Draft
Environmental Impact Report

SCH# 2017071020

Volume 1

Chapters 1 through 10

RB INYOKERN SOLAR PROJECT
by R&L Capital, Inc. *(PP16109)*

Conditional Use Permit 23, Map #47;
Conditional Use Permit 27, Map #47; and
Inyokern Specific Plan Amendment 4, Map #47

Kern County
Planning and Natural Resources Department
Bakersfield, California

July 2020

Lorelei H. Oviatt, AICP, Director
2700 "M" Street, Suite 100
Bakersfield, CA 93301-2323
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Fax: (661) 862-8601 TTY Relay 1-800-735-2929
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PLANNING AND NATURAL RESOURCES DEPARTMENT

Planning
Community Development
Administrative Operations

July 2, 2020

File: CUP 23, Map #47; CUP 27, Map # 47; and SPA 4, Map #47 (Circulation); S.D. #1

ADDRESSEE LIST (See Distribution List)

Re: Draft Environmental Impact Report for the RB Inyokern Solar Project by R&L Capital, Inc. (SCH #2017071020)

Dear Interested Party:

Kern County has prepared a Draft Environmental Impact Report (Draft EIR) for the above-noted land use applications to allow for the construction and operation of a solar photovoltaic power generating facility and associated facilities that would generate a combined total of approximately 26.6 megawatts (MW) of renewable electrical energy located on approximately 166.5 acres of privately-owned land in unincorporated Kern County.

The project is located in the eastern high desert region of Kern County in the unincorporated community of Inyokern. The proposed project is located along United States Highway 395 (US 395) to the east and Brown Road to the west. Phase 1 is located north of Inyokern Road (State Route 178 [SR 178]), between Brown Road and US 395. Phase 2 is directly north and adjacent to Phase 1. The project site would be directly accessed by SR 178 to Brown Road. A wastewater treatment plant is located adjacent on the northeastern portion of the project site. The Inyokern Airport is located west of the project site. An existing 4.2 acre borrow pit is located on the southeast corner of the Phase 1 portion of the site, which was originally used to build a roadway overpass. The pit is fenced around its perimeter and would not be developed or disturbed during project construction activities and is not included as part of the project site footprint. The proposed solar facility can be found within Sections 19 and 20, Township 26 South, Range 39 East, Mount Diablo Base and Meridian (MDB&M).

The project proponents are requesting: **(a)** Two (2) Conditional Use Permits (CUP), to allow for the construction and operation of a 26.6 MW solar photovoltaic electrical generating facility and battery energy storage (Section 19.38.030.G) in an M-2 Zone District (CUP 23, Map #47 and CUP 27, Map #47); and **(b)** Amendment to the Circulation Element of the Inyokern Specific Plan to remove a portion of the designated future secondary collector from Brown Road to the southern boundary of the project site (Specific Plan Amendment 4, Map #47). The project's permanent facilities would include the solar modules, energy storage systems, operations and maintenance building, switchyards, electrical collector system and inverters, gen-tie lines, telecommunication facilities and meteorological station, security fencing, and access roads.

The Kern County Planning and Natural Resources Department, as Lead Agency, has determined that preparation of an Environmental Impact Report would be appropriate for the referenced project. Enclosed is a copy of the Draft EIR.

If we have not received a reply from you by **August 17, 2020, at 5:00 P.M.**, we will assume that you have no comments regarding this Draft EIR.

Should you have any questions regarding this project, please do not hesitate to contact me at (661) 862-8997 or via email at CandiaR@kerncounty.com.

Sincerely,

Ronelle Candia, Supervising Planner
Advanced Planning Division

SPA #4; CUP #23 & #27, Map #47
WO #PP16109
(EIR 02-17 - RB Inyokern Solar)
I:\Planning\WORKGRPS\WP\LABELS\eir02-17rrc.ec.doc
Sc 06/19/20

City of Arvin
P.O. Box 548
Arvin, CA 93203

Bakersfield City Planning Dept
1715 Chester Avenue
Bakersfield, CA 93301

Bakersfield City Public Works Dept
1501 Truxtun Avenue
Bakersfield, CA 93301

California City Planning Dept
21000 Hacienda Blvd.
California City, CA 93515

Delano City Planning Dept
P.O. Box 3010
Delano, CA 93216

City of Maricopa
P.O. Box 548
Maricopa, CA 93252

City of McFarland
401 West Kern Avenue
McFarland, CA 93250

City of Ridgecrest
100 West California Avenue
Ridgecrest, CA 93555

City of Shafter
336 Pacific Avenue
Shafter, CA 93263

City of Taft
Planning & Building
209 East Kern Street
Taft, CA 93268

City of Tehachapi
Attn: John Schlosser
115 South Robinson Street
Tehachapi, CA 93561-1722

City of Wasco
764 E Street
Wasco, CA 93280

Inyo County Planning Dept
P.O. Drawer "L"
Independence, CA 93526

Kings County Planning Agency
1400 West Lacey Blvd, Bldg 6
Hanford, CA 93230

Los Angeles Co Reg Planning Dept
320 West Temple Street
Los Angeles, CA 90012

San Bernardino Co Planning Dept
385 North Arrowhead Avenue, 1st Floor
San Bernardino, CA 92415-0182

San Luis Obispo Co Planning Dept
Planning and Building
976 Osos Street
San Luis Obispo, CA 93408

Santa Barbara Co Resource Mgt Dept
123 East Anapamu Street
Santa Barbara, CA 93101

Tulare County Planning & Dev Dept
5961 South Mooney Boulevard
Visalia, CA 93291

Ventura County RMA Planning Div
800 South Victoria Avenue, L1740
Ventura, CA 93009-1740

U.S. Bureau of Land Management
Ridgecrest Field Office
300 South Richmond Road
Ridgecrest, CA 93555

China Lake Naval Weapons Center
Tim Fox, RLA - Comm Plans & Liaison
429 E Bowen, Building 981
Mail Stop 4001
China Lake, CA 93555

Edwards AFB, Mission Sustainability Liaison
412 TW, Bldg 2750, Ste 117-14
195 East Popson Avenue
Edwards AFB, CA 93524

Federal Aviation Administration
Western Reg Office/
777 South Aviation Boulevard
Suite 150
El Segundo, CA 90245

Federal Communications Comm
18000 Studebaker Road, #660
Cerritos, CA 90701

U.S. Fish & Wildlife Service
777 East Tahquitz Canyon Way, Suite 208
Palm Springs, CA 92262

Eastern Kern Resource Cons Dist
300 South Richmond Road
Ridgecrest, CA 93555-4436

Environmental Protection Agency
Region IX Office
75 Hawthorn Street
San Francisco, CA 94105

U.S. Dept of Agriculture/NRCS
5080 California Avenue, Ste 150
Bakersfield, CA 93309-0711

U.S. Army Corps of Engineers
P.O. Box 997
Lake Isabella, CA 93240

U.S. Army Corps of Engineers
Regulatory Division
1325 "J" Street, #1350
Sacramento, CA 95814-2920

State Air Resources Board
Stationary Resource Division
P.O. Box 2815
Sacramento, CA 95812

So. San Joaquin Valley Arch Info Ctr
California State University of Bkfd
9001 Stockdale Highway
Bakersfield, CA 93311

Caltrans/Dist 6
Planning/Land Bank Bldg.
P.O. Box 12616
Fresno, CA 93778

Caltrans/Dist 9
Planning Department
500 South Main Street
Bishop, CA 93514

Caltrans/
Division of Aeronautics, MS #40
P.O. Box 942873
Sacramento, CA 94273-0001

State Clearinghouse
Office of Planning and Research
1400 - 10th Street, Room 222
Sacramento, CA 95814

State Dept of Conservation
Director's Office
801 "K" Street, MS 24-01
Sacramento, CA 95814-3528

State Dept of Conservation
Geologic Energy Management Division
4800 Stockdale Highway, Ste 108
Bakersfield, CA 93309

California State University
Bakersfield - Library
9001 Stockdale Highway
Bakersfield, CA 93309

California Energy Commission
James W. Reed, Jr.
1516 Ninth Street
Mail Stop 17
Sacramento, CA 95814

California Fish & Wildlife
1234 East Shaw Avenue
Fresno, CA 93710

California Highway Patrol
Planning & Analysis Division
P.O. Box 942898
Sacramento, CA 94298-0001

Public Utilities Comm Energy Div
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San Francisco, CA 94102

California Regional Water Quality
Control Board/Lahontan Region
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Victorville, CA 92392

State Lands Commission
100 Howe Avenue, Ste 100-South
Sacramento, CA 95825-8202

State Dept of Water Resources
San Joaquin Dist.
3374 East Shields Avenue, Room A-7
Fresno, CA 93726

Kern County
Agriculture Department

Kern County Airports Department

Kern County Administrative Officer

Kern County Public Works Department/
Building & Development/Floodplain

Kern County Public Works Department/
Building & Development/Survey

Kern County
Env Health Services Department

Kern County Fire Dept
David Witt, Fire Chief

Kern County Fire Dept
Michael Nicholas, Fire Captain

Kern County Library/Beale
Local History Room

Kern County Library/Beale
Andie Sullivan

Kern County Library
Ridgecrest Branch
131 East Las Flores
Ridgecrest, CA 93555

Kern County Parks & Recreation

Kern County Sheriff's Dept
Administration

Kern County Public Works Department/
Building & Development/Development
Review

Kern County Public Works
Department/Operations &
Maintenance/Regulatory Monitoring &
Reporting

Kern County Public Works Department/
Building & Development/Code
Compliance

Inyokern Municipal Advisory Council
1429 Broadway Avenue
P.O. Box 1418
Inyokern, CA 93527

Mojave Town Council
Bill Deaver, President
P.O. Box 1113
Mojave, CA 93502-1113

Sierra Sands Unified School Dist
113 Felspar
Ridgecrest, CA 93555

Kern County Superintendent of Schools
Attention School District Facility Services
1300 - 17th Street
Bakersfield, CA 93301

KernCOG
1401 19th Street - Suite 300
Bakersfield, CA 93301

Local Agency Formation Comm/LAFCO
5300 Lennox Avenue, Suite 303
Bakersfield, CA 93309

Indian Wells Valley Water Dist
P.O. Box 1329
Ridgecrest, CA 93556

Kern County Water Agency
P.O. Box 58
Bakersfield, CA 93302-0058

Kern County Parks & Recreation

East Kern Air Pollution
Control District

Inyokern Airport
P.O. Box 634
Inyokern, CA 93527

Adams, Broadwell, Joseph & Cardozo
Attention: Janet M. Laurain
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

Kern Audubon Society
Attn: Frank Bedard, Chairman
4124 Chardonnay Drive
Bakersfield, CA 93306

Los Angeles Audubon
926 Citrus Avenue
Los Angeles, CA 90036-4929

Center on Race, Poverty
& the Environment
Attn: Marissa Alexander
1999 Harrison Street – Suite 650
San Francisco, CA 94612

Center on Race, Poverty
& the Environmental/
CA Rural Legal Assistance Foundation
1012 Jefferson Street
Delano, CA 93215

Defenders of Wildlife/
Kim Delfino, California Dir
980 - 9th Street, Suite 1730
Sacramento, CA 95814

Native American Heritage Council
of Kern County
Attn: Gene Albitre
3401 Aslin Street
Bakersfield, CA 93312

Pacific Gas & Electric Co
Land Projects
650 "O" Street, First Floor
Fresno, CA 93760-0001

Sierra Club/Kern Kaweah Chapter
P.O. Box 3357
Bakersfield, CA 93385

Southern California Edison
2244 Walnut Grove, Ave, GO-1 Quad 2C
Rosemead, CA 91770

Verizon California, Inc.
Attention Engineering Department
520 South China Lake Boulevard
Ridgecrest, CA 93555

Chumash Council of Bakersfield
2421 "O" Street
Bakersfield, CA 93301-2441

David Laughing Horse Robinson
P.O. Box 20849
Bakersfield, CA 93390

Kern Valley Indian Council
Attn: Robert Robinson, Chairperson
P.O. Box 401
Weldon, CA 93283

Kern Valley Indian Council
Historic Preservation Office
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Weldon, CA 93283

Santa Rosa Rancheria
Ruben Barrios, Chairperson
P.O. Box 8
Lemoore, CA 93245

Tejon Indian Tribe
Kathy Morgan, Chairperson
1731 Hasti-acres Drive, Suite 108
Bakersfield, CA 93309

Kitanemuk & Yowlumne Tejon Indians
Chairperson
115 Radio Street
Bakersfield, CA 93305

Tubatulabals of Kern County
Attn: Robert Gomez, Chairperson
P.O. Box 226
Lake Isabella, CA 93240

Tule River Indian Tribe
Neal Peyron, Chairperson
P.O. Box 589
Porterville, CA 93258

San Fernando Band of Mission Indians
Attn: John Valenzuela, Chairperson
P.O. Box 221838
Newhall, CA 91322

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Pasadena, CA 91106

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Attn: Todd Quelet
16922 Airport Boulevard
Mojave, CA 93501

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Inyokern, CA 93555

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Ridgecrest, CA 93555

Raymond Kelso/
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Ridgecrest, CA 93555

Indian Wells Valley Airport Dist
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Inyokern, CA 93527

Inyokern Airport
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Inyokern, CA 93527

Inyokern Community Serv Dist
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Inyokern, CA 93527

Indian Wells Valley Groundwater Authority
500 West Ridgecrest Boulevard
Ridgecrest, CA 93555

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Planning Dept.
510 S. China Lake Blvd.
Ridgecrest, CA 93555

U.S. Air Force
Attn: David Bell/AFCEC CZPW
Western Regional/Leg Branch
510 Hickman Ave., Bld 250-A
Travis AFB, CA 94535-2729

U.S. Army
Attn: Philip Crosbie, Chief
Strategic Plans, S3, NTC
P.O. Box 10172
Fort Irwin, CA 92310

U.S. Army
Attn: Tim Kilgannon, Region 9
Coordinator
Office of Strategic Integration
721 - 19th Street, Room 427
Denver, CO 80202

U.S. Navy
Attn: Steve Chung
Regional Community & Liaison Officer
1220 Pacific Highway
San Diego, CA 92132-5190

U.S. Marine Corps
Attn: Patrick Christman
Western Regional Environmental Officer
Building 1164/Box 555246
Camp Pendleton, CA 92055-5246

Congentrix Sunshine, LLC
Rick Neff
9405 Arrowpoint Blvd
Charlotte, NC 28273

Terra-Gen
Randy Hoyle, Sr. Vice Pres
11512 El Camino Real, Suite 370
San Diego, CA 92130

Renewal Resources Group
Holding Company
Rupal Patel
113 South La Brea Avenue, 3rd Floor
Los Angeles, CA 90036

Wind Stream, LLC
Albert Davies
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Santa Rosa, CA 95404

Fotowatio Renewable Ventures
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San Francisco, CA 94104

EDP Renewables Company
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San Francisco, CA 94105

Darren Kelly, Sr. Business Mgr
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New York, NY 10036-6797

Bill Barnes, Dir of Asset Mgt
AES Midwest Wind Gen
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Recurrent Energy
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San Francisco, CA 92109

Wayne Mayes, Dir Tech Serv
Iberdrola Renewables
1125 NW Couch St, Ste 700, 7th Fl
Portland, OR 97209

Michael Strickler, Sr Project Mgr
Iberdrola Renewables
1125 NW Couch St, Ste 700, 7th Fl
Portland, OR 97209

Beyond Coal Campaign/Sierra Club
Sarah K. Friedman
1417 Calumet Avenue
Los Angeles, CA 90026

Tehachapi Area Assoc of Realtors
Carol Lawhon, Assoc Exe, IOM
803 Tucker Road
Tehachapi, CA 93561

Kelly Group
Kate Kelly
P.O. Box 868
Winters, CA 95694

David Walsh
22941 Banducci Road
Tehachapi, CA 93561

Robert Burgett
9261 - 60th Street, West
Mojave, CA 93501

Structure Cast
Larry Turpin, Sales Mgr
8261 McCutchen Road
Bakersfield, CA 93311

DRAFT ENVIRONMENTAL IMPACT REPORT
NOTICE OF AVAILABILITY FOR PUBLIC REVIEW

This is to advise that the Kern County Planning and Natural Resources Department has prepared an Environmental Impact Report (EIR) for the project identified below. As mandated by State law, the minimum public review period for this document is 45 days. The document and documents referenced in the Draft EIR are available for review at the Planning Natural Resources Department, 2700 "M" Street, Suite 100, Bakersfield, CA 93301 or on the Departmental website (https://kernplanning.com/environmental-doc/rb-inyokern-solar-project/).

A public hearing has been scheduled with the Kern County Planning Commission to receive comments on the document on: **September 10, 2020**, at 7:00 p.m. or soon thereafter, Chambers of the Board of Supervisors, First Floor, Kern County Administrative Center, 1115 Truxtun Avenue, Bakersfield, California.

The comment period for this document closes on **August 17, 2020**. Testimony at future public hearings may be limited to those issues raised during the public review period either orally or submitted in writing by 5:00 p.m. the day the comment period closes.

Project Title: RB Inyokern Solar Project by R&L Capital, LLC (PP16109); Conditional Use Permit No. 23, Map 47; Conditional Use Permit No. 27, Map 47; and Inyokern Specific Plan Amendment No. 4, Map 27 (Circulation).

Project Location: The project is located in the eastern high desert region of Kern County in the unincorporated community of Inyokern. The proposed project is located along United States Highway 395 (US 395) to the east and Brown Road to the west. Phase 1 is located north of Inyokern Road (State Route 178 [SR 178]), between Brown Road and US 395. Phase 2 is directly north and adjacent to Phase 1. The project site would be directly accessed by SR 178 to Brown Road. A wastewater treatment plant is located adjacent on the northeastern portion of the project site. The Inyokern Airport is located west of the project site. An existing 4.2 acre borrow pit is located on the southeast corner of the Phase 1 portion of the site, which was originally used to build a roadway overpass. The pit is fenced around its perimeter and would not be developed or disturbed during project construction activities and is not included as part of the project site footprint. The proposed solar facility can be found within Sections 19 and 20, Township 26 South, Range 39 East, Mount Diablo Base and Meridian (MDB&M).

Project Description: The project proponents are requesting: **(a)** Two (2) Conditional Use Permits (CUP), to allow for the construction and operation of a 26.6 MW solar photovoltaic electrical generating facility and battery energy storage (Section 19.38.030.G) in an M-2 Zone District (CUP 23, Map #47 and CUP 27, Map #47); and **(b)** Amendment to the Circulation Element of the Inyokern Specific Plan to remove a portion of the designated future secondary collector from Brown Road to the southern boundary of the project site (Specific Plan Amendment 4, Map #47). The project's permanent facilities would include the solar modules, energy storage systems, operations and maintenance building, switchyards, electrical collector system and inverters, gen-tie lines, telecommunication facilities and meteorological station, security fencing, and access roads.

Anticipated Significant Impacts on Environment: Aesthetics, Air Quality, Biological Resources, Hydrology, Noise, Utilities and Service Systems, and Wildfire

Document can be viewed online at: https://kernplanning.com/environmental-doc/rb-inyokern-solar-project/

For further information, please contact Ronelle Candia, Supervising Planner, at (661) 862-8997 or candiar@kerncounty.com.

LORELEI H. OVIATT, AICP, Director
Planning and Natural Resources Department

To be published once only on next available date and as soon as possible
The Bakersfield Californian
Daily Independent
The News Review

RRC (6/20/2020)

cc: County Clerk (2) (with fee)
Environmental Status Board
Sierra Club/Kern Kaweah Chapter
LiUNA
Lozeau Drury, LLP
California Native Plant Society/Kern Chapter
Kern County Archaeological Society
Native American Heritage Pres. Council/Kern County
Center on Race, Poverty and Environment (2)
Supervisorial District No. 1

SPA #4; CUP #23 & 27, Map #47
(EIR 02-17 - RB Inyokern Solar)
WO PP16109
I:\Planning\WORKGRPS\WP\LABELS\eir 02-17rrc.noa.docx
Sc 06/19/20

352 502 01 00 8
DYE PATRICIA ANN TRUST
8033 DUNBARTON AV
LOS ANGELES CA 90045

352 502 11 00 7
HEPPE BEN & ANGELA L
1925 BLACKBIRD ST
INYOKERN CA 93527-2800

352 085 03 00 4 **DUP**
INYOKERN SANITATION DIST
ADDRESS UNKNOWN

352 085 05 00 0 **SITE**
R&L CAPITAL INC
PO BOX 907
TRONA CA 93592-0907

084 040 03 00 3
SARKOVICH TESS VICTORIA
1026 N CLIFFORD ST
RIDGECREST CA 93555-7968

352 502 07 00 6
TURBETT DENNIS K & JENNIFER J
1948 ORIOLE ST
INYOKERN CA 93527-2806

084 021 18 00 8
UNION PACIFIC R/R CO
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OMAHA NE 68179-1610

352 085 04 00 7 **DUP**
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P O BOX 1090
INYOKERN CA 93527

352 086 09 00 9
CLODT MARY ANN LIV TR
P O BOX 1090
INYOKERN CA 93527

084 040 02 00 0
EL SOLANA MOBILE HOME & RV PARK LLC
9220 CLARO DE LUNA DR
BAKERSFIELD CA 93314-8553

352 085 14 00 6
INDIAN WELLS VALLEY AIRPORT DS
110 MAHAN ST
RIDGECREST CA 93555

352 502 06 00 3
OLSEN BRENDA K
13288 TAWYA RD
APPLE VALLEY CA 92308-6161

352 086 08 00 6 **SITE/DUP**
R&L CAPITAL INC
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TRONA CA 93562

084 010 42 00 7
SIMMONS RODNEY J
2262 NW WILARK DR
SALEM OR 97304-1849

352 085 07 00 6
U S A
450 GOLDEN GATE AVENUE
SAN FRANCISCO, CA 94102

352 085 09 00 2
UNION PACIFIC R/R CO
1400 DOUGLAS ST # 1610
OMAHA NE 68179-1610

352 501 04 00 0
RODARTE LARRY J & KAREN B
1956 CAMBRIDGE WY
SANTA MARIA CA 93454

352 086 04 00 4
CLODT RICHARD L & GERARDELL L FAMILY TRUST
P O BOX 999
INYOKERN CA 93527

352 502 08 00 9
HALCOMB RALPH E & PAULINE L
PO BOX 612
INYOKERN CA 93527-0612

352 085 12 00 0
INYOKERN COMMUNITY SERV DIST
P O BOX 1418
INYOKERN CA 93527

084 010 43 00 0 **DUP**
R & L CAPITAL INC
PO BOX 907
TRONA CA 93592-0907

352 086 08 00 6 **SITE/DUP**
R&L CAPITAL INC
P O BOX 907
TRONA CA 93562

084 010 10 00 4
STATE OF CALIFORNIA
P O BOX 847
BISHOP CA 93514

352 085 08 00 9
U S A
650 CAPITOL MALL
SACRAMENTO CA 95814-4708

352 502 02 00 1
WITHERS BESS
3024 TREESDALE DR
LAS VEGAS NV 89134-7407

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P. O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # 2017071020

Project Title: RB Inyokern Solar Project by R&L Capital, Inc.

