and County highways throughout San Bernardino County. The CHP Victorville Area station serves the High Desert communities of Apple Valley, Victorville, Hesperia, Phelan, Pinon Hills, Lucerne Valley, Wrightwood, Silver Lakes, Helendale, Ore Grande, Spring Valley Lake, Oak Hills and Adelanto. As part of the CHP's Inland Division, the Victorville Area encompasses approximately 1,700 square miles and

patrols portions of I-15, SR-138, SR-2, SR-173, SR-18, SR-247, US-395 and hundreds of miles of unincorporated county roadways within San Bernardino County (CHP 2020).

### 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.**

#### *Fire protection?*

Project site and immediate area are not 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 and operation, 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. 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. Impacts related to fire protection and emergency medical services would be less than significant and no mitigation is required.

#### *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. The existing station is entirely fenced and is manned by operational personnel. 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 are not anticipated to be required. Impacts related to police protection services would be less than significant and no mitigation is required.

#### *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 is required.

### 3.15.3 Mitigation Measures

No mitigation measures are proposed.

### 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

According to the City of Adelanto's Recreation Department, there are no parks within one mile of Project site (City of Adelanto 2020b).

#### 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 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 Adelanto Converter Station* prepared by KOA (2021) provided in Appendix G.

#### 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 eight segments in the Project vicinity. Six of the counts were conducted by Caltrans (as part of its annual traffic survey) and two of the counts were derived from the 2005 Victorville General Plan EIR. The following are the study roadway segments included in the traffic impact analysis:

- Route 395 South of Air Expressway
- Air Expressway West of National Trails Highway
- Mojave Drive East of State Route 395
- Route 395 North of Route 18
- Palmdale Road (State Route 18) West of State Route 395
- Palmdale Road (State Route 18) East of State Route 395
- Route 395 South of Route 18
- Route 395 North of Phelan Road/Main Street

### ***Existing Conditions***

Direct vehicular access to the Project site during construction would be provided on Rancho Road. Running adjacent to the Project site, this roadway is a paved roadway with four travel lanes east of Mountain View Road and two travel lanes west of Mountain View Road, and a striped two-way center left-turn lane. The posted speed limit ranges from 45 to 55 mph.

US-395, which provides access between Rancho Road and I-15, is a federal highway running from Victorville up to Washington State. In the Project area, the highway has one to two lanes in each direction, with dedicated right- and left-turn lanes at major intersections. The posted speed limit is 55 miles per hour.

Air Expressway and Mojave Drive connect the Project area with Victorville and Hesperia, to the east. Air Expressway has two lanes in each direction and left- and right-turn lanes at major intersections. Mojave Drive has two to three lanes per direction, with a hard median or two-way left-turn lane for much of the roadway alignment. The posted speed limit is 65 miles per hour on Air Expressway and 60 miles per hour (in the project area) on Mojave Drive.

Palmdale Road (or SR-18) runs from east to west approximately 3.5 miles south of the Project site. The roadway has two lanes west of US-395 and four lanes east of US-395, with additional turning and receiving lanes adjacent to major intersections. The posted speed limit is 55 miles per hour.

### ***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 for review of impacts that could be caused by development projects. However, VMT metrics are not an appropriate measurement of Project construction activity, and as indicated in Section 15064.3, *Determining the Significance of Transportation Impacts*, of the CEQA guidelines it is stated “For many projects, a qualitative analysis of construction traffic may be appropriate.”

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.

### ***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 based on the construction period which would generate the highest activity. Truck volumes were multiplied by a Passenger Car Equivalency (PCE) factor of 2.5 to estimate the real effect of total Project, consistent with truck studies in the area. The analysis assumes that employees would commute by personal vehicle.