Lead Agency: Kern County Planning Department | Contact Person: Ronelle Candia
Mailing Address: 2700 "M" Street Suite 100 | Phone: (661) 862-8997
City: Bakersfield | Zip: 93301-2323 | County: Kern

Project Location: County: Kern | City/Nearest Community: Inyokern
Cross Streets: United States Highway 395 (US 395) and State Route 178 (SR 178) and Brown Road. | Zip Code: 93527
Lat. / Long.: 35 39'30.20573" N / 117 48'40.50472" W | Total Acres: 166.5
Assessor's Parcel No.: Multiple | Section: 19 & 20 | Twp.: 26S | Range: 39E | Base: MDB&M
Within 2 Miles: | State Hwy #: SR 178 | Waterways: N/A
Airports: Inyokern Airport | Railways: | Schools: High School

Document Type:

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☒ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other
NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI
Other: ☐ Joint Document ☐ Final Document ☐ Other

Local Action Type:

☐ General Plan Update ☐ General Plan Amendment ☐ General Plan Element ☐ Community Plan
☒ Specific Plan ☐ Master Plan ☐ Planned Unit Development ☐ Site Plan
☐ Rezone ☐ Prezone ☒ Use Permit ☐ Land Division (Subdivision, etc.)
☐ Annexation ☐ Redevelopment ☐ Coastal Permit ☐ Other

Development Type:

☐ Residential: Units Acres
☐ Office: Sq.ft. Acres Employees
☐ Commercial: Sq.ft. Acres Employees
☐ Industrial: Sq.ft. Acres Employees
☐ Educational
☐ Recreational
☐ Water Facilities: Type MGD
☐ Transportation: Type
☐ Mining: Mineral
☒ Power: Type Solar MW 26.6
☐ Waste Treatment: Type MGD
☐ Hazardous Waste: Type
☒ Other: Energy Storage

Project Issues Discussed in Document:

☒ Aesthetic/Visual
☒ Agricultural Land
☒ Air Quality
☒ Archeological/Historical
☒ Biological Resources
☐ Coastal Zone
☒ Drainage/Absorption
☒ Economic/Jobs
☐ Other
☐ Fiscal
☒ Flood Plain/Flooding
☒ Forest Land/Fire Hazard
☒ Geologic/Seismic
☒ Minerals
☒ Noise
☐ Population/Housing Balance
☒ Public Services/Facilities
☐ Recreation/Parks
☐ Schools/Universities
☒ Septic Systems
☐ Sewer Capacity
☒ Soil Erosion/Compaction/Grading
☒ Solid Waste
☒ Toxic/Hazardous
☒ Traffic/Circulation
☒ Vegetation
☒ Water Quality
☒ Water Supply/Groundwater
☒ Wetland/Riparian
☒ Wildlife
☐ Growth Inducing
☒ Land Use
☒ Cumulative Effects

Present Land Use/Zoning/General Plan Designation:

Undeveloped Land. *Zoning:* M-2 (Medium Industrial); *Inyokern Specific Plan:* 7.2/2.5 (Service Industrial/Flood Hazard).

Project Description: *See Attached.*

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "**X**".
If you have already sent your document to the agency please denote that with an "**S**".

S	Air Resources Board		Office of Emergency Services
	Boating & Waterways, Department of	S	Office of Historic Preservation
S	California Highway Patrol		Office of Public School Construction
X	CalFire		Parks & Recreation
S	Caltrans District # 6 & 9		Pesticide Regulation, Department of
S	Caltrans Division of Aeronautics	S	Public Utilities Commission
	Caltrans Planning (Headquarters)	S	Regional WQCB # Lahontan
	Central Valley Flood Protection Board		Resources Agency
	Coachella Valley Mountains Conservancy		S.F. Bay Conservation & Development Commission
	Coastal Commission		San Gabriel & Lower L.A. Rivers and Mtns Conservancy
	Colorado River Board		San Joaquin River Conservancy
S	Conservation, Department of		Santa Monica Mountains Conservancy
	Corrections, Department of		State Lands Commission
	Delta Protection Commission		SWRCB: Clean Water Grants
	Education, Department of		SWRCB: Water Quality
S	Energy Commission		SWRCB: Water Rights
S	Fish & Game Region # Fresno		Tahoe Regional Planning Agency
	Food & Agriculture, Department of	X	Toxic Substances Control, Department of
	General Services, Department of		Water Resources, Department of
	Health Services, Department of		
	Housing & Community Development		Other _____
S	Integrated Waste Management Board		Other _____
X	Native American Heritage Commission		

Local Public Review Period (to be filled in by lead agency)

Starting Date July 2, 2020 Ending Date August 17, 2020

Lead Agency (Complete if applicable):

Consulting Firm: _____ Applicant: _____
Address: _____ Address: _____
City/State/Zip: _____ City/State/Zip: _____
Contact: _____ Phone _____
Phone: _____

Signature of Lead Agency Representative: _____ **/s/** _____ **Date:** 7/2/2020

Ronelle Candia, Supervising Planner

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

Project Description: RB Inyokern Solar Project, by R&L Capital, Inc. (project proponent), is requesting the land use entitlements necessary to facilitate the construction and operation of a solar photovoltaic power generating facility and associated facilities that would generate a combined total of approximately 26.6 megawatts (MW) of renewable electrical energy on approximately 166.5 acres of privately-owned land in unincorporated Kern County. Implementation of the project as proposed would include: **a)** Two (2) Conditional Use Permits (CUP), to allow for the construction and operation of a 26.6 MW solar photovoltaic electrical generating facility and battery energy storage (Section 19.38.030.G) in an M-2 Zone District (CUP 23, Map # 47 and CUP 27, Map # 47); and **b)** Amendment to the Circulation Element of the Inyokern Specific Plan to remove a portion of the designated future secondary collector from Brown Road to the southern boundary of the project site (Specific Plan Amendment 4, Map #47). The project's permanent facilities would include the solar modules, energy storage systems, operations and maintenance building, switchyards, electrical collector system and inverters, gen-tie lines, telecommunication facilities and meteorological station, security fencing, and access roads.

Draft
Environmental Impact Report

SCH# 2017071020

Volume 1

Chapters 1 through 10

RB INYOKERN SOLAR PROJECT
by R&L Capital, Inc. *(PP16109)*

Conditional Use Permit 23, Map #47;
Conditional Use Permit 27, Map #47; and
Inyokern Specific Plan Amendment 4, Map #47

Kern County
Planning and Natural Resources Department
Bakersfield, California

July 2020

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Chapter 1
Executive Summary

1.1 Introduction

The RB Inyokern Solar Project (project), proposed by R&L Capital, Inc. (project proponent/operator), would develop a photovoltaic (PV) solar facility and associated infrastructure necessary to generate a combined 26.6 megawatts (MW) of renewable electrical energy and/or energy storage capacity. The project site includes two separate phases: Phase 1 (a 20 MW solar facility) and Phase 2 (a 6.6 MW solar facility). Phasing is dependent upon market conditions. The proposed project would interconnect to an existing Southern California Edison (SCE) 33-kilovolt (kV) electrical distribution line to an existing SCE Inyokern Substation approximately 0.5 miles to the east. The distribution line is located within an existing transmission corridor alongside of the project site. A Lot Line Adjustment (LLA 48-19) has been approved, but not yet recorded, to exclude portions of Assessor Parcel Number (APN) 352-085-13 from the Project. In addition, the project proposes to remove a portion of the designated future secondary collector from Brown Road to the southern boundary of the project site.

The project proponent/operator is requesting one Conditional Use Permit (CUPs) from Kern County to authorize the construction and operation of the 20 MW Phase 1 solar PV electrical generating facility on approximately 124.5 acres (CUP 23, Map 47) and the construction and operation of the 6.6 MW Phase 2 solar PV electrical generating facility on approximately 41.93 acres (CUP 27, Map 47). The project proponent/operator is also requesting California Environmental Quality Act (CEQA) review for the project.

Table 1-1, *Project Assessor Parcel Numbers (APNs) – RB Inyokern Phase 1*, and **Table 1-2**, *Project Assessor Parcel Numbers (APNs) – RB Inyokern Phase 2*, both identify the Assessor Parcel Numbers (APN) for the proposed project site.

TABLE 1-1: PROJECT ASSESSOR PARCEL NUMBERS – RB INYOKERN PHASE 1

APN	Acres (approx.)	Zoning	Inyokern Specific Plan
352-085-05	26.59	M-2	7.2/2.5 (Service Industrial/Flood Hazard)
352-085-06	3.50	M-2	7.2/2.5 (Service Industrial/Flood Hazard)
352-086-08*	8.45*	M-2	7.2/2.5 (Service Industrial/Flood Hazard)
352-501-01	2.82	M-2	7.2/2.5 (Service Industrial/Flood Hazard)
352-501-02	2.89	M-2	7.2/2.5 (Service Industrial/Flood Hazard)
352-501-03	2.85	M-2	7.2/2.5 (Service Industrial/Flood Hazard)
352-501-05	5.02	M-2	7.2/2.5 (Service Industrial/Flood Hazard)
352-501-06	11.99	M-2	7.2/2.5 (Service Industrial/Flood Hazard)
352-501-07	13.20	M-2	7.2/2.5 (Service Industrial/Flood Hazard)
352-501-09	33.32	M-2	7.2/2.5 (Service Industrial/Flood Hazard)
352-501-10	13.84	M-2	7.2/2.5 (Service Industrial/Flood Hazard)
Total	**124.56**		

TABLE 1-2: PROJECT ASSESSOR PARCEL NUMBERS – RB INYOKERN PHASE 2

APN	Acres (approx.)	Zoning	Inyokern Specific Plan
352-086-08*	35.17*	M-2	7.2/2.5 (Service Industrial/Flood Hazard)
352-501-05	6.76	M-2	7.2/2.5 (Service Industrial/Flood Hazard)
Total	**41.93**		

* With recordation of LLA 48-19

This Draft Environmental Impact Report (EIR) has been prepared by Kern County as the Lead Agency under CEQA. The Draft EIR provides information about the environmental setting and impacts of the project and alternatives. It informs the public about the project and its impacts and provides information to meet the needs of local, State, and federal permitting agencies that are required to consider the project. The EIR will be used by Kern County to determine whether to approve the requested CUPs (CUP 23, Map 47 and CUP 27, Map 47) required for the project.

This Executive Summary summarizes the requirements of the *CEQA Guidelines*; provides an overview of the project and alternatives; identifies the purpose of this EIR; outlines the potential impacts of the project and the recommended mitigation measures; and discloses areas of controversy and issues to be resolved.

1.2 Project Summary

The proposed project would develop a solar PV energy-generating facility with battery energy storage on 166.5 acres of privately owned land. As shown in Figure 3-1, *Project Site Vicinity*, and Figure 3-2, *Project Site*, in Chapter 3, *Project Description*, of this EIR, the project is located in the eastern high desert region of Kern County in the unincorporated community of Inyokern. The project would generate a total of 26.6 MW of renewable electrical energy for delivery to the Statewide grid. The proposed project would interconnect to an existing Southern California Edison (SCE) 33 kV electrical distribution line to an existing SCE Inyokern Substation approximately 0.5 miles to the east.

Table 1-3, *Project Statistics*, provides an overview of the capacity, acreage, location, land uses and approvals for both project phases.

TABLE 1-3: PROJECT STATISTICS

Capacity	Approximate Gross Acres	Section, Township/Range	General Plan/ Specific Plan Land Use	County Discretionary Approvals
Phase 1: 20 MW	124.56	East portion of Section 19 and west portion of Section 20, T 26 South, R 39 East	7.2/2.5 (Service Industrial)	CUP
Phase 2: 6.6 MW	41.93	Northeast portion of Section 30 and northwest portion of Section 29, T 26 South, R 39 East	7.2/2.5 (Service Industrial)	CUP

1.2.1 Discretionary Entitlements Required

The Kern County Planning and Natural Resources Department, the lead agency for the project, has discretionary authority over the proposed project. To implement this project, the project operator would need to obtain, at a minimum, the permits/approvals listed below. Additionally, the EIR, once certified, will be used to satisfy the CEQA requirements for the approvals detailed below. In addition to those listed below, other additional permits or approvals from responsible agencies may be required for the project.

Kern County

- Consideration and certification of Final EIR
- Adoption of 15091 Findings of Fact and 15093 Statement of Overriding Considerations
- Approval of proposed Mitigation Measures Monitoring Program
- Approval by the Kern County Board of Supervisors for proposed conditional use permits for the project site
- Approval by the Kern County Board of Supervisors for the proposed Circulation Amendment to the Inyokern Specific Plan
- Kern County construction, grading, building and encroachment permits

Other Responsible Agency Entitlements

- U.S. Fish and Wildlife Service Habitat Conservation Plan (if required)
- California Department of Fish and Wildlife (CDFW) Incidental Take Permit and Habitat Conservation Plan (if required)
- California State Water Resources Control Board – National Pollutant Discharge Elimination System Construction General Permit (if required)
- California Department of Transportation Right-of-Way Encroachment Permit, and Permit for Transport of Oversized Loads
- Eastern Kern County Air Pollution Control District Authority to Construct/Permit to Operate/Fugitive Dust Control Plan

1.3 Relationship of the Project to Other Solar Projects

The project is being developed independently of other approved or proposed solar projects in the County. If approved, the RB Inyokern Solar Project, which includes Phase 1 and 2 facilities, would be subject to their own use permits, conditions of approval, interconnection agreements, and PPAs. Kern County understands that the RB Inyokern Solar Project facilities would be built and operated independently of any other solar project, and, if approved, would not depend on any other solar project for economic viability. The proposed project would involve constructing 150 feet of a new gen-tie line that would connect with an existing SCE 33 kV electrical distribution line, enabling energy delivery to the existing Southern California Edison Inyokern Substation located approximately 0.5 miles to the east of the project site.

1.4 Purpose and Use of the EIR

An EIR is a public informational document used in the planning and decision-making process. This project-level EIR will analyze the environmental impacts of the proposed project. The Kern County Planning Commission and the Board of Supervisors will consider the information in this EIR, including the public comments and staff response to those comments, during the public hearing process. As a legislative action, the final decision is made by the Kern County Board of Supervisors, which may approve, conditionally approve, or deny the project. The purpose of an EIR is to identify:

- The significant potential impacts on the environment and indicate the manner in which those significant impacts can be avoided or mitigated;
- Any unavoidable adverse impacts that cannot be mitigated; and
- Reasonable and feasible alternatives to the project that would eliminate any significant adverse environmental impacts or reduce the impacts to a less-than-significant level.

An EIR also discloses growth-inducing impacts; impacts found not to be significant; and significant cumulative impacts of past, present, and reasonably anticipated future projects. CEQA requires preparation of an EIR that reflects the independent judgment of the lead agency regarding the impacts, the level of significance of the impacts both before and after mitigation, and mitigation measures proposed to reduce the impacts. A draft EIR is circulated to responsible agencies, trustee agencies with resources affected by the project, and interested agencies and individuals. The purposes of public and agency review of a draft EIR include sharing expertise, disclosing agency analyses, checking for accuracy, detecting omissions, discovering public concerns, and soliciting counterproposals. Reviewers of a draft EIR are requested to focus on the sufficiency of the document in identifying and analyzing the possible impacts on the environment, and ways in which the significant impacts of the project might be avoided or mitigated. Comments are most helpful when they suggest additional specific alternatives or mitigation measures that would provide better ways to avoid or mitigate significant environmental effects.

This EIR is being distributed directly to agencies, organizations, and interested groups and persons for comment during a 45-day formal review period in accordance with *CEQA Guidelines* Section 15087. The EIR process, including means by which members of the public can comment on the EIR, is discussed further in Chapter 2, *Introduction*.

1.5 Project Overview

1.5.1 Project Objectives

The project has the following objectives, as identified by the project applicant:

- Minimize the network upgrade costs borne to the consumer by locating the project on a transmission line that does not require major upgrades to accommodate the new facility;
- Maximize the use of existing transmission infrastructure;
- Ensure a short distance of the point of interconnection to minimize the cost on the generator interconnection tie-line and reduce environmental impacts;

- Develop a site to maximize renewable energy production and economic viability through the installation of up to 26.6 MW of solar PV panels and/or energy storage facilities on of private lands with excellent solar resources (an average insolation value of 6 kilowatt-hours per square meter per day (kWh/m^2/day) or greater);
- Ensure that the project can be constructed in a technologically feasible manner and operated in a manner that allows electricity to be provided at a competitive price;
- Locate the facility on land that is zoned for industrial use with no agricultural value, or soil quality conducive to agriculture;
- Support California's efforts to reduce greenhouse gas (GHG) emissions consistent with the timeline established in 2006 under California Assembly Bill 32, the Global Warming Solutions Act of 2006, which requires the California Air Resources Board to reduce statewide emissions of GHGs to at least the 1990 emissions level by 2020. This timeline was updated in 2016 under Senate Bill 32, which requires that statewide GHG emissions are reduced to at least 40 percent below the statewide GHG emissions limit by 2030; and
- Support California's aggressive RPS Program consistent with the timeline established by Senate Bill 100 (De León, also known as the "California Renewables Portfolio Standard Program: emissions of greenhouse gases") as approved by the California legislature and signed by Governor Brown in September 2018, which increases RPS in 2030 from 50 percent to 60 percent and establishes a goal of 100 percent RPS by 2045.

1.5.2 Regional Setting

The project is located in the eastern high desert region of Kern County in the unincorporated community of Inyokern, approximately 9.4 miles south of Inyo County and 9.3 miles west of San Bernardino County. The project site is approximately 5.5 miles west of the City of Ridgecrest, 3 miles east of the community of Indian Wells, and 8 miles west of the China Lake Naval Air Weapons Station. Land uses in the project area are both industrial and residential, as well as some open space. Topography in the project area is relatively flat. The project area is primarily accessible by SR 178 (West Inyokern Road) onto to Brown Road. US 395, located adjacent to the project site on the northeast, is an access control restriction; hence, no project site access is proposed from this route. Another major north–south roadway in the region is State Route 14 (SR 14), a four-lane highway located approximately 3.2 miles east of the project. Emergency access to both facilities is provided off of Brown Road.

1.5.3 Surrounding Land Uses and Project Site Conditions

The project site is located on undeveloped privately owned land in the community of Inyokern. The project site is relatively flat and has an elevation that ranges from approximately 2,300 to 2,400 feet (700 to 730 meters) above mean sea level (amsl). Existing development in the project vicinity includes a wastewater treatment plant, the Inyokern Airport, single family residences, and undeveloped, open space. Forest, parkland, and preserve areas in the vicinity of the project site include the Sequoia and Kings Canyon National Parks located approximately 20 miles northwest. The project site is not located within the boundaries of an adopted Habitat Conservation Plan. The nearest residence is a small rural residential tract approximately 0.30 miles east of SR 395 and 500 feet southwest of the project site. The community of Inyokern is located to the southwest of the project site and includes various single-family residences. Scattered residences are also located east of the project site. The China Lake Naval Air Weapons Station,

located approximately 8 miles east of the project site, has an existing utility scale solar facility. An expanded list of existing, approved, and pending projects in the vicinity of the project site is provided in Table 3-5, *Cumulative Projects List*, in Chapter 3, *Project Description*, of this EIR.

The project would develop 166.5 acres of property, consisting of private undeveloped land. The project site is not designated by the California Department of Conservation (DOC) as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. The DOC designates the project site as grazing land, non-agricultural and natural vegetation, and vacant or disturbed lands. No lands within the project site are subject to a Williamson Act Land Use contract.

As shown in Figure 3-4, *Flood Zones*, in Chapter 3, *Project Description*, of this EIR, the project site is located within Flood Zone A (100-year flood zone) as defined on the Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency (FEMA). This indicates the site has a 1 percent potential of annual flooding. There are no identified State-designated Alquist-Priolo Earthquake Fault Zones on the project site. The nearest active fault is the Little Lake Fault, which is located approximately 7 miles northeast of the project site. According to the Kern County ALUCP, the project site is located within Zones B1and C of the Inyokern Airport influence area.

The project would be served by the Kern County Sheriff's Office for law enforcement and public safety. The closest sheriff station is the Ridgecrest Substation, located approximately 7.4 miles southeast of the project site, at 128 East Coso Avenue in the City of Ridgecrest. The Kern County Fire Department (KCFD) provides fire protection and emergency medical and rescue services for the project area. The closest KCFD fire station is Station #73, located approximately 0.6 miles west of the project site at 6919 Monache Mountain Avenue in the community of Inyokern. The closest school to the project site is Inyokern Elementary School, located approximately 0.22 miles southwest of the project site. The closest hospital to the project site is the Ridgecrest Regional Hospital in the City of Ridgecrest, approximately 7 miles to the east.

Table 1-4, *Project Site and Surrounding Land Uses*, summarizes the existing land uses, map code designations, and zoning classifications on the project site and surrounding area. Figure 3-6, *Existing General Plan and Inyokern Specific Plan Designations*, and Figure 3-7, *Existing Zoning*, in Chapter 3, *Project Description*, of this EIR, show the land use designations and the existing zoning of the project site and its surrounding area.

TABLE 1-4: PROJECT SITE AND SURROUNDING LAND USES

	Existing Land Use	Existing Land Use Designations	Existing Zoning Classifications
Project Site	Undeveloped, Partially Disturbed Land	*Inyokern Specific Plan:* 7.2/2.5 (Service Industrial/Flood Hazard)	M-2 (Medium Industrial)
North	Largely Undeveloped, Industrial, Wastewater Treatment Plant	*Inyokern Specific Plan:* 7.3/2.5 (Heavy Industrial/Flood Hazard) 5.5 (Residential – 1 Dwelling Unit/Net Acre Maximum) 5.6 (Residential – Minimum 2.5 Gross Acres/Unit) 5.7 (Residential – 5.0 Gross Acres/Dwelling Unit Maximum) 5.8 (Residential – 20+ Gross Acres/DU Maximum) 7.1 (Light Industrial)	M-2 (Medium Industrial) E (2 ½) RS MH (Estate 2.5 Acres – Residential Suburban – Mobile Home Combining) E (5) RS MH (Estate 5 Acres – Residential Suburban – Mobile Home Combining)
South	Undeveloped land	*Inyokern Specific Plan:* 1.1/2.5 (State or Federal Land/Flood Hazard)	M-2 (Medium Industrial) M-2 PD (Medium Industrial-Precise Development Plan) OS (Open Space)
East	Roadway, undeveloped, Scattered residences	5.7 (Residential – Minimum 2.5 Gross Acres/Unit); 5.8 (Residential – 5 Gross Acres/Unit) 5.5/2.5 (Residential – 1 Dwelling Unit/Net Acre Maximum/Flood Hazard) 5.8/2.5 (Residential – 20+ Gross Acres/DU Maximum/Flood Hazard) 5.8 (Residential – 20+ Gross Acres/DU Maximum) 5.5 (Residential – 1 Dwelling Unit/Net Acre Maximum) 1.1 (State or Federal Land)	A-1 MH (Limited Agriculture – Mobile Home Combining) OS (Open Space) E (1) RS MH (Estate 1 Acre – Residential Suburban – Mobile Home Combining) E (2½) RS MH (Estate 2.5 Acres – Residential Suburban – Mobile Home Combining) E (10) RS MH (Estate 10 Acres – Residential Suburban – Mobile Home Combining) E (20) RS MH (Estate 20 Acres – Residential Suburban – Mobile Home Combining)
West	Roadway, Inyokern Airport	7.2/2.5 (Service Industrial/Flood Hazard) 3.3 (Other Facilities) 1.1/2.5 1.1/2.5 (State or Federal Land/Flood Hazard) 5.6/2.5 (Residential – Minimum 2.5 Gross Acres/Unit/Flood Hazard) 5.2/2.5 (Residential – 16 Dwelling Units/Net Acre Maximum/Flood Hazard) 6.2 (General Commercial) 6.2/2.5 (General Commercial/Flood Hazard)	M-1 PD H (Light Industrial, Airport Approach Height Combining, Precise Development Combining) OS (Open Space)

1.5.4 Project Characteristics

Power generated by the proposed project would be transferred directly to SCE's Inyokern 33 kV electrical distribution line, which connects to the existing SCE Inyokern Substation approximately 0.5 miles east of the project site. The solar facility would utilize PV technology and consist of solar arrays mounted on either fixed or tracking structures mounted to vertical posts. The solar facility would operate year-round and would generate electricity during the daylight hours when electricity demand is at its peak.

The proposed project consists of two separate sites that comprise a combined 166.5-acre project site (see Figure 3 2, Project Site). These two sites may be combined and constructed at the same time as a single, 26.6 MW AC solar facility, or alternatively, could be developed as two independent solar facilities. Phase 1 would include 20 MW of renewable energy generating solar facilities and battery energy storage on approximately 124.56 acres, and Phase 2 would include 6.6 MW of renewable energy generating solar facilities and battery energy storage on approximately 41.93 acres.

The project's facilities would include the parts and equipment to generate solar power, convert and connect it to the grid, allow site access and report the needed meteorological and power telemetry to the required stakeholders.

The power conversion process starts with the modules and ends with the medium voltage (MV) protection equipment arranged in the following sequence. PV modules are mounted to either a fixed or tracking support structure. They are then grouped into series-strings in parallel, using a combiner box with fuses to protect each incoming wire. Several combiners lead to an inverter that converts direct current (DC) electricity to alternating current (AC) electricity. The inverters output to transformers to step the inverter voltage up to 34,500 volts. This MV is collected using buried or overhead wires and routed to the MV protection and metering equipment.

A typical solar facility and substation are shown in Figure 3-8, *Typical Solar PV Power Plant Facility*, and Figure 3-9, *Typical Substation*, respectively. A conceptual site plan for the project site during construction is shown in Figure 3-10, *Phase 1 Site Plan*, and Figure 3-11, *Phase 2 Site Plan*.

The combined project would include the following components.

- Solar PV generating facilities and solar modules;
- Energy storage systems (ESS);
- Operations and maintenance (O&M) building;
- Switchyards;
- An electrical collector system and inverters;
- One or two generation-tie (gen-tie) lines and an interconnection to the Statewide grid;
- Telecommunication facilities;
- An onsite meteorological station;
- Site access and security measures; and
- Potential SCE offsite upgrades.

The components listed above are described in more detail below.

Solar PV Generating Facilities and Solar Modules

The proposed project would utilize system blocks to convert solar energy directly to electrical power for export to the electrical grid. The proposed project would install PV modules that would be mounted on steel support posts that are pile driven into the ground and connected to inverters. The modules would be made of a thin film material or polycrystalline silicon material covering the glass panes, which would be dark in color, highly absorptive, and have minimum reflectivity. The modules would be manufactured at an offsite location and transported to the project site.

Solar modules for the proposed project will be a single axis tracker system. Depending on the modules used, the panels would measure between 4 and 7 feet in length, and the total height of the panel system measured from ground surface would be approximately 4 to 10 feet. The length of each row of panels would be approximately 300 feet and would be oriented in the east–west direction in the case of fixed-mounts being utilized, and oriented in the north–south direction in the case of single-axis trackers being utilized.

Solar Trackers

- Phase 1 would include:
  - Approximately 74,424 single-axis tracker panels
- Phase 2 would include:
  - Approximately 24,556 single-axis tracker panels

Access roads would be located throughout the project area. Spacing between each row would be approximately 8 to 22 feet. Single-axis tracking systems would employ a motor mechanism that would allow the arrays to track the path of the sun (from east to west) throughout the day. The motors would be installed after the horizontal cross-members described above are in place. In the morning, the panels would face the east. Throughout the day, the panels would slowly move to the upright position at noon and on to the west at sundown. The panels would reset to the east in the evening or early morning to receive sunlight at sunrise. The project, as proposed, would be developed with traditional or second-generation technology.

A solar tracking mechanism is used to maximize the solar energy conversion efficiency by keeping the modules perpendicular to the sun's energy rays throughout the day. This completed assembly of PV modules mounted on a framework structure is called a "tracker" because it tracks the sun from east to west. Single-axis trackers would increase the efficiency of energy production from the arrays relative to a fixed tilt system. The exact tracker manufacturer and model would be determined in the final design. All trackers are intended to function identically in terms of following the motion of the sun.

Module layout and spacing is optimized to balance energy production versus peak capacity and would depend on the sun angles and shading caused by the horizon surrounding the project. The spacing between the rows of trackers is dependent on site-specific features and would be identified in the final design. The final configuration would allow for sufficient clearance for maintenance vehicles and panel access.

Energy Storage Systems

The proposed project may have up to two onsite ESS (one for each facility developed). Each ESS would be able to provide at least four hours of energy storage capacity for the electric grid. Each ESS would occupy approximately a 65-by-150-foot area within the project site and would consist of battery storage

modules placed in either multiple prefabricated enclosures or steel buildings near the onsite switchyard. The ESS would either be installed contemporaneously or after the installation of the PV facilities. The final location is dependent on final design and may require construction of a vault or other form of supporting foundation similar to other structures onsite.

The ESS would consist of battery banks housed in electrical enclosures and buried electrical conduit. The battery enclosures would have fire suppression equipment installed that automatically suppress thermal emergencies. Although the energy storage technology has not been determined at this time, it could include any commercially available battery technology, including but not limited to lithium ion, lead acid, sodium sulfur, and sodium or nickel hydride or any type of flow batteries. Battery systems are operationally silent and flywheel systems have a noise rating of 45 dBA. Power stored by the energy storage facility would be transferred by the existing Sawmill 33 kV electrical distribution line that connects to the existing SCE Inyokern Substation approximately 0.5 miles east of the project site.

Operation and Maintenance Buildings

The proposed project would include one unmanned O&M building. The O&M building would be a prefabricated commercial coach structure that measures up to 25 feet by 25 feet in area and 12 feet high. The O&M activities would not require permanent employees; therefore, no septic tanks or permanent toilets would be required, and no permanent water source is necessary. Water for day to day maintenance will be either from an onsite water well or trucked onto the site. The Inyokern Community Services District would provide water during construction and operation of the project. Electrical service to support the facility and equipment would be provided by SCE.

Switchyards

The proposed project would have a total of two switchyards (one on Phase 1 and one on Phase 2). Switchyards would include individual protection equipment that collects the electricity from all the inverter stations, combines it, and passes it through large breaker (often called a recloser) that protects the site from overcurrent events. Power measurement would be done using Potential and Current transducers that feed signals to a power meter. A customer switch would be included that can be used to show a visible disconnect from the grid. This switch may be pole mounted equipment at 25 feet separation or metal enclosed switch gear. In either case, the MV equipment would be surrounded by a fence to restrict access to all but qualified personnel.

Each switchyard would have two sets of gear: the gear the customer owns and controls and the gear the utility owns and controls. Included in the customer-owned gear are a recloser (or a large breaker) and the metering devices (such as potential transducers and current transducers) that send signals to a meter cabinet a short distance away. This meter cabinet then sends the information to the local Supervisory Control and Data Acquisition (SCADA) system to report offsite or store electricity locally. There is also customer owned-switch that provides a visible indication of grid disconnect should disconnection become necessary. The utility-owned gear includes a separate recloser that is pole-mounted as well as metering devices. Approximately 150 feet of 33 kV gen-tie line would be present onsite extending from the utility recloser to connect to the existing Sawmill 33 kV distribution circuit that leads to the SCE Inyokern Substation.

Electrical Collector System and Inverters

The DC-AC electrical collection system includes all cables and combiners that collect electricity from the panels, deliver it to the inverters, collect it from the inverters, and ultimately deliver it to the project switchyard. The collection system would likely be installed along internal access roads to collect power from the rows of modules and deliver it to the switching station. This collection system would likely be installed in subsurface trenches; in some areas of the site, part or all of the collection system may be housed in above-grade raceways mounted on supports approximately 24 to 36 inches above ground level. The collection system would be rated at between 1,000 and 2,000 volts DC until it reached the inverters and a 34.5 kV AC intermediate voltage system between the inverters and the project switching station.

The DC electricity produced by the solar panels is converted to three-phase AC by a series of inverters. AC is the type of electricity usable by the electric utility and is the form required to connect to the transmission system. The inverter pad equipment includes a transformer that steps up the electricity in its new form to an output voltage of 34.5 kV. This electricity is then transmitted via the medium voltage collection system to the switching station.

Generation-Tie Line(s) and Interconnection to the Statewide Grid

The project would construct one or two onsite 33 kV electrical gen-tie lines from the proposed project transformers to the existing 33 kV Sawmill circuit, which is located along the 20 MW facility's eastern boundary. As mentioned above, power generated by the proposed project would be transferred directly to SCE's Inyokern 33 kV line. Construction would include appropriate environmental monitoring.

Telecommunication Facilities

Onsite equipment communication would be conducted via a combination of options including a secured wireless mesh network, copper and fiber data cables both on equipment racks and underground.

Telecommunication equipment is needed to meet the communication requirements for interconnecting with the SCE and California Independent System Operator (CAISO) grid. Telecommunication equipment would allow the project site to collect information from onsite devices, communicate with offsite facilities and control the site. To provide for offsite bidirectional communication, a fiber optic cable or a T1 data line from local providers would be connected to the site with the appropriate allocations and security. This cable or data line may include both underground and overhead routing paths. The project's unmanned O&M buildings would house an automated field control system. The controls generally include a field supervisory controller in a central location and local microprocessor controllers connected to each tracker (if trackers are to be used). The field control system monitors solar insolation, wind velocity, and tracker performance and status, and communicates with all of the local microprocessor controllers. When the appropriate conditions exist, the field supervisory controller initiates the trackers' daily tracking of the sun, and at the end of the day stows the trackers in the solar array. The project would utilize local exchange carrier services to support remote monitoring requirements. The project would connect to telecommunication fiber optic lines owned and managed by existing service providers.

The project site's electricity would be controlled using a SCADA system comprised of onsite meters, relay control devices, communications gateways and control computers that limits the amount of energy the plant can export and to respond to external utility or owner commands that adjust power, power factor and other

grid required commands. This equipment would be located either in a metal enclosure or a small controls structure with the proper temperature and backup power equipment that is needed for operation. The SCADA system is critical to the CAISO and SCE utility interconnection, and for the proper operation and maintenance of the project, which utilizes propriety software, a fiber optic transmission system, a telephone, radio and/or microwave communications network, and other means of communication such as radio-links and phase loop communication systems that may be implemented to meet the requirements. The SCADA system functions as a remote start, stop, reset, and data aggregator for the facilities. The SCADA system would also control the onsite switchyard reclosers allowing for fully centralized operation of the project to meet all CAISO and utility interconnection requirements.

Onsite Meteorological Station

The project would include at least one onsite solar meteorological station located near the Phase 1 O&M building. The onsite solar meteorological station would consist of solar energy (irradiance) meters, as well as an air temperature sensor and wind anemometer. This equipment (specifically the wind anemometer) would have an estimated height of up to 15 feet.

Site Access and Security Measures

During operation, the project would be accessed from two separate entrances from Brown Road. An additional site access point for emergency vehicles would also be available to provided off of Brown Road. Access to Phase 2 would be directly from Phase 1; there would be no access to Phase 2 directly from Brown Road. To facilitate access for fire and work crews and equipment delivery, the site would have internal service roads typically composed of compacted rock. All road improvements would be completed per County code and regulations. Typical site access would be approximately 20 feet wide, accommodating a 56-foot turning radius in both directions. The rows of solar panels would be separated by access ways. Internal site circulation would include approximately 20-foot-wide perimeter roads consisting of crushed stone and approximately 16-foot-wide O&M roads among the solar arrays consisting of crushed stone or native soil.

Chain-link security fencing would be installed around the site perimeter and other areas requiring controlled access to restrict public access during construction and operations. The security fence would be between approximately 7 and 8 feet high. The fence posts would be set in concrete. Additional security may be provided through the use of closed circuit video surveillance cameras and intrusion systems. Signs would be installed to achieve appropriate safety and security as expected in a solar power facility. Proposed signage would include signs specifying high voltage danger, site under surveillance, caution electric shock, etc. Any signs as required by the National Electrical Code would also be installed.

The project's lighting system would provide operation and maintenance personnel with illumination for both normal and emergency conditions. Lighting would be designed to provide the minimum illumination needed to achieve safety and security objectives. Lighting would be directed downward and shielded to focus illumination on the desired areas only and to avoid light spillage on adjacent properties. Light fixtures would be mounted at the entrance and each inverter station. Lighting would be no brighter than required to meet safety and security requirements, and lamp fixtures and lumens would be selected accordingly. All project lighting would be switched and without timer. All lighting at the proposed solar facilities would be designed to meet Kern County Zoning Ordinance Chapter 19.81, Outdoor Lighting “Dark Skies Ordinance,” requirements.

Potential SCE Offsite Upgrades

To accommodate the project's interconnection, potential SCE and/or CAISO offsite upgrades are necessary. The proposed project would include upgrading the conductors, for less than 1 mile, of the existing Sawmill circuit, which runs along the northern and eastern boundaries of the project site and interconnects to the existing SCE Inyokern Substation.

Other potential network facility modifications necessary to support the development of the project may include but are not limited to replacement of the transformer bank at the existing Inyokern Substation, replacement of an existing transducer with a bidirectional transducer, and addition of remote terminal unit points for the transducer.

1.6 Environmental Impacts

CEQA Guidelines Section 15128 requires that an EIR contain a statement briefly indicating the reasons why any new and possibly significant effects of a project were determined not to be significant and were, therefore, not discussed in detail in the EIR. The County has engaged the public to participate in the scoping of the environmental document. The contents of this EIR were established based on an initial study/notice of preparation (IS/NOP) prepared in accordance with the *CEQA Guidelines*, as well as public and agency input that was received during the scoping process. Comments received on the IS/NOP are located in Appendix A of this EIR. Specific issues found to have no impact or less-than-significant impacts during preparation of the IS/NOP do not need to be addressed further in this EIR. Based on the findings of the IS/NOP and the results of scoping, a determination was made that this EIR must contain a comprehensive analysis of all environmental issues in *CEQA Guidelines* Appendix G except those previously identified within the IS/NOP, including population and housing and recreation.

1.6.1 Impacts Not Further Considered in this EIR

As discussed in the IS/NOP (located in Appendix A of this EIR), the project was determined to have no impact with regard to the following resource areas, which are therefore not analyzed in this EIR.

- Population and Housing
- Recreation

1.6.2 Impacts of the Project

Sections 4.1 through 4.18 in Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, provide a detailed discussion of the environmental setting, impacts associated with the project, and mitigation measures designed to reduce significant impacts to less-than-significant levels, when feasible. The impacts, mitigation measures, and residual impacts for the project are summarized in **Table 1-9**, *Summary of Impacts, Mitigation Measures, and Levels of Significance*, located at the end of this chapter, and are discussed further below.

1.6.3 Less-than-Significant Impacts

Impacts related to the following resource areas are evaluated in this EIR for their potential significance:

- 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
- Public Services
- Transportation and Traffic
- Tribal Culture Resources
- Utilities and Service Systems
- Wildfires

Table 1-5, *Summary of Project Impacts that are Less than Significant or Less than Significant with Mitigation*, presents those impacts of the project that were determined to be less than significant by themselves, or less than significant with implementation of mitigation measures. Less-than-significant cumulative impacts are also included in this table. Sections 4.1 through 4.18 of this EIR present detailed analysis of these impacts and describe the means by which the mitigation measures listed in Table 1-5 would reduce impacts to a less-than-significant level.

TABLE 1-5: SUMMARY OF PROJECT IMPACTS THAT ARE LESS THAN SIGNIFICANT OR LESS THAN SIGNIFICANT WITH MITIGATION

Impact	Mitigation Measures
Agriculture and Forest Resources (Project and Cumulative)	No mitigation required
Biological Resources (Project)	MM 4.4-1 through MM 4.4-14; MM 4.1-3 and MM 4.1-4
Cultural Resources (Project and Cumulative)	MM 4.5-1 through MM 4.5-4
Energy (Project and Cumulative)	MM 4.3-3 and MM 4.3-7
Geology and Soils (Project and Cumulative)	MM 4.7-1 through MM 4.7-7
Greenhouse Gas Emissions (Project and Cumulative)	No mitigation required
Hazards and Hazardous Materials (Project and Cumulative)	MM 4.9-1 through MM 4.9-3; MM 4.1-5; MM 4.1-6; MM 4.14-1; MM 4.17-1
Land Use and Planning (Project and Cumulative)	MM 4.11-1 through MM 4.11-3; MM 4.1-4 and MM 4.1-6
Mineral Resources (Project and Cumulative)	No mitigation required
Noise (Cumulative)	MM 4.13-1 through MM 4.13-4
Public Services (Project and Cumulative)	MM 4.14-1 and MM 4.14-2
Traffic and Transportation (Project and Cumulative)	MM 4.15-1
Tribal Cultural Resources (Project and Cumulative)	No mitigation required
Wildfire (Project)	MM 4.10-1; MM 4.14-1

1.6.4 Significant and Unavoidable Impacts

CEQA Guidelines Section 15126.2(b) requires that the EIR describe any significant impacts, including those that can be mitigated but not reduced to less-than-significant levels. Potential environmental effects of the project and proposed mitigation measures are discussed in detail in Chapter 4, *Environmental Setting, Impacts, and Mitigation Measures*, of this EIR. Impacts for the following have been found to be significant and unavoidable at the project-level:

- Aesthetics
- Air Quality
- Hydrology and Water Quality
- Noise
- Utilities and Service Systems

According to *CEQA Guidelines* Section 15355, the term cumulative impacts "… refers to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." Individual effects that may contribute to a cumulative impact may be from a single project or a number of separate projects. Individually, the impacts of a project may be relatively minor, but when considered along with impacts of other closely related or nearby projects, including newly proposed projects, the effects could be cumulatively considerable. This EIR has considered the potential cumulative effects of the project along with other current and reasonably foreseeable projects. Impacts for the following have been found to be cumulatively considerable:

- Aesthetics
- Air Quality
- Biological Resources
- Hydrology and Water Quality
- Utilities and Service Systems
- Wildfire

Table 1-6, *Summary of Significant and Unavoidable Project-Level and Cumulative Impacts of the Solar Facility*, presents those impacts at the project -level and cumulatively. Sections 4.1, *Aesthetics*; 4.3, *Air Quality*; 4.4, *Biological Resources*; 4.10, *Hydrology and Water Quality*; 4.13, *Noise*; 4.17, *Utilities and Service Systems*; and 4.18, *Wildfire*, of this EIR present detailed analyses of these impacts and describe the means by which the mitigation measures listed in Table 1-6, would reduce the severity of impacts to the extent feasible.

TABLE 1-6: SUMMARY OF SIGNIFICANT AND UNAVOIDABLE PROJECT-LEVEL AND CUMULATIVE IMPACTS OF THE SOLAR FACILITY

Resources	Project Impacts	Cumulative Impacts
Aesthetics	Although implementation of Mitigation Measures MM 4.1-1 through MM 4.1-3 would reduce the visual changes experienced at individual key observation point locations, there are no mitigation measures that would allow for the preservation of the existing visual character of the area; and the resultant visual impact is considered **significant and unavoidable**.	The project would have cumulatively significant and unavoidable aesthetic impacts after implementation of mitigation. Although implementation of Mitigation Measures MM 4.1-1 through MM 4.1-3 would reduce the adverse visual changes experienced at individual key observation point locations, there are no mitigation measures that would allow for the preservation of the existing visual character of the area. The conversion of approximately 166.5 acres of currently undeveloped land to a solar energy production facility is considered a **significant and unavoidable** cumulative impact.
Air Quality	Even with implementation of Mitigation Measures MM 4.3-1 through MM 4.3-12, the uncertainty of the project's regional and localized health impacts associated with criteria air pollutants, such as $PM_{2.5}$ along with indirect linkages of criteria pollutants and COVID-19, on vulnerable populations would result in **significant and unavoidable** project level impacts.	Although implementation of Mitigation Measures MM 4.3-1 through MM 4.3-12 would reduce impacts to air quality, the proposed project would not result in a cumulatively considerable impact related to the incremental contribution to the Mojave Desert Air Basin Emissions Inventory. However, the uncertainty of the project's regional and localized health impacts associated with criteria air pollutants, such as $PM_{2.5}$ along with indirect linkages of criteria pollutants and COVID-19, on vulnerable populations would result in **significant and unavoidable** cumulative level impacts.
Biological Resources	There would be no significant and unavoidable project impacts.	As development increases within Kern County, impacts to biological resources within the region are increasing on a cumulative level. When considered with other past, present, and probable future projects, which encompass Indian Wells Valley in the western Mojave Desert, the project would have an incremental contribution to a cumulative loss of foraging and nesting habitat for other special-status species, even with the implementation of project-specific Mitigation Measures MM 4.4-1 through MM 4.4-14 and MM 4.1-44. This loss of foraging and nesting habitat for special-status species that may utilize habitat on the project site would result in a **significant and unavoidable** cumulative impact.