### **Trip Generation Totals**

The total daily Project trips defined by Table 3-21 represent one-way inbound and outbound trips by both the construction personnel vehicles and construction trucks. 840 soil and 930 debris haul truckloads are anticipated during the course of the project, occurring over a 60-day period during the Site Preparation phase of the project. Each truck load consists of two truck trips (an outbound and an inbound trip) making for a total of 3,540 trips over the period or 59 trips per day, as shown in Table 3-21.

**TABLE 3-21 TRUCK TRIP CALCULATIONS**

TRUCK TYPES	TOTAL TRUCKLOADS	TOTAL TRUCK TRIPS	WORKDAYS	TRIPS PER DAY
Soil Haul	840	1680	60	28
Debris Haul	930	1860		31
<b>Total</b>	<b>1,770</b>	<b>3,540</b>	<b>60</b>	<b>59</b>

Source: KOA 2021.

Those trips were then multiplied by a PCE rate of 2.5, consistent with area traffic models, with a total PCE trip number of 148.

During the peak period of construction, the Project will employ 275 workers. The workers would generate weekday daily total of 550 trips, based on one inbound trip and one outbound trip per day. Table 3-22 summarizes the overall Project trip generation – with a total daily number of trips at 698, including 293 trips in the AM peak hour and the same number in the PM peak hour.

**TABLE 3-22 PROJECT CONSTRUCTION WEEKDAY TRIP GENERATION**

TRIP TYPE	AVERAGE DAILY TRIPS	AM PEAK			PM PEAK		
		TOTAL	IN	OUT	TOTAL	IN	OUT
Personnel	550	275	275	0	275	0	275
Soil / Debris Truck Hauling	59	7	0	7	7	7	0
Adjustment Factors <sup>1</sup>							
Vehicle Occupancy (Personnel)	2.5						
Adjusted Values							
Personnel (Total)	550	275	275	0	275	0	275
Personnel (Private Vehicle)	550	275	275	0	275	0	275
Soil/Debris Truck	148	18	0	18	18	18	0
Total	698	93	275	18	293	18	275

Source: KOA 2021.

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

### 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 conditions. The proposed Project would not conflict with the applicable congestion management program, ordinances, or policies related to the circulation system.

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

**Less Than Significant Impact.** Based on the peak-hour volumes at the study intersections, existing lane configurations and traffic controls, study area roadway operations were analyzed with and without Project construction activities. The Project construction period trip generation defined above was applied to this analysis, and the trip distribution used the most direct routes to regional roadway corridors and highways.

The capacity of the study roadway segment was defined based on the number of lanes, with a single roadway lane assumed to have a capacity of 10,000 vehicles.

Existing volumes were taken from the Caltrans Traffic Census for segments on US-395 and State Route (SR) 18. Volumes were also compiled from the Victorville General Plan Environmental Impact Report. Counts from the former source were taken in the year 2018, while counts from the latter source were taken in the year 2005 (refer to Table 3-23). The older counts were not used to define any impacts, but were included for informational purposes along with the other data. All counts were factored upward by an annual growth factor.

PCE factors were applied to the truck volumes in each count, based on truck and truck-axle percentages provided by the Caltrans Traffic Census.

**TABLE 3-23 EXISTING COUNTS AND SOURCES**

NUMBER	TOTAL TRAFFIC COUNT	ROADWAY SEGMENT	YEAR	SOURCE
1	26,967	Route 395 South of Air Expressway	2018	Caltrans Traffic Census Program (2018 AADT)
2	12,874	Air Expressway West of National Trails Highway	2005	Victorville General Plan EIR
3	15,566	Mojave Drive East of State Route 395	2005	Victorville General Plan EIR
4	26,995	Route 395 North of Route 18	2018	Caltrans Traffic Census Program (2018 AADT)
5	20,526	Palmdale Road (State Route 18) West of State Route 395	2018	Caltrans Traffic Census Program (2018 AADT)
6	9,722	Palmdale Road (State Route 18) East of State Route 395	2018	Caltrans Traffic Census Program (2018 AADT)
7	29,244	Route 395 South of Route 18	2018	Caltrans Traffic Census Program (2018 AADT)
8	33,919	Route 395 North of Phelan Road/Main Street	2018	Caltrans Traffic Census Program (2018 AADT)

Source: KOA 2021.

The traffic count totals in Table 3-23 were factored by an annual growth rate of one percent to the year 2020 to define existing traffic conditions, analyzed in Table 3-24.

**TABLE 3-24 EXISTING (2020) CONDITIONS**

ROADWAY SEGMENT		NUMBER OF LANES	WEEKDAY		
			ADT	V/C	LOS
1	Route 395 South of Air Expressway	2	27,509	1,375	F
2	Air Expressway West of National Trails Highway	4	14,946	0.0374	A
3	Mojave Drive East of State Route 395	4	18,072	0.452	A
4	Route 395 North of Route 18	2	27,538	1.377	F
5	Palmdale Road (State Route 18) West of State Route 395	2	20,939	1.047	F
6	Palmdale Road (State Route 18) East of State Route 395	4	9,917	0.248	A
7	Route 395 South of Route 18	4	29,832	0.746	C
8	Route 395 North of Phelan Road/Main Street	2	34,601	1.730	F

Source: KOA 2021.

The year 2020 counts were then factored up by a growth rate of two percent per year to define the year-2023 future baseline conditions that are analyzed in Table 3-25.

**TABLE 3-25 FUTURE BASELINE (2023) CONDITIONS – NO PROJECT**

ROADWAY SEGMENT		NUMBER OF LANES	WEEKDAY		
			ADT	V/C	LOS
1	Route 395 South of Air Expressway	2	29,193	1,460	F
2	Air Expressway West of National Trails Highway	4	15,861	0.397	A
3	Mojave Drive East of State Route 395	4	19,178	0.479	A
4	Route 395 North of Route 18	2	29,223	1.461	F
5	Palmdale Road (State Route 18) West of State Route 395	2	22,220	1.111	F
6	Palmdale Road (State Route 18) East of State Route 395	4	10,524	0.263	A
7	Route 395 South of Route 18	4	31,658	0.791	C
8	Route 395 North of Phelan Road/Main Street	2	36,719	1.836	F

Source: KOA 2021.

Finally, adding the daily employee and truck trips on each segment were added to the future baseline volumes to derive future post-project volumes, as analyzed in Table 3-26.

**TABLE 3-26 FUTURE POST-PROJECT (2023) CONDITIONS**

	ROADWAY SEGMENT	NUMBER OF LANES	WEEKDAY			EMPLOYEE TRIPS	TRUCK TRIPS
			ADT	V/C	LOS		
1	Route 395 South of Air Expressway	2	29,257	1.463	F	64	0
2	Air Expressway West of National Trails Highway	4	15,891	0.397	A	30	0
3	Mojave Drive East of State Route 395	4	19,227	0.481	A	49	0
4	Route 395 North of Route 18	2	29,431	1.472	F	60	148
5	Palmdale Road (State Route 18) West of State Route 395	2	22,240	1.112	F	20	0
6	Palmdale Road (State Route 18) East of State Route 395	4	10,544	0.264	A	20	0
7	Route 395 South of Route 18	4	31,846	0.796	C	40	148
8	Route 395 North of Phelan Road/Main Street	2	36,887	1.844	F	20	148

Source: KOA 2021.

Altogether, four of the eight roadway segments (three of which are on US Highway 395) would operate at LOS F in all scenarios. Of the remaining segments, two (on Air Expressway and Mojave Drive) would operate at LOS A based on factored 2005 volumes, and one would operate at LOS C. Project truck and employee trips would cause the Volume-to-Capacity ratio to increase by the following percent's on segments operating at LOS F:

- Route 395 South of Air Expressway – Volumes increase by 0.2 percent
- Route 395 North of Route 18 – Volumes increase by 0.7 percent
- Palmdale Road/SR18 West of Route 395 – Volumes increase by 0.1 percent
- Route 395 North of Phelan Road/Main Street – Volumes increase by 0.5 percent

As shown in Table 3-27, all of the volume increases at the segments with LOS F conditions would be less than one percent with project construction. The increases are negligible and are considered to represent less than significant impacts and no mitigation is required.