TABLE 1-6: SUMMARY OF SIGNIFICANT AND UNAVOIDABLE PROJECT-LEVEL AND CUMULATIVE IMPACTS OF THE SOLAR FACILITY

Resources	Project Impacts	Cumulative Impacts
Hydrology and Water Quality	The proposed project would depend on groundwater supplies for construction and operation. The proposed project has secured an agreement with Inyokern Community Services District, which obtains its water from the Indian Wells Valley Groundwater Basin. The Basin is currently in a critical condition of overdraft. Although implementation of Mitigation Measures MM 4.10-2 and MM 4.10-3 would require compliance with current restrictions on groundwater use within the final Groundwater Sustainability Plan and would require the project proponent to verify the water source for project construction and operation, the proposed use of groundwater supplies from a critically overdrafted groundwater basin would result in a **significant and unavoidable** cumulative impact.	The project itself would result in significant and unavoidable impacts to groundwater supplies given that the Indian Wells Valley Groundwater Basin is in a condition of critical overdraft. Other projects proposed in the Indian Wells Valley would likely also depend on the Indian Wells Valley Groundwater Basin for water supply. Although implementation of Mitigation Measures MM 4.7-3, MM 4.9-1, and MM 4.10-1 through MM 4.10-3 would be required, the use of overdrafted groundwater supplies by the proposed project as well as other projects would result in a **significant and unavoidable** cumulative impact.
Noise	It is anticipated that there would be times during the project's construction activities where the nearest sensitive receptors would be exposed to a perceptible change in noise levels of greater than 5 dBA, even with adherence to all applicable Kern County noise requirements and implementation of Mitigation Measures MM 4.13-1 through MM 4.13-3. Therefore, the project would result in perceptible temporary increases in noise levels during construction and this impact would be considered **significant and unavoidable**.	There would be no **significant and unavoidable** cumulative-level impacts.
Utilities and Service Systems	The Indian Wells Valley Groundwater Basin, within which the Inyokern Community Service District is located, is in a critical condition of overdraft. Even with the implementation of Mitigation Measure MM 4.10 2 requiring the project proponent to verify the water source for operation and construction prior to the issuance of building and/or grading permits and Mitigation Measure MM 4.10-3 requiring the project proponent to comply with any restrictions that result from the final Groundwater Sustainability Plan, significant impacts from construction and operation of a new onsite water supply well would remain **significant and unavoidable**.	The Indian Wells Valley Groundwater Basin is in a critical condition of overdraft. Plans to address this overdraft condition are still underway, but pumping may be restricted in the future. Although the project has an agreement with Inyokern Community Services District for water supply, the proposed project's use of this water could preclude other projects from obtaining a water supply from water purveyors that depend on the Indian Wells Valley Groundwater Basin for water supply, including the Inyokern Community Services District. Although implementation of Mitigation Measures MM 4.7-3, MM 4.10-1 through MM 4.10-3, and MM 4.17-1 would be required, affecting available local water purveyor supply would result in a **significant and unavoidable** cumulative impact.

TABLE 1-6: SUMMARY OF SIGNIFICANT AND UNAVOIDABLE PROJECT-LEVEL AND CUMULATIVE IMPACTS OF THE SOLAR FACILITY

Resources	Project Impacts	Cumulative Impacts
Wildfire	There would be no significant and unavoidable project impacts.	Despite implementation of Mitigation Measures MM 4.10-1 and MM 4.14-1, given the location in a rural area, the project and related projects have the potential to result in a cumulative impact related to the following: an adopted emergency response plan or emergency evacuation plan; exposure of project occupants to pollutant concentrations from a wildfire; installation or maintenance of associated infrastructure; and exposing people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage change. Thus, would result in a **significant and unavoidable** cumulative impact.

1.6.5 Irreversible Impacts

CEQA Guidelines Section 15126.2(c) defines an irreversible impact as an impact that uses nonrenewable resources during the initial and continued phases of the project. Irreversible impacts can also result from damage caused by environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to ensure that such consumption is justified.

Build-out of the project would commit nonrenewable resources during project construction. During project operations, oil, gas, and other fossil fuels and nonrenewable resources would be consumed, primarily in the form of transportation fuel for project employees. Therefore, an irreversible commitment of nonrenewable resources would occur as a result of long-term project operations. However, assuming that those commitments occur in accordance with the adopted goals, policies, and implementation measures of the Kern County General Plan and the Inyokern Specific Plan, as a matter of public policy, those commitments have been determined to be acceptable. The Kern County General Plan and the Inyokern Specific Plan ensure that any irreversible environmental changes associated with those commitments will be minimized.

1.6.6 Growth Inducement

The Kern County General Plan recognizes that certain forms of growth are beneficial, both economically and socially. *CEQA Guidelines* Section 15126.2(d) provides the following guidance on growth-inducing impacts:

> *A project is identified as growth-inducing if it "would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.*

Growth inducement can be a result of new development that requires an increase in employment levels, removes barriers to development, or provides resources that lead to secondary growth. With respect to employment, the project would not induce substantial growth. There is no onsite workforce for the project. It is anticipated that the construction workforce would commute to the sites each day from local communities, and the majority would likely come from the existing labor pool as construction workers

travel from site to site as needed. Construction staff not drawn from the local labor pool would stay in any of the local hotels in Inyokern, Ridgecrest or other local communities.

Although the project would contribute to the energy supply, which supports growth, the development of power infrastructure is a response to increased market demand. It does not induce new growth. Kern County planning documents already permit and anticipate a certain level of growth in the area of the project and in the State as a whole, along with attendant growth in energy demand. It is this anticipated growth that drives energy-production projects, not vice versa. The project would supply energy to accommodate and support existing demand and projected growth, but it would not foster any new growth. Therefore, any link between the project and growth in Kern County would be speculative.

In *Kerncrest Audubon Society v. Los Angeles Department of Water and Power*, the analysis of growth-inducing effects contained in the EIR for the Pine Tree Wind Development Project was challenged. Plaintiffs argued that the discussion was too cursory to provide adequate information about how additional electricity generated by the project would sustain further growth in the Los Angeles area. The court held that the additional electricity that the project would produce was intended to meet the current forecast of growth in the Los Angeles area. As such, the wind development project would not cause growth, and so it was not reasonable to require a detailed analysis of growth-inducing impacts. In addition, EIRs for similar energy projects have contained similarly detailed analyses of growth-inducing impacts. Their conclusions that increasing the energy supply would not create growth has been upheld, because: (1) the additional energy would be used to ease the burdens of meeting existing energy demands within and beyond the area of the project; (2) the energy would be used to support already-projected growth; or (3) the factors affecting growth are so multifarious that any potential connection between additional energy production and growth would necessarily be too speculative and tenuous to merit extensive analysis. Thus, as has been upheld in the courts, this level of analysis provided in this EIR is adequate to inform the public and decision makers of the growth-inducing impacts of the project.

1.7 Alternatives to the Project

CEQA Guidelines Section 15126.6 states that an EIR must address "a range of reasonable alternatives to the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives." Based on the significant environmental impacts of the proposed project, the aforementioned objectives established for the proposed project and the feasibility of the alternatives considered, a range of alternatives is analyzed below and discussed in detail in Chapter 6, *Alternatives,* of this EIR.

1.7.1 Alternatives Considered and Rejected

Alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce any significant environmental effects (*CEQA Guidelines* Section 15126.6(c)). Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, also do not need to be considered (*CEQA Guidelines* Section 15126(f)(2)). Kern County considered several alternatives to reduce impacts to aesthetics (project and cumulative), air quality (cumulative), biological resources (cumulative), hydrology and water quality (project and cumulative), noise (project), utilities and service systems (project and cumulative), and wildfire (cumulative). Per CEQA, the lead agency may make an initial determination as to which alternatives are

feasible and warrant further consideration, and which are infeasible. The following alternatives were initially considered but were eliminated from further consideration in this EIR because they do not meet project objectives or were infeasible.

- Wind Energy Project Alternative
- Industrial Power Plant Alternative
- Alternative Site Alternative

Wind Energy Project Alternative

The Wind Energy Project Alternative would involve the use of wind energy as an alternative to development of solar site. Similar solar power, power from the wind is an alternative to energy production from coal, oil, or nuclear sources. Wind energy provides the following benefits:

- It is a renewable and infinite resource;
- It is free of any emissions, including carbon dioxide (GHG); and
- It is a free resource after the capital cost of installation (excluding maintenance).

In addition, energy production from wind power would not require the significant water usage associated with coal, nuclear, and combined-cycle sources. Turbines used in wind farms for commercial production of electric power are usually three-bladed units that are pointed into the wind by computer-controlled motors. The wind farm would consist of a group of wind turbines placed where electrical power is produced. The individual turbines would be interconnected with a medium-voltage power collection system and a communications network. At a substation, the medium-voltage electrical current would be increased through a transformer before connection to the high-voltage transmission system. Compared with traditional energy sources, the environmental effects of wind power are relatively minor. However, wind farms would not decrease short-term construction-related air emissions. Wind turbines would also have the potential to affect avian species in the local area.

As noted above, some of the project proponent's objectives for the project are to develop a solar project that will help meet the increasing demand for clean, renewable electrical power, as well as help California meet its statutory and regulatory goals of generating more renewable power with minimum potential for environmental effects by using proven and established PV technology that is efficient, requires low maintenance and is recyclable. Alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce significant environmental effects. Therefore, this alternative was eliminated from further consideration because:

- It would substantially increase the significant aesthetic impacts associated with the project because wind turbines would be much taller than solar panels, be more visible from many viewpoints and would require FAA lighting;
- It may conflict with the Inyokern Airport, Kern County Airport Land Use Compatibility Plan and potentially the China Lake NAWS due to the heights of the turbines.
- It may result in additional/greater biological resources impacts than the project;
- It may generate long-term noise impacts to nearby sensitive receptors from rotating turbine blades; and
- It would require a greater overall project footprint that would result in increased disturbance.

Industrial Power Plant Alternative

This alternative would involve the development of a natural gas-fired power plant or plants (equivalent to 26.6 MW) in Kern County. Fossil fuel-powered plants are designed on a large scale for continuous operation. However, byproducts of industrial power plant operation need to be considered in both design and operation. When waste heat that results from the finite efficiency of the power cycle is not recovered and used as steam or hot water, it must be released to the atmosphere, and often uses a cooling tower as a cooling medium (especially for condensing steam). The flue gas from combustion of the fossil fuels is discharged to the air and contains carbon dioxide and water vapor as well as other substances, such as nitrogen, nitrogen oxides, and sulfur oxides. Furthermore, unlike the proposed project, fossil fuel-powered plants are major emitters of GHGs. In addition, industrial power plants generally involve the construction of large structures, such as cooling towers and gas stacks, as well as a large number of employees to operate the facility on a 24/7 basis 365 days a year. Accordingly, the development of an industrial power plant would typically result in greater adverse impacts related to: (1) air quality and GHG emissions, (2) aesthetics and the local visual setting of the project area, (3) land use and planning conflicts with the rural development of the surrounding area, (4) noise from the plant operations, (5) traffic from increased employment at the facility, and (6) demand on public utilities, including water and waste disposal.

As noted above, some of the objectives for the proposed project are to develop a solar project that would help meet the increasing demand for clean, renewable electrical power as well as help California meet its statutory and regulatory goals of generating more renewable power with minimum potential for environmental effects. Alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce significant environmental effects. Therefore, this alternative was eliminated from further consideration because:

- It would result in additional/greater impacts than the proposed project (aesthetics, air quality, GHG emissions, land use and planning, noise, traffic, public utilities, and water use and disposal);
- It may conflict with the Inyokern Airport, Kern County Airport Land Use Compatibility Plan and potentially the China Lake NAWS due to the heights of the cooling towers and smoke stacks.
- Depending on siting, it may also result in greater biological resources impacts than the project; and
- It would not contribute to the statewide renewable energy and GHG reduction objectives.

Alternative Site

This alternative would involve the development of the proposed project on another site located within Kern County, other than constructing rooftop distributed generation systems. Although undetermined at this time, the alternative project site would likely be located in the Indian Wells Valley desert region of the County. This alternative is assumed to involve construction of a 26.6 MW PV solar facility on a site totaling 166.5 acres. *CEQA Guidelines* Section 15126.6(f)(2(a) states that the key and initial step in considering an alternative site is whether "any of the significant effects of the project would be avoided or substantially lessened" in relocating the project, while remaining consistent with the same basic objectives of the proposed project.

The Indian Wells Valley has attracted renewable energy development applications that are being proposed for vacant land or land with a history of agricultural uses. The availability of alternative sites is constrained by the renewable energy market itself. While other sites with similar size, configuration, and use history may exist in the Indian Wells Valley, alternative project sites in the area are likely to have similar project

and cumulatively significant impacts after mitigation, including cumulatively significant impacts to aesthetics, biological resources, hydrology and water quality, noise, and utilities and service systems. This is based on the known general conditions in the area and the magnitude of the proposed project.

In addition, alternative sites for the project are not considered to be "potentially feasible," as there are no suitable sites within the control of the project proponent that would reduce project impacts. The potential amount of available, similar sites is further reduced because unlike the proposed project, alternative sites may not include sites with close proximity to transmission infrastructure. Therefore, this alternative was eliminated because it would not avoid or substantially reduce the significant environmental effects of the proposed project.

1.7.2 Alternatives Selected for Analysis

The following alternatives have been determined to represent a reasonable range of alternatives that have the potential to feasibly attain most of the basic objectives of the project, but which may avoid or substantially lessen any of the significant impacts of the project. The following alternatives are analyzed in detail in this chapter of the EIR:

- Alternative 1: No Project Alternative
- Alternative 2: General Plan/Specific Plan and Zoning Build-Out Alternative
- Alternative 3: Reduced Project Alternative
- Alternative 4: No Ground-Mounted Utility-Solar Development Alternative – Distributed Commercial and Industrial Rooftop Solar Only

Table 1-7, *Summary of Development Alternatives*, on the following page provides a summary of the relative impacts and feasibility of each alternative and **Table 1-8**, *Comparison of Alternatives*, provides a summary side-by-side comparison of the potential impacts of the alternatives and the project. A complete discussion of each alternative is provided below.

TABLE 1-7: SUMMARY OF DEVELOPMENT ALTERNATIVES

Alternative	Description	Basis for Selection and Summary of Analysis
Project	Construction and operation of a solar facility with battery energy storage on approximately 166.5 acres that would generate up to 26.6 MW of electricity and deliver it to the grid. The proposed project would interconnect to an existing Southern California Edison (SCE) 33 kV electrical distribution line to an existing SCE Inyokern Substation approximately 0.5 miles to the east. Approval of two Conditional Use Permits (CUPs) for construction and operation of commercial solar electrical generating facility with battery energy storage and a Specific Plan Amendment (SPA) to the Circulation Element would be required.	N/A
Alternative 1: No Project Alternative	No development would occur on the project site. The project site would remain unchanged.	• Required by CEQA • Avoids need for CUPs and SPA • Avoids all significant and unavoidable impacts • Greater impacts to GHGs • Similar impacts to agricultural and forestry resources, tribal cultural resources, and mineral resources • Fewer overall impacts in all remaining environmental issue areas • Does not meet any of the project objectives
Alternative 2: General Plan/ Specific Plan and Zoning Build-Out Alternative	Project site would be developed to the maximum intensity allowed under the Kern County General Plan land use designations, Inyokern Specific Plan, Kern County zoning, and other existing applicable restrictions.	• Avoids need for CUPs and SPA • Similar impacts to agricultural and forestry resources, cultural resources, tribal cultural resources, and mineral resources • Fewer impacts to land use and planning • Greater overall impacts in all remaining environmental issue areas • Would not reduce any significant and unavoidable impacts • Does not meet any of the project objectives

TABLE 1-7: SUMMARY OF DEVELOPMENT ALTERNATIVES

Alternative	Description	Basis for Selection and Summary of Analysis
Alternative 3: Reduced Project Alternative	Construction and operation of one solar facility on approximately 124.56 acres, situated on the southern parcel of the project site, would generate up to 20 MW of electricity and battery energy storage and deliver it to the grid. The project site would require CUP and SPA approvals.	• Does not avoid any significant and unavoidable impacts but would reduce overall impacts to aesthetics, air quality, biological resources, hydrology and water quality, noise, utilities and service systems, and wildfire • Greater impacts to GHGs • Similar impacts to agriculture and forestry resources, tribal cultural resources, land use and planning, and mineral resources • Fewer overall impacts in all remaining environmental issue areas • Does not meet all the project objectives
Alternative 4: No Ground-Mounted Utility-Solar Development Alternative – Distributed Commercial and Industrial Rooftop Solar Only	The construction of 26.6 MW of PV solar distributed on rooftops throughout the Indian Wells Valley. Electricity generated would be for on-site use only.	• Avoids need for CUPs and SPA at the project site but may require other entitlements (such as a CUP or variance) on other sites • Avoid significant and unavoidable impacts associated with aesthetics, air quality, biological resources, hydrology and water quality, noise, utilities and service systems, and wildfire • Greater impacts to GHGs and land use and planning • Similar impacts to agriculture and forestry resources, cultural resources, mineral resources, and tribal cultural resources • Fewer impacts in all remaining issue areas • Does not meet all of the project objectives nor does this alternative account for the energy storage component of the project.

TABLE 1-8: COMPARISON OF ALTERNATIVES

Environmental Resource	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: General Plan/Specific Plan and Zoning Build-Out Alternative	Alternative 3: Reduced Project Alternative	Alternative 4: No Ground Mounted Utility-Solar– Distributed Commercial and Industrial Rooftop Solar Only
Aesthetics	Significant and unavoidable (project and cumulative)	Fewer (NI)	Greater (SU)	Fewer (SU)	Fewer (LTS)
Agricultural and Forestry Resources	No impact	Similar (NI)	Similar (NI)	Similar (NI)	Similar (NI)
Air Quality	Significant and Unavoidable (project and cumulative)	Fewer (NI)	Greater (SU – Project and Cumulative)	Fewer (SU – Project and Cumulative)	Fewer (LTS)
Biological Resources	Significant and unavoidable (cumulative only)	Fewer (NI)	Greater (SU)	Fewer (SU)	Fewer (LTS)
Cultural Resources	Less than significant with mitigation	Fewer (NI)	Similar (LTS)	Fewer (LTS)	Fewer (LTS)
Energy	Less than significant with mitigation	Fewer (NI)	Greater (LTS)	Fewer (LTS)	Fewer (LTS)
Geology and Soils	Less than significant with mitigation	Fewer (NI)	Greater (LTS)	Fewer (LTS)	Fewer (LTS)
Greenhouse Gas Emissions	Less than significant	Potentially Greater (LTS)	Potentially Greater (LTS)	Potentially Greater (LTS)	Greater (LTS)
Hazards and Hazardous Materials	Less than significant with mitigation	Fewer (NI)	Greater (LTS)	Fewer (LTS)	Fewer (LTS)
Hydrology and Water Quality	Significant and unavoidable (project and cumulative)	Fewer (NI)	Greater (SU)	Fewer (SU)	Fewer (LTS)
Land Use and Planning	Less than significant with mitigation	Fewer (NI)	Fewer (NI)	Similar (LTS)	Greater (LTS)
Mineral Resources	Less than significant	Similar (NI)	Similar (NI)	Similar (NI)	Similar (NI)
Noise	Significant and unavoidable (project construction only)	Fewer (NI)	Greater (SU)	Fewer (SU)	Similar (LTS)

TABLE 1-8: COMPARISON OF ALTERNATIVES

Environmental Resource	Proposed Project	Alternative 1: No Project Alternative	Alternative 2: General Plan/Specific Plan and Zoning Build-Out Alternative	Alternative 3: Reduced Project Alternative	Alternative 4: No Ground Mounted Utility-Solar– Distributed Commercial and Industrial Rooftop Solar Only
Public Services	Less than significant with mitigation	Fewer (NI)	Greater (LTS)	Fewer (LTS)	Fewer (LTS)
Traffic and Transportation	Less than significant with mitigation	Fewer (NI)	Greater (LTS)	Fewer (LTS)	Fewer (LTS)
Tribal Cultural Resources	No impact	Similar (NI)	Similar (NI)	Similar (NI)	Greater (LTS)
Utilities and Service Systems	Significant and unavoidable (project and cumulative)	Fewer (NI)	Greater (SU)	Fewer (SU)	Fewer (LTS)
Wildfire	Less than Significant with Mitigation (project); Significant and Unavoidable (cumulative)	Fewer (NI)	Greater (SU)	Fewer (SU)	Fewer (SU)
Meet Project Objectives?	All	None	None	Some	Some
Reduce Significant and Unavoidable Impacts?	N/A	All	None	None	Some

Alternative 1: No-Project Alternative

The *CEQA Guidelines* require EIRs to include a No Project Alternative for the purpose of allowing decision makers to compare the effects of approving the proposed project versus a No Project Alternative. Accordingly, Alternative 1, the No Project Alternative, assumes that the development of the (up to) 26.6 MW PV solar facility and battery energy storage on the 166.5-acre site would not occur. The No Project Alternative would not require an amendment to the Inyokern Specific Plan Circulation Element to eliminate future road reservations or the Lot Line Adjustment. The No Project Alternative would maintain the current zoning, land use classifications, and existing land uses, which consisting mostly of undeveloped desert vegetation. No physical changes would be made to the project site.

Alternative 2: General Plan/Specific Plan Build-Out Alternative

Alternative 2, the General Plan/Specific Plan and Zoning Build-Out Alternative, would develop the project site to the maximum intensity allowed under the existing Kern County General Plan, Inyokern Specific Plan, and Kern County Zoning Ordinance. According to the Kern County General Plan, the 4.1 (Accepted County Plan Areas) land use designation applies to areas where specific land use plans have already been prepared and approved. In the case of the project site, the project would be within the boundaries of the Inyokern Specific Plan. The entire project site is currently designated as 7.2/2.5 (Service Industrial/Flood Hazard) under the Inyokern Specific Plan and a zoning code designation of M-2 (Medium Industrial).

Implementation of Alternative 2 would consist of developing the project site under the current land use classification of 7.2/2.5 (Service Industrial/Flood Hazard). The 7.2 classification pertains to commercial or industrial activities which involve outdoor storage or the use of heavy equipment. These industries can be visually obtrusive and are not generally suited for locations next to residential uses. Typical permitted land uses include auto and truck parking, welding, automobile body and painting shop, freighting or trucking yards, and lumber yard. The 2.5 classification pertains to a special flood hazard area (Zone A) as identified by the Federal Emergency Management Agency (FEMA) where 100-year flood events occur.

The project site would also be developed under its current zoning classification of M-2 (Medium Industrial). The M-2 zoning classification involves general manufacturing, processing and assembly activities. Therefore, under this alternative, the entire project site would be developed with commercial and industrial land uses that include outdoor storage and/or the use of heavy equipment, including general manufacturing processing and assembly activities.

Alternative 3: Reduced Project Alternative

Alternative 3, the Reduced Project Alternative, would develop only Phase 1, the southern parcel of the project site and eliminate the construction and operation of Phase 2. The proposed gen-tie line connecting Phase 1 to the existing substation would remain unchanged. Eliminating Phase 2 facilities from the project would reduce the project's total generation and battery storage capacity to 20 MW and reduce the developed area from approximately 166.5 acres to 124.56 acres. Similar to the proposed project, this alternative would require amendments to the Inyokern Specific Plan Circulation Element to eliminate future road reservations and approval of a conditional use permit (CUP) for construction and operation of a commercial solar electrical generating facility. The Lot Line Adjustment would not be required under this alternative.

Alternative 4: No Ground-Mounted Utility-Solar Development Alternative—Distributed Commercial and Industrial Rooftop Solar Only

Alternative 4, the No Ground-Mounted Utility-Solar Development Alternative, would involve the development of a number of geographically distributed small to medium solar PV systems (100 kWh to 1 MW) within existing developed areas, typically on the rooftops of commercial and industrial facilities situated throughout the Indian Wells Valley. Under this alternative, no new land would be developed or altered. However, depending on the type of solar modules installed and the type of tracking equipment used (if any), a similar or greater amount of acreage (i.e., greater than 166.5 acres of total rooftop area) may be required to attain project's capacity of 26.6 MW of solar PV generating capacity. Because of space or capital cost constraints, many rooftop solar PV systems would be fixed-axis systems or would not include the same type of sun-tracking equipment that would be installed in a freestanding utility-scale solar PV project and, therefore, would not attain the same level of efficiency with respect to solar PV generation. Alternative 4 would generate 26.6 MW of electricity, but it would be for onsite use only. This alternative assumes that rooftop development would occur primarily on commercial and industrial structures due to the greater availability of large, relatively flat roof areas necessary for efficient solar installations. Similar to the project, this alternative would be designed to operate year-round using PV panels to convert solar energy directly to electrical power. Power generated by such distributed solar PV systems would typically be consumed on site by the commercial or industrial facility without requiring the construction of new electrical substation or transmission facilities. The battery energy storage facility would not be constructed as part of this alternative.

1.7.3 Environmentally Superior Alternative

As presented in the comparative analysis above, and as shown in Table 6-2, there are a number of factors in selecting the environmentally superior alternative. An EIR must identify the environmentally superior alternative to the project. Alternative 1, the No Project Alternative, would be environmentally superior to the project on the basis of its minimization or avoidance of physical environmental impacts. However, *CEQA Guidelines* Section 15126.6(e)(2) states:

> *The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives.*

Because the No Project Alternative cannot be the Environmentally Superior Alternative under CEQA, the Environmentally Superior Alternative is considered to be the No Ground-Mounted Utility-Solar Development Alternative. This alternative would avoid significant and unavoidable impacts to aesthetics, biological resources, hydrology and water quality, and utilities. Greater impacts to tribal cultural resources would occur given this alternative's potential to impact areas containing tribal cultural resources. Impacts related to GHG emissions would be greater under this alternative due to the lower efficiency of the distributed systems, which would not include solar tracking technology. This alternative would also result in greater impacts to land use as it would require extensive discretionary actions, such as design review, CUPs, or zone variances, depending on local jurisdictional requirements. However, this alternative would result in fewer overall impacts to aesthetics, air quality, biological resources, geology and soils, hazards

and hazardous materials, hydrology and water quality, public services, traffic and transportation, and utilities and service systems. Thus, for most environmental issue areas, this alternative would result in fewer environmental impacts, both short-term and long-term, when compared to the proposed project.

It is important to note that it is considered to be impracticable and infeasible to construct the No Ground-Mounted Utility-Solar Development Alternative within the same timeframe and/or with the same efficiency as the proposed project because the project proponent lacks control and access to the sites required to develop 26.6 MW of distributed solar generated electricity. In addition, this alternative would not achieve the project objective of assisting California load-serving entities in meeting their obligations under California's RPS Program. Nonetheless, because this alternative reduces impacts to a greater degree than the Alternatives 2 and 3, the No Ground-Mounted Utility-Solar Development Alternative is considered the Environmentally Superior Alternative.

1.8 Areas of Controversy

Areas of controversy were identified through written agency and public comments received during the scoping period. Public comments received during the scoping period are provided in Appendix A. In summary, the following issues were identified during scoping and are addressed in the appropriate sections of Chapter 4:

- Impacts related to aesthetics (glare);
- Impacts to air quality;
- Impacts to biological resources;
- Impacts to hydrology and water quality;
- Impacts related to traffic;
- Impacts to utilities and service systems (water supplies).

1.9 Issues to Be Resolved

CEQA Guidelines Section 15123(b)(3) requires that an EIR contain issues to be resolved, which includes the choices among alternatives and whether or how to mitigate significant impacts. The following major issues are to be resolved:

- Determine whether the EIR adequately describes the environmental impacts of the project;
- Choose among alternatives;
- Determine whether the recommended mitigation measures should be adopted or modified; and
- Determine whether additional mitigation measures need to be applied to the project.

1.10 Summary of Environmental Impacts and Mitigation Measures

Table 1-9 summarizes the environmental impacts of the project, mitigation measures, and unavoidable significant impacts identified and analyzed in Sections 4.1 through 4.18 of this EIR. Refer to the appropriate EIR section for additional information.

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.1 Aesthetics			
Impact 4.1-1: The project would have a substantial adverse effect on a scenic vista.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.1-2: The project would substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.1-3: The project would, in nonurbanized 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 points) If the project is in an urbanized area, the project would conflict with applicable zoning and other regulations governing scenic quality.	Significant and unavoidable	**MM 4.1-1:** Prior to issuance of a grading or building permit, a Maintenance, Trash Abatement, and Pest Management Program shall be submitted to the Kern County Planning and Natural Resources Department. The program shall include, but not be limited to the following: a. The project proponent/operator shall clear debris from the project area at least four times per year; this can be done in conjunction with regular panel washing and site maintenance activities. b. The project proponent/operator shall erect signs with contact information for the project proponent/operator's maintenance staff at regular intervals along the site boundary, as required by the Kern County Planning and Natural Resources Department. Maintenance staff shall respond within two weeks to resident requests for additional cleanup of debris. Correspondence with such requests and responses shall be submitted to the Kern County Planning and Natural Resources Department. c. The project proponent/operator shall implement a regular trash removal and recycling program on an ongoing basis during construction and operation of the project. Barriers to prevent pest/rodent access to food waste receptacles shall be implemented. Locations of all trash receptacles during operation of the project shall be shown on final plans. d. Trash and food items shall be contained in closed containers to be locked at the end of the day and removed at least once per	Significant and unavoidable

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		week to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs. **MM 4.1-2:** The project proponent shall install metal fence slats or similar view-screening materials, as approved by the Kern County Planning and Natural Resources Department, in all on-site perimeter fencing for any portion of the solar site that is adjacent to parcels zoned for residential use, including E (Estate Residential), R-1 (Low-Density Residential), R-2 (Medium-Density Residential), R-3 (High-Density Residential), or PL (Platted Lands) zoning unless the adjacent property is owned by the project proponent (to be verified by the Kern County Planning and Natural Resources Department) or a public or private agency that has submitted correspondence to the Kern County Planning and Natural Resources Department requesting this requirement to be waived. Should the project proponent sell the adjacent property, slat fencing or similar view-screening materials shall be installed prior to the sale. The project proponent/operator shall color treat all project facilities including operations and maintenance buildings, gen-tie poles, array facilities, etc. to blend in with the colors found in the natural landscape. Color treatments shall result in matte or nonglossy finishes. Plans showing color treatments shall be submitted for approval by the Kern County Planning and Natural Resources Department. **MM 4.1-3:** The measures detailed below shall be implemented during project construction and decommissioning to protect existing vegetation onsite: a. Natural vegetation may be mowed only within the project boundary, along gen-tie and access routes. b. Wherever possible, within the proposed project boundary the natural vegetation shall remain undisturbed as permitted by the Fire Code. c. Where feasible, root balls shall be maintained during vegetation clearing to maintain soil stability and ultimately vegetation re-growth following construction.	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		d. All natural vegetation adjacent to the proposed project boundary shall remain in place. e. Prior to the commencement of project operations and decommissioning, the project proponent/operator shall submit a Landscape Revegetation and Restoration Plan for the project site to the Kern County Planning and Natural Resources Department for review and approval. The plan shall include the measures detailed below: i. In areas temporarily disturbed during construction and decommissioning (including grading or removal of root balls resulting in loose soil), the ground surface shall be revegetated with a native seed mix or native plants (including Mohave creosote scrub habitat) and/or allowed to re-vegetate with the existing native seed bank in the top soil where possible to establish revegetation. Areas that contain permanent features such as perimeter roads, maintenance roads or under arrays do not require revegetation. ii. The plan must include but is not limited to: (1) the approved California native seed mix that will be used onsite, (2) a timeline for seeding the site, (3) the details of which areas are to be revegetated, (4) a list of the consultation efforts completed, (5) the methods and schedule for installation of fencing that complies with wildlife agency regulations, and a clear prohibition of the use of toxic rodenticides. iii. Ground cover shall include native seed mix and shall be spread where earthmoving activities have taken place, as needed to establish re-vegetation. The seed mix or native plants shall be determined through consultation with professionals such as landscape architect(s), horticulturist(s), botanist(s), etc. with local knowledge as shown on submitted resume and shall be approved by the Kern County Planning and Natural Resources Department prior to planting. Phased seeding may be used if a phased construction approach is used (i.e., the entire site need not be seeded all at the same time).	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		iv. Ground cover shall be continuously maintained on the site by the project operator. v. The re-vegetation and restoration of the site shall be monitored annually for a three-year period following restoration activities that occur post-construction and post-decommissioning. Based on annual monitoring visits during these three-year periods, an annual evaluation report shall be submitted to the Kern County Planning and Natural Resources Department for the three-year period. Should efforts to revegetate with the existing native seed bank in the top soil prove in the second year to not be successful by 75 percent cover rate, re-evaluation of revegetation methods shall be made in consultation with the Kern County Planning and Natural Resources Department and an additional year shall be added to the monitoring program to ensure coverage is achieved. The three-year monitoring program is intended to ensure the site naturally achieve native plant diversity, establishes perennials, and is consistent with conditions prior to implementation of the proposed project, where feasible.	
Impact 4.1-4: The project would create a new source of substantial light or glare that could adversely affect day or nighttime views in the area.	Potentially significant	**MM 4.1-4:** Prior to final activation of the solar facility, the project proponent shall demonstrate to Kern County Planning and Natural Resources Staff that the project site complies with the applicable provisions of the *Dark Skies Ordinance* (Chapter 19.81 of the Kern County Zoning Ordinance), and shall be designed to provide the minimum illumination needed to achieve safety and security objectives. All lighting shall be directed downward and shielded to focus illumination on the desired areas only and avoid light trespass into adjacent areas. Lenses and bulbs shall not be exposed or extend below the shields. **MM 4.1-5:** Prior to the issuance of building permits, the project proponent shall demonstrate the solar panels and hardware are designed to minimize glare and spectral highlighting. Emerging technologies shall be used, such as diffusion coatings and nanotechnological innovations, to effectively reduce the refractive index of the solar cells and protective glass. These technological	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		advancements are intended to make the solar panels more efficient with respect to converting incident sunlight into electrical power while also reducing the amount of glare generated by the panels. Specifications of such designs shall be submitted to the Kern County Planning and Natural Resources Department. **MM 4.1-6:** Prior to final activation of the solar facility, the project operator shall demonstrate that all onsite buildings utilized non-reflective materials, as approved by the Kern County Planning and Natural Resources Department.	
Impact 4.1: Cumulative Impacts	Significant and unavoidable	Implementation of Mitigation Measures MM 4.1-1 through MM 4.1-6 is required.	Significant and unavoidable
4.2 Agriculture and Forestry Resources			
Impact 4.2-1: The project would convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) to nonagricultural uses.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.2: Cumulative Impacts	Less than significant	No mitigation measures are required.	Less than significant
4.3 Air Quality			
Impact 4.3-1: The project would conflict with or obstruct implementation of the applicable air quality plan.	Potentially significant	**MM 4.3-1:** The project proponent/operator shall ensure construction of the project shall be conducted in compliance with applicable rules and regulations set forth by the Eastern Kern Air Pollution Control District. Dust control measures outlined below shall be implemented where they are applicable and feasible. The list shall not be considered all-inclusive and any other measures to reduce fugitive dust emissions may be required by appropriate agencies to respond to urgent issues on site: a. **Land Preparation, Excavation and/or Demolition.** The following dust control measures shall be implemented: i. All soil being actively excavated or graded shall be sufficiently watered to prevent excessive dust. Watering shall occur as needed with complete coverage of disturbed soil	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		areas. Watering shall take place a minimum of three times daily on disturbed soil areas with active operations, unless dust is otherwise controlled by rainfall or use of a dust suppressant. ii. After active construction activities, soil shall be stabilized with a non-toxic soil stabilizer or soil weighting agent, or alternative approved soil stabilizing methods. iii. All unpaved construction and operation/maintenance site roads, as they are being constructed, shall be stabilized with a non-toxic soil stabilizer or soil weighting agent. iv. All clearing, grading, earth moving, and excavation activities shall cease during periods of winds greater than 20 miles per hour (averaged over one hour), or when dust plumes of 20 percent or greater opacity impact public roads, occupied structures, or neighboring property or as identified in a plan approved by the Eastern Kern Air Pollution Control District. v. All trucks entering or leaving the site shall cover all loads of soils, sands, and other loose materials, or be thoroughly wetted with a minimum freeboard height of 6 inches. vi. Areas disturbed by clearing, earth moving, or excavation activities shall be minimized at all times. vii. Stockpiles of soil or other fine loose material shall be stabilized by watering or other appropriate method to prevent wind-blown fugitive dust. viii. All soil storage piles and disturbed areas that remain inactive for longer than 10 days shall be covered, or shall be treated with appropriate dust suppressant compounds. ix. Prior to construction, wind breaks (such as chain-link fencing including a wind barrier) shall be installed where appropriate. x. Where acceptable to the Kern County Fire Department, weed control shall be accomplished by mowing instead of disking, thereby, leaving the ground undisturbed and with a mulch covering.	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		xi. The project proponent/operator shall use Global Positioning System or lasers to level posts, generally avoiding grading except when elevation changes exceed design requirements. xii. When grading is unavoidable, it is to be phased and done with the application of approved chemical dust palliatives that stabilize the earth. xiii. Where ground is cleared, plant roots must be left in place where possible to stabilize the soil. b. **Site Construction.** After active clearing, grading, and earth moving is completed within any portion of the site, the following dust control practices shall be implemented: i. Dust suppressant shall be used on the same day or day immediately following the cessation of activity for a particular area where further activity is not planned. ii. Dependent on specific site conditions (season and wind conditions), revegetation shall occur in those areas where planned after installation of the solar panels. iii. All unpaved road areas shall be treated with a dust suppressant or graveled to prevent excessive dust. iv. The project proponent/operator shall use dust suppression measures during road surface preparation activities, including grading and compaction. v. Final road surfaces must be stabilized to achieve a measurable threshold friction velocity equal to or greater than 100 centimeters per second. vi. Wind barrier fencing or screening shall be installed, when appropriate. c. **Vehicular Activities.** During all phases of construction, the following vehicular control measures shall be implemented: i. Onsite vehicle speed shall be limited to 10 miles per hour on unpaved areas within the project site. Vehicles may travel up to 25 miles per hour on stabilized unpaved roads (application of palliatives, gravel, etc. that reduces the erosion potential of	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		the soil) as long as such speeds do not create visible dust emissions. ii. Visible speed limit signs shall be posted at main ingress point(s) onsite. iii. All areas with vehicle traffic such as the main entrance roadway to the project site shall be graveled or treated with dust palliatives so as to prevent track-out onto public roadways. iv. All vehicles that are used to transport solid bulk material on public roadways and that have potential to cause visible emissions shall be provided with a cover, or the materials shall be sufficiently wetted and loaded onto the trucks in a manner to provide at least one foot of freeboard. v. Streets adjacent to the project site shall be kept clean, and project-related accumulated silt shall be removed on at a minimum of once daily, or as necessary to prevent substantial offsite fugitive dust releases. The use of either dry rotary brushes (unless prior wetting) or blower devices is prohibited. vi. Access to the site shall be by means of an apron into the project site from adjoining surfaced roadways. The apron shall be surfaced or treated with dust suppressants. If site soils cling to the wheels of the vehicles, then a grizzly, wheel-washer, or other such device shall be used on the road exiting the project site, immediately prior to the pavement, to remove most of the soil material from vehicle tires. **MM 4.3-2:** Prior to the issuance of grading or building permits, the project proponent/operator shall provide a comprehensive Phased Grading Plan for review by the Kern County Planning and Natural Resources Department to reduce fugitive dust emissions resulting from wind erosion at the site. The Phased Grading Plan shall: a. Identify a comprehensive grading schedule for the entire project site which demonstrates the measures described below. i. Grading shall be minimized to limit the removal of topsoil and creation of loose soils. Only in areas where drainage	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		improvements, structural foundations (e.g., inverter/transformer pads), service roads, and leveling of severe grades need to occur will grading that removes and recompacts the soil surface occur. Dust palliatives and water shall be immediately applied following any grading. ii. Application of dust palliatives shall be applied throughout project construction to help reduce dust, especially during periods of high winds, and shall include use of: (1) an eco-safe, biodegradable, liquid copolymer shall be used to stabilize and solidify any soil; and (2) A hydro mulch mixture composed of wood fiber mulch and an Environ-Mend binder may also be applied, where real-time weather conditions dictate that additional measures are necessary. iii. Water trucks shall transit across the project site and construction access roads to suppress the fugitive dust from disturbed soils on roads and active working areas on a regular and as needed basis. b. Minimize all grading activities to those areas necessary for project access and installation of solar panels and other associated infrastructure associated with the solar facility. Construction shall commence on areas that have undergone initial grading within 20 calendar days. c. Identify, in addition to those measures required by the Eastern Kern Air Pollution Control District, all measures being undertaken during construction activities and operational activities to ensure dust being blown off site is minimized. Measure may include, but are not limited to: i. Increased use of water and or use of dust suppressant; ii. Pre-seeding and/or use of wood chips as permitted by the Eastern Kern Air Pollution Control District; and iii. Construction of dust screening around the project site. d. A Revegetation Plan shall be submitted for approval to the Kern County Planning and Natural Resources Department. To minimize long term dust issues from the project, the project site	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		shall be revegetated (consistent with existing site conditions). Root balls shall be maintained during vegetation clearing to maintain soil stability and ultimately vegetation re-growth following construction, where feasible. Following construction completion, the project area shall be re-seeded with native vegetation. See Mitigation Measure MM 4.1-3 for plan specifications. **MM 4.3-3: Implement Diesel Emission Reduction Measures During Construction.** To control PM emissions during construction, the project proponent/operator and/or its contractor(s) shall implement the following measures during construction of the project, subject to verification by the County: a. All equipment shall be maintained in accordance with the manufacturer's specifications. b. Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 10 minutes. c. Electric equipment shall be used whenever feasible in lieu of diesel or gasoline-powered equipment. d. All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce oxides of nitrogen emissions. e. On-road and off-road diesel equipment shall use diesel particulate filters (or the equivalent) if permitted under manufacturer's guidelines. f. Prohibit the use of heavy-equipment during first- or second-stage smog alerts and suspend all construction activities during second-stage smog alerts. g. Utilize existing power sources (i.e., power poles) when available. This measure would minimize the use of higher polluting gas or diesel generators. h. Limit the hours of operation of heavy-duty equipment and/or the amount of equipment in use to the extent feasible.	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		i. Require that trucks and vehicles in loading or unloading queues have their engines turned-off when not in use. j. Off-road equipment engines over 50 horsepower shall be Tier 2 certified or higher (unless Tier 2 equipment has been determined to not be available). k. Provide notification to trucks and vehicles in loading or unloading queues that their engines shall be turned-off when not in use for more than 10 minutes. **MM 4.3-4:** The project proponent/operator shall implement the following wind erosion reduction measures to comply with Eastern Kern Air Pollution Control District Rules 401 and 402 during strong wind events. a. Sand fences shall be used to capture sand deposits caused by wind erosion in the southwest portion of the project site. Sand fences should be placed to protect structures, including residences, and other amenities from wind-blown sand. In particular, sand fencing should be placed during Phase 1 on the eastern boundary of Phase 1, the southwest corner of Phase 1, and during Phase 2 on the western boundary and southern boundary of Phase 2. b. Install permanent fencing with a minimum 50 percent porosity and at least 6 feet in height in those areas immediately west, north, and east of permanent existing residences prior to vegetation removal/soil disturbance within 1,000 feet of the residence. c. In areas where grading will occur, temporary construction fences (with minimum 50 percent porosity and at least 4 feet high) shall be installed every 200 to 300 feet perpendicular to the prevailing wind in a manner to reduce fugitive dust from leaving the area being graded. Depending on the use and effectiveness of water and dust suppressants, install additional temporary fencing with tighter spacing as necessary. **MM 4.3-5:** The project proponent/operator shall continuously comply with the measures described below during construction and operations to control fugitive dust emissions.	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		a. The unpaved main access road for employees and deliveries to the maintenance complex shall be paved or effectively stabilized using soil stabilizers that can be determined to be as efficient as or more efficient for fugitive dust control than California Air Resources Board approved soil stabilizers, and that shall not increase any other environmental impacts including loss of vegetation. b. The other unpaved roads at the project site shall be stabilized using water or soil stabilizers so that vehicle travel on these roads does not cause visible dust plumes. c. Traffic speeds on unpaved roads shall be limited to no more than 10 miles per hour, with the exception that vehicles may travel up to 25 miles per hour on stabilized unpaved roads as long as such speeds do not create visible dust emissions. Traffic speed signs shall be displayed prominently at all site entrances and at egress point(s) from the project site. d. The construction contractor shall ensure that all on-road construction vehicles are properly tuned and maintained in accordance with the manufacturer's specifications. **MM 4.3-6:** The project proponent/operator shall continuously comply with the measures described below to control fugitive dust emissions during project operations and construction activities. a. Increase handling moisture content of graded soils from the typical of 15 percent to 20 percent. b. Reduce speed of road grading by motor graders and rollers from typical 7.1 miles per hour to 5 miles per hour. c. Prior to construction, onsite roads that will have the greatest extent of onsite travel shall be graveled. d. Use a dust suppressant such as magnesium chloride, polymer, or similar, to the extent feasible, including on gravel roads. **MM 4.3-7:** The project proponent/operator shall continuously comply with the measures described below during construction and	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		operations to control emissions from onsite dedicated equipment (equipment that would remain onsite each day). a. All onsite off-road equipment and on-road vehicles for operation and maintenance shall meet the recent California Air Resources Board engine emission standards or alternatively fueled construction equipment, such as compressed natural gas, liquefied gas, or electric, as appropriate. b. All equipment shall be turned off when not in use, where feasible. Engine idling of all equipment shall be minimized. c. All equipment engines shall be maintained in good operating condition and in tune per manufacturer's specification. **MM 4.3-8:** The project proponent/operator shall continuously comply with the measures described below during operation to control wind erosion. a. Install permanent fencing with a minimum 50 percent porosity and at least 6 feet in height along the project boundary within 1,000 feet of permanent residences along the eastern boundary of Phase 1, the southwest corner of Phase 1, and the western boundary and southern boundary of Phase 2. If significant sand movement is observed onsite, additional sand fences should be placed within the site to reduce movement and protect onsite structures, including photovoltaic arrays, from wind-blown sand. As sand deposits grow, the sand deposits shall be planted with vegetation to reduce further erosion. (This can take the place of Mitigation Measure MM 4.3-4(3) assuming installed prior to construction activities.) b. Prepare a Fugitive Dust Emission Monitoring Plan, which shall include installation of onsite particulate matter-10 air monitors for a minimum of 5 years to ensure effectiveness of dust mitigation measures. Per Eastern Kern Air Pollution Control District guidelines, the project proponent of a facility may petition to cancel particulate monitoring, in the event that 5years of data demonstrate (upwind/downwind concentration difference is 50-$\mu g/m^3$ or less [based on one-hour averages]).	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		MM 4.3-9: Prior to the issuance of any grading or building permit, the project proponent shall establish a "construction coordinator" and submit written documentation which includes their phone number, email address and mailing address. The construction coordinator shall be responsible for the following: a. Responding to any local complaints about construction activities. The construction coordinator shall determine the cause of the construction complaint and shall be required to implement reasonable measures such that the complaint is resolved. b. Ensuring all appropriate construction notices have been made available to the public and that all appropriate construction signs have been installed. c. Maintaining an ongoing up-to-date log of all construction related complaints (i.e., blowing dust, inability to access parcels, etc.) during project construction activities. The log shall include the nature of the complaint and the measures that were undertaken to address the concerns. Upon request, the construction coordinator shall provide the log to the Planning and Natural Resources Department no later than three business days from request.	
Impact 4.3-2: The project would expose sensitive receptors to substantial pollutant concentrations.	Potentially significant	Implementation of Mitigation Measures MM 4.3-1 through MM 4.3-9 is required. **MM 4.3-10:** At the time of project implementation, a COVID-19 Health and Safety Plan should be prepared in accordance with the Kern County Public Health Services Department and Kern County Health Officer mandates. A copy shall be submitted to the Kern County Planning Department for review and approval. **MM 4.3-11:** Minimize Exposure to Potential Valley Fever–Containing Dust. Prior to ground disturbance activities, the project proponent shall implement the following Valley Fever Provisions: a. Provide evidence to the Kern County Planning and Natural Resources Department that the project operator and/or construction manager has developed a "Valley Fever Training Handout", training, and schedule of sessions for education to be provided to all construction personnel. All evidence of the	Significant and Unavoidable