**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 Rancho Road. Two new entrances would be constructed off Racoon Avenue and Pansy Road. 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 Rancho Road. 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 prepare a Traffic Control Plan. 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, paramedic services, and other agencies with jurisdiction over the public roads that would be directly affected by project construction 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.

**TABLE 3-27 STUDY ROADWAY SEGMENTS IMPACT ANALYSIS**

ROADWAY SEGMENT		NUMBER OF LANES	Capacity	EXISTING (2018)			FUTURE (2023) NO PROJECT			FUTURE (2023) WITH PROJECT CONSTRUCTION		
				ADT	V/C	LOS	ADT	V/C	LOS	ADT	V/C	LOS
1	Route 395 South of Air Expressway	2	20,000	27,509	1,375	F	29,193	1,460	F	29,257	1.463	F
2	Air Expressway West of National Trails Highway	4	40,000	14,946	0.374	A	15,861	0.397	A	15,891	0.397	A
3	Mojave Drive East of State Route 395	4	40,000	18,072	0.452	A	19,178	0.479	A	19,227	0.481	A
4	Route 395 North of Route 18	2	20,000	27,538	1.377	F	29,223	1.461	F	29,431	1.472	F
5	Palmdale Road (State Route 18) West of State Route 395	2	20,000	20,939	1.047	F	22,220	1.111	F	22,240	1.112	F
6	Palmdale Road (State Route 18) East of State Route 395	4	40,000	9,917	0.248	A	10,524	0.263	A	10,544	0.264	A
7	Route 395 South of Route 18	4	40,000	29,832	0.746	C	31,658	0.791	C	31,846	0.796	C
8	Route 395 North of Phelan Road/Main Street	2	20,000	34,601	1.730	F	36,719	1.836	F	36,887	1.844	F

Source: KOA 2021.

### 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

#### 3.18.1 Affected Environment

##### Native American Coordination

LADWP has engaged in Assembly Bill 52 consultation for the Project with local tribes as part of the pre-planning phase. In support of this effort, POWER performed a Phase I cultural resource survey on certain undeveloped areas within the perimeter of the existing high voltage switching station, converter station, and associated facilities. The area surveyed by POWER staff covered more ground than might be necessary to accomplish the construction work. The fieldwork was larger than needed to provide a buffer zone for flexibility should revisions in construction design be needed in the future. While in the field, the survey excluded all previously disturbed and built upon ground within the inventory areas depicted in Figure 3-5. POWER documented the results in the *Adelanto Switching Station - Phase I Cultural Resource Survey* report provided in Appendix C of this Initial Study/MND.

The San Manuel Band of Mission Indians (SMBMI) began consultations with LADWP in May 2020 and requested specific cultural resources information pertaining to the Project. SMBMI indicated that the proposed Project area exists within Serrano ancestral territory and the lands are of cultural interest to the Tribe. SMBMI reviewed the *Phase I Cultural Resource Survey* and provided input on the cultural resource mitigation measures provided in this Initial Study/MND.

### 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 Impact.** As discussed in Checklist Responses 3.5.2 (a), a literature and records search were conducted at the SCCIC on July 2, 2020. Records consulted at the SCCIC included the inventory of the National Register of Historic Places, the California Register Historic Resources, the 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-mile search radius was utilized.

This research effort indicated that several cultural resources were located within one mile of the Project area (see Table 3-4), while few surveys in this region have occurred. The most recent and only SCCIC-filed survey on the Project site was conducted in 1985 for the last major LADWP transmission project. the Mead-Adelanto Project; most of the station parcel was surveyed previously by Dames and Moore archaeological staff in support of that project. Although the SCCIC files show that the rest of the Project area has not been surveyed previously and that no cultural resources have been detected inside the footprint of the Adelanto Switching Station, POWER archaeologists did survey the footprint of the solar panel installations in 2010 as part of the Adelanto Solar Power Project (POWER 2010d).