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		training session materials, handout(s) and schedule shall be submitted to the Kern County Planning and Natural Resources Department within 24 hours of the first training session. Multiple training sessions may be conducted if different work crews will come to the site for different stages of construction; however, all construction personnel shall be provided training prior to beginning work. The training may be administered using video or other electronic media. The evidence submitted to the Kern County Planning and Natural Resources Department regarding the "Valley Fever Training Handout" and Session(s) shall include the following: i. A sign-in sheet (to include the printed employee names, signature, and date) for all employees who attended the training session. ii. Distribution of a written flier or brochure that includes educational information regarding the health effects of exposure to criteria pollutant emissions and Valley Fever. iii. Training on methods that may help prevent Valley Fever infection. iv. A demonstration to employees on how to use personal protective equipment, such as respiratory equipment (masks), to reduce exposure to pollutants and facilitate recognition of symptoms and earlier treatment of Valley Fever. Where respirators are required, the equipment shall be readily available and shall be provided to employees for use during work. Proof that the demonstration is included in the training shall be submitted to the county. This proof can be via printed training materials/agenda, DVD, digital media files, or photographs. b. The project proponent also shall consult with the Kern County Health Services Department to develop a Valley Fever Dust Management Plan that addresses the potential presence of the Coccidioides spore and mitigates for the potential for Coccidioidomycosis (Valley Fever). Prior to issuance of permits, the project operator shall submit the Plan to the Kern County	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Public Health Department for review and approval. The Plan shall include a program to evaluate the potential for exposure to Valley Fever from construction activities and to identify appropriate safety procedures that shall be implemented, as needed, to minimize personnel and public exposure to potential Coccidioides spores. Measures in the Plan shall include the following: i. Provide High-Efficiency Particulate Air filters for heavy equipment equipped with factory enclosed cabs capable of accepting the filters. Require contractors utilizing applicable heavy equipment to furnish proof of worker training on proper use of applicable heavy equipment cabs, such as turning on air conditioning prior to using the equipment. ii. Provide communication methods, such as two-way radios, for use in enclosed cabs. iii. Require National Institute for Occupational Safety and Health- approved half-face respirators equipped with minimum N-95 protection factor for use during worker collocation with surface disturbance activities, as required per the hazard assessment process. iv. Cause employees to be medically evaluated, fit-tested, and properly trained on the use of the respirators, and implement a full respiratory protection program in accordance with the applicable California Occupational Safety and Health Administration Respiratory Protection Standard (8 California Code of Regulations Section 5144). v. Provide separate, clean eating areas with hand-washing facilities. vi. Install equipment inspection stations at each construction equipment access/egress point. Examine construction vehicles and equipment for excess soil material and clean, as necessary, before equipment is moved off site.	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		vii. Train workers to recognize the symptoms of Valley Fever, and to promptly report suspected symptoms of work-related Valley Fever to a supervisor. viii. Work with a medical professional to develop a protocol to medically evaluate employees who develop symptoms of Valley Fever. ix. Work with a medical professional, in consultation with the County Health Services Department, to develop an educational handout for on-site workers and surrounding residents within 3 miles of the project site, and include the following information on Valley Fever: what are the potential sources/ causes, what are the common symptoms, what are the options or remedies available should someone be experiencing these symptoms, and where testing for exposure is available. Prior to construction permit issuance, this handout shall have been created by the project operator and reviewed by the project operator and reviewed by the County. No less than 30 days prior to any work commencing, this handout shall be mailed to all existing residences within 3 miles of the project boundaries. x. When possible, position workers upwind or crosswind when digging a trench or performing other soil-disturbing tasks. xi. Prohibit smoking at the worksite outside of designated smoking areas; designated smoking areas will be equipped with handwashing facilities. xii. Post warnings on-site and consider limiting access to visitors, especially those without adequate training and respiratory protection. **MM 4.3-12:** Prior to the issuance of grading permits, a one-time fee shall be paid to the Kern County Public Health Services Department in the amount of $3,200 for Valley Fever public awareness programs.	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
Cumulative Impacts **Impact 4.3-3:** Construction and operation of the project would result in a cumulatively considerable net increase of any criteria pollutant for which the projects' region is nonattainment under applicable federal or state ambient air quality standards.	Potentially significant	Implementation of Mitigation Measures MM 4.3-1 through MM 4.3-12 is required.	Significant and Unavoidable
4.4 Biological Resources			
Impact 4.4-1: The project would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or a special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service.	Potentially significant	Implementation of Mitigation Measure MM 4.1-3 and MM 4.1-4 is required. **MM 4.4-1:** Prior to the issuance of a grading permit from the County, the project proponent/operator shall conduct focused surveys to determine the exact locations of silver cholla and beavertail cactus, and determine presence or absence of Mojave tarplant, pale yellow layia, Charlotte's phacelia, and Latimer's woodland gilia onsite. After the additional analysis determines if these species occur on the project site and the exact locations of these species, the project proponent/operator shall submit written documentation to the Kern County Planning and Natural Resources Department confirming implementation of the measures described below. a. The project proponent/operator shall work with an authorized biologist to identify all known locations of silver cholla and beavertail cactus, and to determine presence of Mojave tarplant, pale yellow layia, Charlotte's phacelia, and Latimer's woodland gilia to establish "avoidance areas," where feasible. All locations of these special-status cactus species found within the project site shall be avoided by a buffer of 25 feet through micro-siting activities to the extent feasible. Sturdy, highly visible, orange plastic construction fencing (or equivalent material verified by the authorized biologist) shall be installed around all locations of these special-status cactus plants to protect from impacts during the construction phase, until they can be relocated. The fence shall be securely staked and installed in a durable manner that	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		would be reasonably expected to withstand wind and weather events and last at least through the construction period. Fencing shall be removed upon completion of the project construction. b. Silver cholla and beavertail cactus that cannot feasibly be avoided during construction shall be translocated according to the California Department of Fish and Wildlife's 2014 *Cactus Translocation (Revegetation) Guidelines* and in accordance with California Desert Native Plants Act. Translocation will include the following components: i. A likelihood of salvage success assessment of all special-status species proposed for translocation; ii. Preferred extraction period (October through March); iii. Temporary (shaded) nursery storage of extracted cactus for at least two weeks prior to translocation to "callous" roots and prevent fungal growth; iv. Translocation to a suitable California Department of Fish and Wildlife approved site; v. Transplanting into shallow swales or holes during cool morning periods; vi. Limited supplemental watering if needed based on precipitation conditions; vii. Two years of post-construction monitoring that include supplemental irrigation (if determined to be necessary); viii. Annual monitoring and reporting to meet success criteria; and ix. Monitoring of translocation by a qualified biologist experienced with cactus translocation. c. Any pale yellow layia, Charlotte's phacelia, and Latimer's woodland gilia onsite populations that cannot feasibly be avoided in final project design shall have seed collected prior to construction for sowing into suitable onsite habitat or in nearby suitable offsite habitat covered with a conservation easement. A seed harvesting and storage plan including a planting plan shall	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		be prepared and approved by the County, prior to ground disturbance of these areas. **MM 4.4-2:** If Mojave tarplant is found on the project site during implementation of Mitigation Measure MM 4.4-1, and it is determined this species cannot be avoided during the construction phase of the project, additional permitting shall be required. Therefore: a. Since the Mojave tarplant is a State-listed species as endangered, potential project impacts to a listed species requires obtaining an incidental take permit from the California Department of Fish and Wildlife Regional Office prior to construction for compliance with Section 2081 of the California Endangered Species Act; and b. Once a Section 2081 permit is obtained, the species will be included in the seed collection efforts included in Mitigation Measure MM 4.4-1. **MM 4.4-3:** Mohave ground squirrel has been confirmed to be present on the Phase 1 portion of project site. Therefore, the project must comply with the measures detailed below. a. A California Department of Fish and Wildlife 2081 incidental take permit shall be required to the development of Phase 1. b. In addition, prior to any impacts on the Phase 2 portion of the project, California Department of Fish and Wildlife protocol surveys for Mohave ground squirrel shall occur to determine presence or absence of the species. Alternatively, the project proponent/operator may assume presence of Mohave ground squirrel on Phase 2 and provide compensatory habitat-based mitigation for loss of suitable habitat at a ratio determined by the California Department of Fish and Wildlife prior to issuance of a grading permit from the county. Compensatory mitigation for the loss of habitat will be provided through compliance with Senate Bill 34 and either the advance purchase of mitigation properties acceptable to the California Department of Fish and Wildlife or the contribution of in lieu fees to the California Department of Fish and Wildlife.	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		MM 4.4-4: Prior to construction, the project proponent/operator shall conduct preconstruction surveys in suitable habitat for desert tortoise and shall implement the measures described below. a. Pre-construction tortoise clearance surveys shall be conducted at 15-foot intervals to locate any desert tortoises prior to grading or ground disturbance. The surveys shall be conducted by an authorized biologist within 24 hours of the onset of the surface disturbance and prior to the installation of all tortoise-proof fencing. An "authorized biologist" is defined as a wildlife biologist who has been authorized to handle desert tortoises by U.S. Fish and Wildlife Service and California Department of Fish and Wildlife for this project. Name(s) of proposed authorized biologist(s) must be submitted to U.S. Fish and Wildlife Service and California Department of Fish and Wildlife for approval at least 15 days prior to initiating field surveys. b. Authorized biologists shall conduct preconstruction clearance surveys for desert tortoise prior to the start of any ground disturbing construction activity. c. If a desert tortoise is found during preconstruction surveys, no one shall be allowed to touch the tortoise without authorization from the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife. The U.S. Fish and Wildlife Service and California Department of Fish and Wildlife shall be contacted for further guidance and consultation on additional measures and to determine whether temporary exclusionary fencing is required. Authorized biologists shall conduct clearance surveys for desert tortoises within the fenced project site after exclusionary fence installation if required by the wildlife agencies. Two surveys without finding any tortoises or new tortoise signs shall occur prior to declaring the site clear of tortoises. All burrows that could provide shelter for a desert tortoise shall be excavated during the first clearance survey. An authorized biologist shall remain onsite until all vegetation is cleared and, at a minimum, conduct site and fence inspections on a regular basis throughout construction in order to ensure that the	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		fence is intact and that no tortoises can enter the construction area. d. Authorized biologists shall be onsite to survey for tortoises immediately prior to vegetation clearance activities in the event a tortoise was inadvertently missed during clearance surveys. An authorized biologist shall remain on-call throughout construction in the event a tortoise wanders onto the site. e. All construction personnel shall watch for desert tortoises within the construction area and access roads whenever driving, transporting, or operating equipment. f. If no desert tortoises are found during preconstruction surveys, the project proponent/operator shall provide a report to U.S. Fish and Wildlife Service and California Department of Fish and Wildlife within one week of starting construction. This report shall be prepared by the authorized biologist. Following construction, the project proponent/operator shall submit the report within 90 days, documenting applicable desert tortoise measures taken during the project such as tortoise training, fence monitoring and maintenance, etc. g. If a desert tortoise is observed on the project site after preconstruction surveys and during construction activities, construction shall cease in the vicinity of the tortoise and the tortoise shall be allowed to pass through the area on its own accord. No one shall be allowed to touch the tortoise without authorization from the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife. Concurrent with this effort, U.S. Fish and Wildlife Service and California Department of Fish and Wildlife shall be consulted regarding any additional avoidance, minimization, or mitigation measures that may be necessary. Once the animal is observed leaving the site, work in the area can resume. A report shall be prepared by an authorized biologist to document the occurrence of the desert tortoise within the site. This report shall be submitted to U.S. Fish and Wildlife Service and California Department of Fish and Wildlife and the	

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Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Kern County Planning and Natural Resources Department after the impact occurs. **MM 4.4-5:** Prior to the issuance of grading or building permits from the county, the project proponent/operator shall retain a qualified biologist(s) who meets the qualifications of an authorized biologist as defined by U.S. Fish and Wildlife Service to oversee compliance with protection measures for all listed and other special-status species that may be affected by the construction of the project. The following measures pertain to qualified biologists onsite. a. The qualified biologist(s) shall be on the project site during construction of perimeter fencing, clearing of vegetation, grading activities, and similar ground-disturbance activities that will be associated with the construction phase. b. The qualified biologist(s) shall have the right to halt all activities that are in violation of the special-status species mitigation measures, as well as any regulatory permits from the California Department of Fish and Wildlife and/or U.S. Fish and Wildlife Service. Work shall proceed only after hazards to special-status species are removed and the species is no longer at risk. c. The qualified biologist(s) shall have in her/his possession a copy of all the compliance measures while work is being conducted on the project site. d. Prior to issuance of grading or building permits, contact information for the qualified biologist(s) shall be submitted to the Kern County Planning and Natural Resources Department. e. Any individuals who undertake biological monitoring and mitigation tasks shall be supervised by the qualified biologist(s) and shall have the appropriate education and experience to accomplish biological monitoring and mitigation tasks. Biological monitors shall comply with the above measures. **MM 4.4-6:** Prior to the issuance of grading or building permits from the County, and for the duration of construction activities, and within a minimum of one-week initial ground disturbance, all construction workers shall attend an Environmental Awareness Training and	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Education Program that will be presented by an authorized biologist. Any personnel associated with construction that did not attend the initial training shall be trained by the authorized biologist prior to working on the project site. Any employee responsible for the operations, maintenance, and/or decommissioning of the project facilities shall also attend the Worker Environmental Awareness Training and Education Program prior to starting work on the project and on an annual basis. The Program will be developed and presented by the project qualified biologist(s) or designee approved by the qualified biologist(s). The Program shall include the components described below. a. Information on the life history of the desert tortoise; Mohave ground squirrel, burrowing owl, Swainson's hawk, Cooper's hawk; nesting birds; as well as other wildlife, special-status plant species, and the California Department of Fish and Wildlife-regulated drainages that may be affected during construction activities. The program shall also discuss the legal protection status of each species, the definition of "take" under the Federal Endangered Species Act and California Endangered Species Act, measures the project proponent/operator shall implement to protect the species, reporting requirements, specific measures for workers to avoid take of special-status plant and wildlife species, and penalties for violation of the requirements outlined in the California Environmental Quality Act mitigation measures and agency permit requirements. b. An acknowledgement form signed by each worker indicating that the Worker Environmental Awareness Training and Education Program has been completed shall be kept on file at the construction site. c. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the Worker Environmental Awareness Training and Education Program and signed acknowledgement forms shall be submitted to the Kern County Planning and Natural Resources Department.	

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Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		d. A copy of the training transcript, training video or informational binder for specific procedures shall be kept available for all personnel to review and be familiar with as necessary. e. A sticker shall be placed on hard hats indicating that the worker has completed the Worker Environmental Awareness Training and Education Program. Construction workers shall not be permitted to operate equipment within the construction areas unless they have attended the Worker Environmental Awareness Training and Education Program and are wearing hard hats with the required sticker. f. The construction crews and contractor(s) shall be responsible for preventing unauthorized impacts from construction activities to sensitive biological resources that are outside the areas defined as subject to impacts by project permits. Unauthorized impacts may result in project stoppage, and/or fines depending on the impact and consultation with the California Department of Fish and Wildlife and/or U.S. Fish and Wildlife Service. **MM 4.4-7:** During construction, operations and maintenance, and decommissioning, the project proponent/operator and/or contractor(s) shall implement the general avoidance and protective measures described below. a. Prior to conducting vegetation clearing or grading activities associated with construction or decommissioning, a qualified biologist or biological monitor that has been approved by the qualified biologist shall survey the area immediately prior to conducting these activities to ensure that no special-status animals are present. The qualified biologist or biological monitor shall monitor all initial construction and decommissioning ground disturbance activities. A report of those activities shall be submitted to the Kern County Planning and Natural Resources Department within 30 days of completion of activities. b. All proposed impact areas, including solar fields, generation-tie lines, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid sensitive biological	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		resources (i.e., special-status species, jurisdictional drainages, nesting birds, etc.) where possible. Construction-related activities outside of the impact zone shall be avoided. c. Access roads that are planned for use during construction shall not extend beyond the planned impact area. All vehicle traffic shall be contained within the planned impact area or in previously disturbed areas. Where new access routes are required, the route will be clearly marked (i.e., flagged and/or staked) prior to construction. d. The project proponent/operator shall limit the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. These areas shall be demarcated and disturbance activities, vehicles, and equipment shall be confined to these areas. e. Spoils shall be stockpiled in disturbed areas that lack native vegetation. Best Management Practices shall be employed to prevent erosion in accordance with the project's approved Stormwater Pollution Prevention Plan (see Section 4.10, *Hydrology and Water Quality*, for more details on Stormwater Pollution Prevention Plan requirements). All detected erosion shall be remedied within 2 days of discovery or as described in the Stormwater Pollution Prevention Plan or Erosion Control Plan. Spoils that have been stockpiled and inactive for greater than 10 days shall be inspected by a qualified biologist for signs of special-status wildlife before moving or disturbing the spoils. f. If exclusion fencing is required by any consulting Resource Agency (i.e., California Department of Fish and Wildlife, and U.S. Fish and Wildlife Service), the project site shall be fenced with a temporary exclusion fence to keep special-status terrestrial wildlife species, including desert tortoise, from entering during construction. This exclusion fencing shall be constructed of silt fence material, metal flashing, plastic sheeting, or other materials that will prohibit wildlife from climbing the fence or burrowing below the fence. The fencing shall be buried approximately	

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Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		12 inches below the surface and extend a minimum of 30 inches above grade. Fencing shall be installed prior to issuance of grading or building permits and shall be maintained during all phases of construction and decommissioning. The fencing shall be inspected by an authorized biologist approved by the Resource Agencies weekly and immediately after all major rainfall events through the duration of construction and decommissioning activities. Any needed repairs to the fence shall be performed on the day of their discovery. Exclusion fencing shall be removed once construction or decommissioning activities are complete. Outside temporarily fenced exclusion areas, the project proponent/operator shall limit the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. These areas shall be flagged and disturbance activities, vehicles, and equipment shall be confined to these flagged areas. When consultation with the Resource Agency is required, such Resource Agency may impose additional requirements. g. To prevent inadvertent entrapment of desert kit foxes, American badgers, or other animals during construction, all excavated, steep-walled holes or trenches more than 2 feet deep shall be covered with plywood or similar materials at the close of each working day, or provided with one or more escape ramps constructed of earth fill or wooden planks that are no less than 12 inches wide and secured at the top, and placed a minimum of every 100 feet within the open trench. Covered and non-covered holes or trenches shall be thoroughly inspected for trapped animals by a qualified biologist or their biological monitor at the beginning and end of each day, including non-work days. Immediately before such holes or trenches are filled, they shall again be thoroughly inspected by trained staff approved by the retained qualified biologist for trapped animals. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow for their escape. If a listed species is trapped, the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife, as appropriate for the species,	

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Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		and Kern County Planning and Natural Resources Department shall be contacted immediately. h. Burrowing owls, mammals, and nesting birds may use construction pipes, culverts, or similar structures for refuge or nesting. Therefore, all construction pipes, culverts, or similar structures with a diameter of 4 inches or more that are stored at a construction site (during operation or maintenance) for one or more overnight periods shall be thoroughly inspected by a qualified biologist for special-status wildlife or nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved until a qualified biologist has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated by a qualified biologist holding the appropriate handling permits from the Resource Agencies. i. No vehicle or equipment parked on the project site shall be moved prior to inspecting the ground beneath the vehicle or equipment for the presence of wildlife. If present, the animal shall be left to move on its own, or relocated by a qualified biologist holding the appropriate handling permits from the Resource Agencies. No one shall be allowed to touch a listed species without authorization form the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife. j. Vehicular traffic to and from the project site shall use existing routes of travel. Cross country vehicle and equipment use outside designated work areas shall be prohibited. k. A speed limit of 15 miles per hour shall be enforced within the limits of the proposed project. If night work occurs on the proposed project, the speed limit will be 10 miles per hour. l. Fueling of equipment shall take place within existing roads. No refueling within or adjacent to drainages or native desert habitats (within 150 feet) shall be permitted. Contractor equipment shall be checked for leaks prior to operation and repaired as necessary.	

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Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		m. The project proponent/operator shall submit a Maintenance, Trash Abatement, and Pest Management Program to the Kern County Planning and Natural Resources Department for review and approval. The program shall include, but not be limited to the following: i. The project proponent/operator shall clear debris from the project area at least twice per year; this can be done in conjunction with regular panel washing and site maintenance activities. ii. The project proponent/operator shall erect signs with contact information for the project proponent/operator's maintenance staff at regular intervals along the site boundary, as required by the Kern County Planning and Natural Resources Department. Maintenance staff shall respond within two weeks to resident requests for additional cleanup of debris. Correspondence with such requests and responses shall be submitted to the Kern County Planning and Natural Resources Department. iii. The project proponent/operator shall implement a regular trash removal and recycling program on an ongoing basis during construction and operation of the project. Barriers to prevent pest/rodent access to food waste receptacles shall be implemented. Locations of all trash receptacles during operation of the project shall be shown on final plans. iv. Trash and food items shall be contained in closed containers to be locked at the end of the day and removed at least once per week to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs. n. Workers shall be prohibited from bringing pets and firearms to the project site and from feeding wildlife. o. Intentional killing or collection of any plant or wildlife species shall be prohibited. p. No rodenticides shall be used on the project site.	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		MM 4.4-8: Prior to the issuance of grading or building permits from the County, a Raven Management Plan shall be developed for the project site and approved by the Kern County Planning and Natural Resources Department. This plan shall include, but is not limited to, the components listed below. a. Identification of all raven nests within the project area during construction and decommissioning, with written documentation submitted to the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. b. Weekly inspection during construction and decommissioning under all nests in the project area for evidence of raven predation on local wildlife (bones, carcasses, etc.), and, if evidence of predation is noted, submit a report to California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, and the Kern County Planning and Natural Resources Department within 5 calendar days. c. Where evidence of wildlife predation is observed, the project authorized biologist shall coordinate with both California Department of Fish and Wildlife and U.S. Fish and Wildlife Service to determine if preventative measures are possible and to implement such measures. d. Provisions for the management of exposed food, trash, and standing water that could attract common ravens during the construction, operation, and decommissioning phases of the project. e. Furthermore, the project proponent/operator shall be required to participate in the regional comprehensive raven management plan to address the threats of the common raven to desert resources. The project proponent/operator shall be subject to compensation through the payment of a one-time fee not to exceed $150 per disturbed acre. Evidence of the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife determination and payment of any required fees shall be	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		submitted to the Kern County Planning and Natural Resources Department. **MM 4.4-9:** To protect special status species from disturbance during construction, the actions described below shall occur. a. A qualified biologist (approved by the appropriate agency) shall monitor all initial ground-disturbance activities and remain on-call throughout construction in the event a special-status species wanders into the project site. b. Preconstruction surveys for special-status species shall be conducted within the project boundaries of the project site, as well as within a minimum of 500 feet from the project site to account for any inadvertent impacts to adjacent areas, by the authorized biologist within a maximum of 14 days of the start of any ground disturbing activities, such as geotechnical drilling vegetation clearing and/or grading. Methodology for preconstruction surveys shall be conducted as appropriate for special-status plants, Swainson's hawk, burrowing owl, desert tortoise, Mohave ground squirrel, kit fox, loggerhead shrike, Le Conte's thrasher, and migratory birds, and shall follow U.S. Fish and Wildlife Service and/or the California Department of Fish and Wildlife preconstruction survey guidelines, where appropriate. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur within 14 days of the portion of the project site that will be disturbed. If evidence of occupation by a special-status species is observed, a suitable buffer shall be established by a qualified biologist that results in sufficient avoidance. **MM 4.4-10:** The project proponent/operator shall implement the following measures, based on the recently updated California Department of Fish and Game (now California Department of Fish and Wildlife) 2012 Staff Report on Burrowing Owl Mitigation, to ensure potential impacts to burrowing owl resulting from project implementation will be avoided and minimized to less-than-significant levels:	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		a. A qualified wildlife biologist shall be onsite during all initial grading and construction, pre-construction ground disturbing activities, and decommissioning activities. A qualified wildlife biologist (i.e., a wildlife biologist with the ability to identify the species and possessing previous burrowing owl survey and avoidance and minimization protection experience) shall conduct pre-construction surveys of all areas that will be permanently or temporary impacted, plus a 150-meter (approximately 492-foot) buffer, to locate active breeding or wintering burrowing owl burrows. The survey(s) shall occur no more than 14 days prior to ground-disturbing activities (i.e., exploratory geotechnical drilling, vegetation clearance, grading, etc.). The survey methodology shall be consistent with the methods outlined in the 2012 California Department of Fish and Wildlife Staff Report on Burrowing Owl Mitigation and shall consist of walking parallel transects 7 to 20 meters apart, adjusting for vegetation height and density as needed, and noting and mapping any potential burrows with burrowing owl signs or presence of burrowing owls. Surveys may be conducted concurrently with desert tortoise preconstruction surveys. A biologist shall prepare a preconstruction survey report that shall be submitted to California Department of Fish and Wildlife and the Kern County Planning and Natural Resources Department. b. A qualified biologist shall conduct an additional pre-construction survey of all impact areas plus an approximately 492-foot buffer no more than 24-hours prior to start or restart (as the case may be) of ground disturbing activities associated with construction or decommissioning activities as authorized by this approval to identify any additional burrowing owls or burrows necessitating avoidance, minimization, or mitigation measures. If active burrowing owl burrows are detected onsite, they shall be protected in place through the use of visual screens or through California Department of Fish and Wildlife-identified restricted activity dates and setback distances (presented in Table 4.4-4, Burrowing Owl Burrow Restricted Activity Dates and Setback Distances, below), or other measures as described in the 2012	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation

California Department of Fish and Wildlife Staff Report to minimize disturbance impacts unless otherwise authorized by California Department of Fish and Wildlife. Burrowing owls shall not be moved or excluded from burrows during the breeding season.

TABLE 4.4-4: BURROWING OWL RESTRICTED ACTIVITY DATES AND SETBACK DISTANCES

	Level of Disturbance (m)		
Time of Year	**Low**	**Medium**	**High**
April 1–August 15	200	500	500
August 16–October 15	200	200	500
October 16–March 31	50	100	500

SOURCE: CDFW, 2012.

c. If avoidance of active burrows is infeasible, the owls can be passively displaced from their burrows according to recommendations made in the 2012 California Department of Fish and Wildlife Staff Report on Burrowing Owl Mitigation. Burrowing owls shall not be excluded from burrows unless or until:

   i. Occupied burrows shall not be disturbed during the nesting season generally defined as February 1 through August 31.

   ii. Before excluding owls during the non-nesting season, generally defined as September 1 through January 31, a qualified biologist meeting the Biologist Qualifications set forth in the 2012 California Department of Fish and Wildlife Staff Report, shall verify through noninvasive methods that either: (1) the owls have not begun egg-laying and incubation; or (2) juveniles from the occupied burrows are foraging