Based on the results of the SCCIC data search, few cultural resources are known for this area. Because, the site has been previously graded and/or otherwise disturbed due to recent utility development within and adjacent to the LADWP and Southern California Edison easements and along Rancho Road, the potential for the discovery of cultural resources is considered low.

Further, no tribal cultural resources were identified as a result of the consultation with SMBMI. Therefore, no tribal cultural resources that are listed in or eligible for listing in the California Register, or in a local register of historical resources as defined in PRC Section 5020.1(k) would be impacted by project implementation. Also, no tribal cultural resources that have been 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 PRC Section 5024.1, would be impacted by project implementation. The lack of encountered prehistoric and historic-era resources reinforces the fact that the potential for such resources should be considered low. The fact that no archaeological or historic-era sites were observed suggests that the chance that any will be found during construction is unlikely. 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 CUL-1 through CUL-6 (refer to Section 3.5.3, Cultural Resources) would reduce impacts to cultural resources to less than significant.

**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 Impact.** Refer to Checklist Response 3.17.2 (a) above for a discussion.

### **3.18.3 Mitigation Measures**

No mitigation measures are proposed.

### 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.** The Project consists the expansion of the existing switching station and the construction of a new converter station within the existing approximate 315-acre fenced Project site. The new converter station would be built adjacent to the existing converter station in order to upgrade and replace aging infrastructure. The switching station will be expanded to accommodate the new converter station and associated equipment. In addition, other Project components include transmission line relocation, construction of new towers, site preparation, and demolition of existing structures within the

Project site. The proposed Project is needed to upgrade and replace aging infrastructure and to allow LADWP greater control in managing the energy transfer along the existing high voltage transmission lines and improve long-term reliability.

During construction, sanitary waste and wastewater would be contained within portable toilet facilities and disposed of by contract at an approved disposal site. Because construction activities would temporary and would cease upon Project completion, no new treatment facilities or expansion of existing wastewater treatment facilities would be required.

The Project site is currently developed and the existing utility and service system connections which could adequately handle the proposed Project and no expansion of these services is required. As a result, the potential impacts would be less than significant and no mitigation is 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.** The City of Adelanto Water Department provides water service and wastewater service to the Project site and Project Area. Water would be used for dust control and worker needs during the construction phase of the proposed Project. Water trucks would support construction activities and dust suppression. Construction water may be obtained from local municipal sources, trucked in by a water supply vendor, or derived from local wells. Once in operation water consumption will be reduced because the cooling system will be changed to a closed system. In addition, operation of the Project is not expected to result in an increase in personnel. As such, the proposed Project would have a less than significant impact on domestic water services and no mitigation is required.

**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 on site restroom facilities. It would not generate wastewater that would require treatment at a water treatment plant. No impact would occur and no mitigation would be required.

The proposed Project would not result in a permanent increase in population. The minimal amount of effluent generated by construction personnel would not cause a wastewater treatment plant to exceed its treatment capacity. Portable toilets would be used during the construction phase, which would be maintained and serviced by an outside contractor who would dispose of effluent in accordance with applicable regulations for wastewater disposal. As such, the proposed Project would not generate additional wastewater with potential to exceed the capacity of existing wastewater treatment facilities and would not cause existing facilities to exceed wastewater treatment standards. Therefore, the proposed Project would have a less than significant impact on wastewater services and no mitigation is 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.** Construction of the proposed Project would generate wastes such as such as non-hazardous metal and refuse. Solid waste would include vegetation, rock, scrap wood and metal, materials removed from the existing switching station, transmission lines and poles, excavated soil, and other construction debris, and trash in general. Construction and demolition waste materials, such as towers, poles and conductors, would be recycled to the maximum extent practical. Construction debris would be recycled or transported to a landfill site and disposed of appropriately. Operation of the Project is not expected to result in an increase in personnel and is not expected to generate additional quantities of

waste over existing conditions. Impacts related to construction and operation 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
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, 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 type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

### 3.20.1 Affected Environment

As stated in Section 3.15.1, SBCFD provides fire suppression and prevention, along with emergency medical services to the Project and surrounding area. The closest fire station to the Project is the Adelanto Station 322 located at 10370 Rancho Road, Adelanto, California 92301.

According to the City of Adelanto, “A majority of the Planning Area is in a Moderate Fire Hazard Severity Zone, indicating that the area is not highly vulnerable to wildfire, but the potential for wildfire does exist. Adelanto’s urban areas are designated as a Non-Wildland/Non-Urban Zone, which has minimal fire hazards” (City of Adelanto 2014).

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).

### 3.20.2 Impact Assessment

**If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project**

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

**No Impact.** Neither the City of Adelanto nor the Project site are located with a “Fire Hazard Severity Zone” as mapped by CAL FIRE. As previously mentioned in Checklist Responses 3.9.2 (F) and

3.17.2.(d), at no time during construction will adjacent streets be completely closed to traffic. All construction staging would occur on-site. Furthermore, the proposed Project would not involve the closure or alteration of any existing evacuation routes that would be important in the event of a wildfire. 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 “Fire Hazard Severity Zone” as designated by CAL FIRE. 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.** As stated in Checklist Response 3.9.2 (g), 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 and operation, 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. Therefore, the Project would not exacerbate wildfire risks resulting in temporary or ongoing impacts from a wildfire.

**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?**

**No Impact.** The Project site is developed with an existing switching station, converter station, and associated facilities. Surrounding land uses are sparsely developed and the topography is general level. Therefore, the Project will not expose people or structures to flooding or landslides facilitated by runoff flowing down barren and charred slopes. No impact would occur and no mitigation is required.

### **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-11. 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-6 would be implemented to reduce impacts 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, noise, and transportation. 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-11. Potentially significant cultural resources impacts would be reduced to less than significant with implementation of MMs CUL-1 through CUL-6. Potentially significant impacts related to geology and soils would be reduced to less than significant with implementation of MM BIO-11 and HYD-1. Potentially significant impacts related to hazards and hazardous materials would be reduced to less than significant with implementation of MM HAZ-1. Potentially significant impacts related to hydrology and water quality would be reduced to less than significant with implementation of MM HYD-1. Potentially significant impacts to noise would be reduced to less than significant with implementation of MM NOI-1. Potentially significant transportation impacts would be reduced to less than significant with implementation of MM TRA-1.

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, public services, 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, transportation, and tribal cultural resources. 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.

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## **4.0 LIST OF PREPARERS AND CONTRIBUTORS**

### **4.1 Preparers**

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

Charles Holloway, Manager of Environmental Planning and Assessment  
Nadia Parker, Environmental Supervisor  
Eduardo Cuevas, Environmental Engineering Associate  
Luis Jansen, Project Manager  
Johnel Javier Rodriguez, Electrical Engineering Associate  
Adham Ibrahim, Electrical Engineering Associate

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

Mike Strand, Environmental Project Manager  
Kim Quinn, Environmental Planner and Project Coordinator  
Ken McDonald, Biologist  
Michael Dice, Cultural Resources Manager  
Jeff Cramer, GIS Analyst  
Heidi Horner, Technical Editor  
Jackie Graff, Document Production

### **4.2 Contributors**

#### **Terry A. Hayes Associates Inc.**

Sam Silverman, Project Manager  
Anders Sutherland, Environmental Scientist  
Kieran Bartholow, Planner

#### **KOA Corporation**

Brian Marchetti, VP | Senior Planner  
Ryland Lu, Associate Planner

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