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		independently and are capable of independent survival. Burrowing owls shall not be moved or excluded from burrows during the breeding season. iii. A Burrowing Owl Exclusion Plan is developed and approved by the applicable local California Department of Fish and Wildlife office and submitted to the Kern County Planning and Natural Resources Department. The plan shall include, at a minimum: 1. Confirm by site surveillance that the burrow(s) is empty of burrowing owls and other species preceding burrow scoping; 2. Type of scope and appropriate timing of scoping to avoid impacts; 3. Occupancy factors to look for and what will guide determination of vacancy and excavation timing, one-way doors shall be left in place a minimum of 48 hours to ensure burrowing owls have left the burrow before excavation, visited twice daily, and monitored for evidence that owls are inside and can't escape (i.e., look for sign immediately inside the door); 4. How the burrow(s) will be excavated. Excavation using hand tools with refilling to prevent reoccupation is preferable whenever possible (may include using piping to stabilize the burrow to prevent collapsing until the entire burrow has been excavated and it can be determined that owls do not reside in the burrow); 5. Removal of other potential owl burrow surrogates or refugia onsite; 6. Photographing the excavation and closure of the burrow to demonstrate success and sufficiency; vii. Monitoring of the site to evaluate success and, if needed, to implement remedial measures to prevent subsequent owl use to avoid take;	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		7. How the impacted site will continually be made inhospitable to burrowing owls and fossorial mammals (e.g., by allowing vegetation to grow tall, heavy disking, or immediate and continuous grading) until development is complete. iv. Permanent loss of occupied burrow(s) and habitat is mitigated in accordance with the measures described below. v. Temporary exclusion is mitigated in accordance with the measures described below. vi. Site monitoring is conducted prior to, during, and after exclusion of burrowing owls from their burrows sufficient to ensure take is avoided. Conduct daily monitoring for 1 week to confirm young of the year have fledged if the exclusion will occur immediately after the end of the breeding season. vii. Excluded burrowing owls are documented using artificial or natural burrows on an adjoining mitigation site (if able to confirm by band re-sight). viii. In accordance with the Burrowing Owl Exclusion Plan, a qualified wildlife biologist shall excavate burrows using hand tools. Sections of flexible plastic pipe or burlap bag shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow. One-way doors shall be installed at the entrance to the active burrow and other potentially active burrows within 160 feet of the active burrow and monitored for at least 48 hours after installation. If burrows will not be directly impacted by the Project, one-way doors shall be installed to prevent use and shall be removed after ground disturbing activities have concluded in the area. Only burrows that will be directly impacted by the Project shall be excavated and filled. ix. During construction activities, monthly and final compliance reports shall be provided to the California Department of Fish and Wildlife, Kern County Planning and Natural Resources Department, and other applicable resources agencies documenting the effectiveness of mitigation measures and the	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		level of burrowing owl take associated with the proposed project. x. If passive relocation is required, compensatory mitigation for lost breeding and/or wintering habitat shall be implemented onsite or offsite in accordance with Burrowing Owl Staff Report guidance. The following recommendations shall be implemented: 1. Temporarily disturbed habitat shall be restored, to pre-project conditions, including decompacting soil and revegetating. If restoration is not feasible, then the project proponent/operator shall consult with the California Department of Fish and Wildlife when determining offsite mitigation acreages, but shall be no less than 160 acres. 2. In order to protect habitat, the measures described below shall be implemented. a. Permanently conserve similar vegetation communities (grassland, scrublands, desert, and agriculture [grazing lands]) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and non-breeding seasons) comparable to or better than that of the impact area, and with sufficiently large acreage, and presence of fossorial mammals. Conservation shall occur in areas that support burrowing owl habitat and can be enhanced to support more burrowing owls. b. Permanently protect mitigation land through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission. If the project is located within the service area of a California Department of Fish and Wildlife-approved burrowing owl conservation bank, the project proponent/operator may purchase available burrowing owl conservation bank credits. c. Develop and implement a mitigation land management plan in accordance with Burrowing Owl	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Staff Report guidelines to address long-term ecological sustainability and maintenance of the site for burrowing owls. d. Fund the maintenance and management of mitigation land through the establishment of a long-term funding mechanism such as an endowment. e. Habitat shall not be altered or destroyed, and burrowing owls shall not be excluded from burrows, until mitigation lands have been legally secured, are managed for the benefit of burrowing owls according to California Department of Fish and Wildlife-approved management, monitoring and reporting plans (including construction of artificial burrows if necessary), and the endowment or other long-term funding mechanism is in place or security is provided until these measures are completed. f. Mitigation lands shall be on, adjacent to, or in proximity to the impact site, where feasible, and where habitat is sufficient to support burrowing owls. **MM 4.4-11:** To mitigate for potential impacts to nesting birds, special-status birds, and birds protected under the Migratory Bird Treaty Act and California Fish and Game Code during construction and decommissioning activities, the following measures shall be implemented as part of the approval for a grading or building permit. a. During the avian nesting season (February 1–August 31), a qualified biologist shall conduct a preconstruction avian nesting survey no more than 7 days prior to initial vegetation clearing. Surveys need not be conducted for the entire project site at one time; they may be phased so that surveys occur within 7 days prior to clearing or disturbance in specific areas of the site. The surveying biologist must be qualified to determine the species, status, and nesting stage without causing intrusive disturbance. At no time shall the biologist be allowed to handle the nest or its eggs. The survey shall cover all reasonably potential nesting locations on and within 500 feet of the project site, including	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		ground nesting where species, such as California horned lark and killdeer might nest all shrubs that could support nests, and suitable raptor nest sites such as nearby trees, windrows and power poles. Swainson's hawk nest surveys will be conducted prior to construction according to the *Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California* (California Department of Fish and Wildlife, 2010) and within a 5-mile buffer around the project site. Access shall be granted on private offsite properties prior to conducting surveys on private land. If access is not obtainable, the biologist shall survey these areas from the nearest vantage point with use of spotting scopes or binoculars. b. If construction is scheduled to occur during the non-nesting season (September 1–February 1), no preconstruction surveys or additional measures are required for non-listed avian species. c. If construction begins in the non-nesting season and proceeds continuously into the nesting season within any particular construction or decommissioning area, no surveys are required for non-listed avian species so long as all suitable nesting sites have been cleared from active construction/decommissioning areas. d. If active nests are found, a 300-foot no-disturbance buffer shall be created around passerine species' nests unless adjusted by the qualified biologist based on the needs and sensitivities of individual species, a 0.5-mile no-disturbance buffer for Swainson's hawk nest, and a 500-foot no-disturbance buffer around raptor species' nests (or a suitable distance otherwise determined in consultation with California Department of Fish and Wildlife). Any nest of a federal- or State-listed bird species shall require consultation with the appropriate agency (United States Fish and Wildlife Service or the California Department of Fish and Wildlife) to determine the appropriate buffer distance surrounding the nest to provide adequate nest protection. These buffers shall remain in effect until a qualified wildlife biologist has determined that the birds have fledged or the proposed project	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		component(s) have been redesigned to avoid the area. All no-disturbance buffers shall be delineated in the field with visible flagging or fencing material. **MM 4.4-12:** During the operations and maintenance phase of the project, an Avian Mortality Monitoring Program shall be developed in coordination with California Department of Fish and Wildlife and U.S. Fish and Wildlife Service and implemented to systematically and periodically determine the extent of mortality occurring due to collisions with solar arrays. The measures listed below apply to the program. a. The Avian Mortality Monitoring Program shall be developed following the Mortality Monitoring Design for Utility-Scale Solar Power Facilities to achieve Objective 1 (monitoring to estimate total bird and bat mortality). Methods include using a trained and skilled team of authorized biologists to systematically sample the project site by walking transects through the solar arrays scanning for deceased birds. b. Data shall be collected on any encountered deceased wildlife species including species, condition of the carcass, approximate age, presence of feathers, etc. c. Additionally, maintenance personnel working on the project site that encounter injured or deceased birds (or any other wildlife) should be trained to collect data and photograph the encountered species. d. Mortality monitoring shall be conducted for a minimum 2-year period following the commencement of the operations and maintenance phase of the project. Quarterly reporting of results shall be prepared and provided to State and federal agencies, if requested. e. Appropriate performance standards for mitigation of impacts to any species regulated by the Bald and Golden Eagle Protection Act, the Endangered Species Act, and the California Endangered Species Act exist through required consultation with the U.S. Fish and Wildlife Service and the California Department of Fish	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		and Wildlife under their respective regulatory and permitting frameworks. If, after 2 years of mortality monitoring, project impacts to any other avian species caused by the project are shown to result in a substantial, long-term reduction in the demographic viability of the population of the species in question, then adaptive management must be implemented to reduce impacts to below this threshold. Adaptive management measures may include but not be limited to passive avian diverter installations, the use of sound, light or other means to discourage site use consistent with legal requirements, onsite habitat management or pre control measures consistent with applicable legal requirements, or modification to support structures to exclude nesting birds. f. Construct all power transmission lines to the 2006 Avian Power Line Interaction Committee Guidelines specifications to protect birds from electrocution and collision. Appropriate notes regarding these specifications shall be included on any grading permit, building permit, or final map. g. After construction, submit written documentation to the Kern County Planning and Natural Resources Department verifying that all power lines are constructed to the 2006 Avian Power Line Interaction Committee Guidelines. The project proponent/operator shall conform to the latest practices (as outlined in the 2006 Avian Power Line Interaction Committee Guidelines document) to protect birds from electrocution and collision. h. Install power collection and transmission facilities utilizing Avian Power Line Interaction Committee standards for collision reducing techniques as outlined in Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006 (Avian Power Line Interaction Committee, 2006).	
Impact 4.4-2: The project would have a substantial adverse effect on any riparian habitat or other sensitive natural community, or jurisdictional waters,	Potentially significant	**MM 4.4-13:** Prior to issuance of any grading or building permit by the County, the project proponent/operator shall submit a report detailing how all identified ephemeral drainages are avoided and will be continually complied with during the life of the project. A copy	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
identified in local or regional plans, policies, or regulations or by the CDFW or the USFWS.		of this report shall be provided to the Regional Water Quality Control Board and the County. The report shall include information as shown below as a plan if necessary and shall outline compliance to the following: a. Avoidance of potential jurisdictional features (ephemeral drainages). This may be shown in plan form. b. Any material/spoils generated from project activities shall be located away from jurisdictional areas and protected from storm water run-off using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate. c. Fuel or hazardous materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage from contaminating the ground and be placed generally at least 50 feet from the top of bank. d. Any spillage of fuel or hazardous material will be stopped if it can be done safely. The contaminated area will be cleaned and any contaminated material properly disposed. For all spills, the project foreman or designated environmental representative will be notified. **MM 4.4-14:** If jurisdictional features cannot be avoided, the project proponent/operator shall be subject to provisions as identified below: a. If avoidance is not practical, prior to ground disturbance activities that could impact these aquatic features, the project proponent/operator shall file a complete Report of Waste Discharge with the Regional Water Quality Control Board to obtain Waste Discharge Requirements and shall also consult with California Department of Fish and Wildlife on the need for a streambed alteration agreement. Correspondence and copies of reports shall be submitted to the County. b. Based on consultation with the Regional Water Quality Control Board and California Department of Fish and Wildlife, if permits are required for the project site, appropriate permits shall be obtained prior to disturbance of jurisdictional resources.	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		c. Compensatory mitigation for impacts to unvegetated streambeds/washes shall be identified and secured prior to disturbance of the features at a minimum 1:1 ratio, or as approved by the Regional Water Quality Control Board or California Department of Fish and Wildlife. Mitigation may be either through onsite or offsite mitigation, or purchasing credits from an approved mitigation bank. d. The project proponent/operator shall comply with the compensatory mitigation required and proof of compliance, along with copies of permits obtained from the Regional Water Quality Control Board and/or California Department of Fish and Wildlife, shall be provided to the County. e. A Habitat Mitigation and Monitoring Plan shall be prepared that outlines the compensatory mitigation in coordination with the Regional Water Quality Control Board and California Department of Fish and Wildlife. i. If onsite mitigation is proposed, the Habitat Mitigation and Monitoring Plan shall identify those portions of the site, such as relocated drainage routes, that contain suitable characteristics (e.g., hydrology) for restoration. Determination of mitigation adequacy shall be based on comparison of the restored habitat with similar, undisturbed habitat in the site vicinity (such as upstream or downstream of the site). ii. The Habitat Mitigation and Monitoring Plan shall include remedial measures in the event that performance criteria are not met. iii. If mitigation is implemented off site, mitigation lands shall be comprised of similar or higher quality and preferably located in the vicinity of the site or watershed. Offsite land shall be preserved through a deed restriction or conservation easement and the Habitat Mitigation and Monitoring Plan shall identify an approach for funding assurance for the long-term management of the conserved land.	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		iv. Copies of any coordination, permits, etc., with the Regional Water Quality Control Board and California Department of Fish and Wildlife shall be provided to the County.	
Impact 4.4-3: The project would interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.	Potentially significant	Implementation of Mitigation Measure MM 4.1-4 is required.	Less than significant
Impact 4.4: Cumulative Impacts	Significant and unavoidable	Implementation of Mitigation Measures MM 4.4-1 through MM 4.4-14 as well as MM 4.1-3 and MM 4.1-4 are required.	Significant and unavoidable
4.5 Cultural Resources			
Impact 4.5-1: The project would cause a substantial adverse change in the significance of a historical resource as defined in *CEQA Guidelines* Section 15064.5.	Potentially significant	**MM 4.5-1:** The project proponent/operator shall retain a Lead Archaeologist, defined as an archaeologist meeting the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior, 2011), to carry out all mitigation measures related to archaeological and historical resources. The contact information for this Lead Archaeologist shall be provided to the Kern County Planning and Natural Resources Department prior to the commencement of any construction activities on-site. Further, the Lead Archaeologist shall be responsible for ensuring the following employee training provisions are implemented during implementation of the project: a. Prior to commencement of any ground disturbing activities, the Lead Archaeologist in consultation with the Native American monitor(s) shall develop a Cultural Resources Sensitivity Training for all personnel working on the proposed project. A Cultural Resources Sensitivity Training Guide approved by the Lead Archaeologist shall be provided and discussed with all personnel. A copy of the Cultural Resources Sensitivity Training Guide shall be submitted to the Kern County Planning and Natural Resources Department. The training guide may be presented in video form.	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		The training shall include an overview of potential cultural resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the Lead Archaeologist and/or Native American monitor(s) for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of archaeological resources. b. A copy of the Cultural Resources Sensitivity Training Guide/Materials shall be kept on-site and available for all personnel to review and be familiar with as necessary. It is the responsibility of the Project Owner to ensure all employees receive appropriate training before the work onsite. **MM 4.5-2:** During implementation of the project, the services of Native American Tribal Monitor(s) working under the supervision of the Lead Archaeologist, as identified through consultation with appropriate Native American tribes, shall be retained by the project proponent/operator to monitor ground-disturbing activities associated with project-related construction activities, as follows: a. All initial excavation and ground-disturbing activities within the project site shall be monitored, given the potential for alluvial burial of archaeological resources. b. The Lead Archaeologist, archaeological monitors, and Native American monitors shall be provided all project documentation related to cultural resources within the project site prior to commencement of ground disturbance activities. Project documentation shall include, but not be limited to, previous cultural studies, surveys, maps, drawings, etc. Any modifications or updates to project documentation, including construction plans and schedules, shall immediately be provided to the Lead Archaeologist, archaeological monitor, and Native American monitor. c. The archaeological monitor(s) shall keep monitoring logs and the Lead Archaeologist shall submit monthly written updates to the Kern County Planning and Natural Resources Department. After monitoring has been completed, the Lead Archaeologist shall	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		prepare a monitoring report detailing the results of monitoring, which shall be submitted to the Kern County Planning and Natural Resources Department and to the Southern San Joaquin Valley Information Center at California State University, Bakersfield. **MM 4.5-3:** During implementation of the project, in the event archaeological materials are encountered during the course of grading or construction, the project contractor shall cease any ground disturbing activities within 50 feet of the find. The area of the discovery shall be marked off by temporary fencing that encloses a 50-foot radius from the location of discovery. Signs shall be posted that establish it as an Environmentally Sensitive Area and all entrance to the area shall be avoided until the discovery is assessed by the Lead Archaeologist, as well as the Native American monitor if the discovery involves resources of interest to Native American tribes, including but not limited to prehistoric archaeological sites or tribal cultural resources. The Lead Archaeologist in consultation with the Native American monitor, if appropriate, shall evaluate the significance of the resources and recommend appropriate treatment measures. If further treatment of the discovery is necessary, the Environmentally Sensitive Area shall remain in place until all work is completed. Per California Environmental Quality Act *Guidelines* Section 15126.4(b)(3), project redesign and preservation in place shall be the preferred means to avoid impacts to significant historical resources. Consistent with California Environmental Quality Act *Guidelines* Section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the Lead Archaeologist in consultation with the Native American monitor shall develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures. The County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in nature. Archaeological materials recovered during any investigation shall be curated at an accredited curation facility. The Lead Archaeologist, in consultation with a designated Native American monitor, shall	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		prepare a report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the Kern County Planning and Natural Resources Department and to the Southern San Joaquin Valley Information Center at California State University, Bakersfield.	
Impact 4.5-2: The project would cause a substantial adverse change in the significance of an archaeological resource as defined in *CEQA Guidelines* Section 15064.5.	Potentially significant	Implementation of Mitigation Measures MM 4.5-1 through MM 4.5-3 is required.	Less than significant
Impact 4.5-3: The project would disturb any human remains, including those interred outside of formal cemeteries.	Potentially significant	**MM 4.5-4:** If human remains are uncovered during project construction, the project proponent/operator shall immediately halt work within 100 feet of the find, contact the Kern County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.4 (e)(1) of the California Environmental Quality Act *Guidelines*. If the County Coroner determines that the remains are Native American, the coroner shall contact the Native American Heritage Commission, in accordance with Health and Safety Code Section 7050.5, subdivision (c), and Public Resources Code 5097.98 (as amended by Assembly Bill 2641). The Native American Heritage Commission shall designate a Most Likely Descendent for the remains per Public Resources Code 5097.98. Per Public Resources Code 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the most likely descendent regarding their recommendations, if applicable, taking into account the possibility of multiple human remains. If the remains are determined to be neither of forensic value to the Coroner, nor of Native American origin, provisions of the California Health and Safety Code (7100 et. seq.) directing identification of the next-of-kin will apply.	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
Impact 4.5: Cumulative Impacts	Potentially significant	Implementation of Mitigation Measures MM 4.5-1 through MM 4.5-4 is required.	Less than significant
4.6 Energy			
Impact 4.6-1: The project would result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.	Potentially significant	Implementation of Mitigation Measures MM 4.3-3 and MM 4.3-7 is required.	Less than significant
Impact 4.6-2: The project would conflict with or obstruct a state or local plan for renewable energy or energy efficiency.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.5: Cumulative Impacts	Potentially significant	Implementation of Mitigation Measures MM 4.3-3 and MM 4.3-7 is required.	Less than significant
4.7 Geology and Soils			
Impact 4.7-1: The project would directly or indirectly cause substantial adverse effects, including the risk of loss, injury, or death involving: 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.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.7-2: The project would directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking.	Potentially significant	**MM 4.7-1:** Prior to the issuance of building or grading permits for the project, the project proponent shall conduct a full geotechnical study to evaluate soil conditions and geologic hazards on the project site and submit it to the Kern County Public Works Department for review and approval.	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		a. The geotechnical study must be signed by a California-registered and licensed professional geotechnical engineer or engineering geologist and must include, but not be limited to, the following: i. Location of fault traces and potential for surface rupture and groundshaking potential; ii. Maximum considered earthquake and associated ground acceleration for design; iii. Potential for seismically induced liquefaction, landslides, differential settlement, and unstable soils; iv. Stability of any existing or proposed cut-and-fill slopes; v. Collapsible or expansive soils; vi. Foundation material type; vii. Potential for wind erosion, water erosion, sedimentation, and flooding; viii. Location and description of unprotected drainage that could be impacted by the proposed development; and, ix. Recommendations for placement and design of facilities, foundations, and remediation of unstable ground. b. The geotechnical study shall be performed pursuant to Chapters 16 and 18 of the 2016 California Building Code; California Geological Survey Special Publication 117A; the American Society of Civil Engineers (ASCE) 7-10 Standard; and California Geological Survey Note 49. Final project design and construction shall incorporate the recommendations of the geotechnical study. The project proponent shall not locate project facilities on or immediately adjacent to an active fault trace. c. The Kern County Public Works Department shall evaluate any final facility siting design developed prior to the issuance of any building or grading permits to verify that geological constraints have been avoided. **MM 4.7-2:** Prior to the issuance of grading permits, the project proponent shall retain a California registered and licensed geotechnical engineer to design the project facilities to withstand	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		probable seismically induced ground shaking at the site. All grading and construction onsite shall adhere to the specifications, procedures, and site conditions contained in the final design plans, which shall be fully compliant with the seismic recommendations of the California-registered professional engineer and state and local building codes, as well as California Geological Survey Special Publication 117A. a. The procedures and site conditions shall encompass site preparation, foundation specifications, and protection measures for buried metal. b. The final structural design shall be subject to approval and follow-up inspection by the Kern County Building Inspection Department. Final design requirements shall be provided to the onsite construction supervisor and the Kern County Building Inspector to ensure compliance. A copy of the approved design shall be submitted to the Kern County Planning and Natural Resources Department.	
Impact 4.7-3: The project would result in substantial soil erosion or the loss of topsoil.	Potentially significant	**MM 4.7-3:** The construction contractor shall incorporate BMPs consistent with National Pollutant Discharge Elimination System (NPDES) General Construction Permit Program for all construction projects that would not retain all stormwater onsite and the Kern County Grading Code. The project proponent shall prepare an Erosion and Sedimentation Control Plan as well as a Stormwater Pollution Prevention Plan (SWPPP). The plan shall be prepared by a Qualified SWPPP Developer (QSD) and submitted for review and approval by the applicable Regional Water Quality Control Board. The SWPPP BMPs shall include, but not be limited to, the following: • Scheduling to avoid construction during rain events to the maximum extent possible • Preservation of existing vegetation and topography to the maximum extent practicable • Stabilized construction entrances and exits • Erosion control (including all pertinent temporary erosion control practices as specified in Chapter 17.28.140 of the Kern County	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Grading Code), such as mulching, temporary drains and cullies, sandbag barrier, geotextiles and mats, silt fences, brush or rock filters, earth dikes, straw bale barriers, and sediment traps • Sediment control • Waste management • Good housekeeping • Post-construction site stabilization Prior to initial construction mobilization, preconstruction surveys shall be performed and sediment and erosion controls shall be installed in accordance with the approved SWPPP. A copy of the approved SWPPP shall be submitted to the Kern County Planning and Natural Resources Department. **MM 4.7-4:** The project proponent shall limit grading to the minimum area necessary for construction. Prior to the initiation of construction, the project proponent shall retain a California registered and licensed professional engineer to submit final grading earthwork and foundation plans to the Kern County Public Works for approval.	
Impact 4.7-4: The project would 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 onsite or offsite landslides, lateral spreading, subsidence, liquefaction, or collapse.	Potentially significant	Implementation of Mitigation Measures MM 4.7-1 and MM 4.7-2 is required.	Less than significant
Impact 4.7-5: The project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, as defined in *CEQA Guidelines* Section 15064.	Potentially significant	**MM 4.7-5:** The project proponent/operator shall retain a qualified paleontologist, defined as a paleontologist meeting the Society for Vertebrate Paleontology's Professional Standards (Society for Vertebrate Paleontology, 2010), to carry out all mitigation measures related to paleontological resources. a. Prior to commencement of any ground disturbing activities, the qualified paleontologist shall conduct a Paleontological Resources Awareness Training program for all construction	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		personnel working on the project. A Paleontological Resources Awareness Training Guide approved by the qualified paleontologist shall be provided to all personnel. A copy of the Paleontological Resources Awareness Training Guide shall be submitted to the Kern County Planning and Natural Resources Department. The training guide may be presented in video form. b. Paleontological Resources Awareness Training may be conducted in conjunction with other awareness training requirements. c. The training shall include an overview of potential paleontological resources that could be encountered during ground disturbing activities to facilitate worker recognition, avoidance, and subsequent immediate notification to the qualified paleontologist for further evaluation and action, as appropriate; and penalties for unauthorized artifact collecting or intentional disturbance of paleontological resources. d. The Paleontological Resources Awareness Training Guides shall be kept onsite and available for all personnel to review and be familiar with as necessary. **MM 4.7-6:** A qualified paleontologist or designated monitor shall monitor all ground-disturbing activity (with the exception of vibratory or hydraulic installation of tracking or mounting structures and foundations or supports) that occurs at a depth of 5 feet or deeper below ground surface. a. The duration and timing of monitoring shall be determined by the qualified paleontologist in consultation with the Kern County Planning and Natural Resources Department, and shall be based on a review of geologic maps and grading plans. i. During the course of monitoring, if the paleontologist can demonstrate based on observations of subsurface conditions that the level of monitoring should be reduced, the paleontologist, in consultation with the Kern County Planning and Natural Resources Department, may adjust the level of monitoring to circumstances, as warranted.	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		b. Paleontological monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The qualified paleontologist or paleontological monitor shall have authority to temporarily divert excavation operations away from exposed fossils to collect associated data and recover the fossil specimens if deemed necessary. c. Following the completion of construction, the qualified paleontologist shall prepare a report within 60 days after completion of construction, documenting the absence or discovery of fossil resources onsite. If fossils are found, the report shall summarize the results of the inspection program, identify those fossils encountered, recovery and curation efforts, and the methods used in these efforts, as well as describe the fossils collected and their significance. A copy of the report shall be provided to the Kern County Planning and Natural Resources Department and to an appropriate repository such as the Natural History Museum of Los Angeles County. **MM 4.7-7:** If a paleontological resource is found, the project contractor shall cease ground-disturbing activities within 50 feet of the find. The qualified paleontologist shall evaluate the significance of the resources and recommend appropriate treatment measures. At each fossil locality, field data forms shall be used to record pertinent geologic data, stratigraphic sections shall be measured, and appropriate sediment samples shall be collected and submitted for analysis. Any fossils encountered and recovered shall be catalogued and donated to a public, non-profit institution with a research interest in the materials. Accompanying notes, maps, and photographs shall also be filed at the repository.	
Impact 4.7: Cumulative Impacts	Less than significant	Implementation of Mitigation Measures MM 4.7-1 through MM 4.7-7 is required.	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.8 Greenhouse Gases			
Impact 4.8-1: The project would generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.	Potentially significant	No mitigation would be required; however, implementation of Mitigation Measure MM 4.3-3 would further reduce GHG emissions from construction activities.	Less than significant
Impact 4.8-2: The project would conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.8: Cumulative Impacts	Less than significant	No mitigation measures are required.	Less than significant
4.9 Hazards and Hazardous Materials			
Impact 4.9-1: The project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	Potentially significant	Implementation of Mitigation Measure MM 4.17-1 is required. **MM 4.9-1:** During the life of the project, including decommissioning, the project operator shall prepare and maintain a Hazardous Materials Business Plan, as applicable, pursuant to Article 1 and Article 2 of California Health and Safety Code 6.95 and in accordance with Kern County Ordinance Code 8.04.030, by submitting all the required information to the California Environmental Reporting System at http://cers.calepa.ca.gov/ for review and acceptance by the Kern County Environmental Health Services Division/Hazardous Materials Section. The Hazardous Materials Business Plan shall: • Delineate hazardous material and hazardous waste storage areas • Describe proper handling, storage, transport, and disposal techniques • Describe methods to be used to avoid spills and minimize impacts in the event of a spill	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		• Describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction and operation • Establish public and agency notification procedures for spills and other emergencies including fires • Include procedures to avoid or minimize dust from existing residual pesticides and herbicides that may be present on the site The project proponent shall ensure that all contractors working on the project are familiar with the facility's Hazardous Materials Business Plan as well as ensure that one copy is available at the project site at all times. In addition, a copy of the accepted Hazardous Materials Business Plan from the California Environmental Reporting System shall be submitted to the Kern County Planning and Natural Resources Department for inclusion in the projects permanent record.	
Impact 4.9-2: The project would 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.	Potentially significant	Implementation of Mitigation Measures MM 4.9-1 and MM 4.17-1 is required. **MM 4.9-2:** The project proponent/operator shall continuously comply with the following: a. The construction contractor or project personnel shall use herbicides that are approved by the California Department of Fish and Wildlife and U.S. Fish and Wildlife Service. Personnel applying herbicides shall have all appropriate State and local herbicide applicator licenses and comply with all State and local regulations regarding herbicide use. b. Herbicides shall be mixed and applied in conformance with the manufacturer's directions. c. The herbicide applicator shall be equipped with splash protection clothing and gear, chemical resistant gloves, chemical spill/splash wash supplies, and material safety data sheets for all hazardous materials to be used. To minimize harm to wildlife, vegetation, and water bodies, herbicides shall not be applied directly to wildlife.	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		d. Products identified as non-toxic to birds and small mammals shall be used if nests or dens are observed; and herbicides shall not be applied if it is raining at the site, rain is imminent, or the target area has puddles or standing water. e. Herbicides shall not be applied when wind velocity exceeds 10 miles per hour. If spray is observed to be drifting to a non-target location, spraying shall be discontinued until conditions causing the drift have abated. f. A written record of all herbicide applications on the site, including dates and amounts shall be furnished to the Kern County Planning and Natural Resources Department.	
Impact 4.9-3: The project would emit hazardous emissions or involves handling hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school.	Potentially significant	Implementation of Mitigation Measures MM 4.9-1, MM 4.9-2, and MM 4.17-1 is required.	Less than significant
Impact 4.9-4: The project would result in a safety hazard or excessive noise for people residing or working in the project area, for a project located within the adopted Kern County Airport Land Use Compatibility Plan.	Potentially significant	Implementation of Mitigation Measures MM 4.1-5 and MM 4.1-6is required. **MM 4.9-3:** Prior to the issuance of building and grading permits, the project proponent/operator shall comply with the following: a. Submit Form 7460-1 (Notification of Proposed Construction or Alteration) to the Federal Aviation Administration, in the form and manner prescribed in Code of Federal Regulation 77.17 (if applicable). b. Provide documentation to the Kern County Planning and Natural Resources Department demonstrating that a copy of the final site plans has been provided to the operators of the Inyokern Airport.	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
Impact 4.9-5: The project would expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.	Potentially significant	Implementation of Mitigation Measure MM 4.14-1 is required.	Less than significant
Impact 4.9: Cumulative Impacts	Potentially significant	Implementation of Mitigation Measures MM 4.9-1, MM 4.9-2, MM 4.9-3, MM 4.1-5, MM 4.1-6, MM 4.14-1, and MM 4.17-1 is required.	Less than significant
4.10 Hydrology and Water Quality			
Impact 4.10-1: The project would violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality.	Potentially significant	Implementation of Mitigation Measures MM 4.7-3 and MM 4.9-1 is required. **MM 4.10-1:** Prior to the issuance of a grading permit, the project proponent/operator shall complete a hydrologic study and final drainage plan designed to evaluate and minimize potential increases in runoff from the project site. The study shall include, but is not limited to the following: a. Numerical stormwater model for the project site and would evaluate existing and proposed (with project) drainage conditions during storm events ranging up to the 100-year event. b. The study shall also consider potential for erosion and sedimentation in light of modeled changes in stormwater flow across the project area that would result from project implementation. c. The drainage plan would include engineering recommendations to be incorporated into the project design and applied within the site boundary. Engineering recommendations will include measures to offset increases in stormwater runoff that would result from the project, as well as implementation of design measures to minimize or manage flow concentration and changes in flow depth or velocity so as to minimize erosion, sedimentation, and flooding onsite or offsite.	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		d. The final design of the solar arrays shall include one-foot of freeboard clearance above the calculated maximum flood depths for the solar arrays or the finished floor of any permanent structures. Solar panel sites located within a 100-year floodplain shall be graded to direct potential flood waters without increasing the water surface elevations more than one foot or as required by Kern County's Floodplain Management Ordinance. e. The hydrologic study and drainage plan shall be prepared in accordance with the Kern County Grading Code and Kern County Development Standards, and approved by the Kern County Public Works Department prior to the issuance of grading permits.	
Impact 4.10-2: The project would substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin.	Significant and unavoidable	**MM 4.10-2:** The proposed project proponent/operator would be required to comply with all applicable restrictions on groundwater use as applicable to the Indian Wells Valley Groundwater Authority's Groundwater Sustainability Plan for the Indian Wells Valley Groundwater Basin. During construction, operation, and decommissioning, the project shall implement water conservation measures to the maximum extent possible. **MM 4.10-3:** Prior to the issuance of a grading or building permit, written documentation shall be submitted to the Kern County Planning and Natural Resources Department that the project proponent has verified the water source for project construction and operation by one of the following methods: a. A will serve letter from the Inyokern Community Services District dated within 60 days of application for the grading or building permit; or b. A letter from the Indian Wells Valley Groundwater Authority dated within 60 days of application for the grading or building permit acknowledging that a new well drilled and developed within the project boundaries, which is permitted by Kern County Public Health, can pump groundwater and state the amount of groundwater pumping allowed per year; or c. A letter from a water provider outside of the Basin, showing the source and amount of water and method of delivery to the site.	Significant and unavoidable

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
Impact 4.10-3: The project would substantially alter the existing drainage patterns 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 than would result in substantial erosion and/or sedimentation on-site or off-site.	Potentially significant	Implementation of Mitigation Measures MM 4.7-3 and MM 4.10-1 is required.	Less than significant
Impact 4.10-4: The project would substantially alter the existing drainage patterns 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 that would substantially increase the rate or amount of surface runoff which would result in flooding on- or off- site.	Potentially significant	Implementation of Mitigation Measure MM 4.10-1 is required.	Less than significant
Impact 4.10-5: The project would 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.	Potentially significant	Implementation of Mitigation Measure MM 4.10-1 is required.	Less than significant
Impact 4.10-6: The project would contribute to inundation by a flood hazard, tsunami, or seiche zones, that would result in risk of release of pollutants.	Potentially significant	Implementation of Mitigation Measure MM 4.9-1 is required.	Less than significant
Impact 4.10-7: The project would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	Potentially significant	Implementation of Mitigation Measures MM 4.7-3 and MM 4.10-1 through MM 4.10-3 is required.	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
Impact 4.10: Cumulative Impacts	Significant and unavoidable	Implementation of Mitigation Measures MM 4.7-3, MM 4.9-1 and MM 4.10-1 through MM 4.10-3 is required.	Significant and unavoidable
4.11 Land Use			
Impact 4.11-1: The project would conflict with applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	Potentially significant	Implementation of Mitigation Measures MM 4.1-4 and MM 4.1-6 is required. **MM 4.11-1:** Prior to the issuance of grading/building permits, the project proponent shall either: a. Keep all recorded access easements within the project boundaries free and clear of development and revise site plans accordingly and provide an updated site plan to the Kern County Planning and Natural Resources Department showing the easement and panel setbacks; or b. Record a minimum 30-foot-wide public access easement traversable to a standard vehicle for APN 352-501-04 approved by the Kern County Planning and Natural Resources Director and provide an updated site plan to the Kern County Planning and Natural Resources Department showing the easement and panel setbacks.	Less than significant
Impact 4.11: Cumulative Impacts	Potentially significant	Implementation of Mitigation Measures MM 4.1-4, MM 4.1-6, and MM 4.11-1 is required. **MM 4.11-2:** Prior to issuance of any building permit, the project operator shall provide a Decommission Plan for review and approval by the Kern County Engineering, Surveying, and Permit Services Department or a County-contracted consulting firm at a cost to be borne by the project operator. The Decommission Plan shall factor in the cost to remove the solar panels and support structures, replacement of any disturbed soil from removal of support structures, and control of fugitive dust on the remaining undeveloped land. Salvage value for the solar panels and support structures shall be included in the financial assurance calculations. The assumption, when preparing the estimate, is that the project operator is incapable of performing the work or has abandoned the solar facility, thereby requiring Kern County to hire an independent contractor to perform	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		the decommissioning work. In addition to submitting a Decommission Plan, the project operator shall post or establish and maintain financial assurances with Kern County related to the deconstruction of the site as identified on the approved Decommission Plan in the event that at any point in time the project operator determines it is not in the company's best interest to operate the facility. The financial assurance required prior to issuance of any building permit shall be established using one of the following: a. An irrevocable letter of credit; b. A surety bond; c. A trust fund in accordance with the approved financial assurances to guarantee the deconstruction work will be completed in accordance with the approved decommission plan; or d. Other financial assurances as reviewed and approved by the respective County administrative offices, in consultation with the Kern County Planning and Natural Resources Department. The financial institution or Surety Company shall give the County at least 120 days' notice of intent to terminate the letter of credit or bond. Financial assurances shall be reviewed annually by the Kern County Engineering, Surveying, and Permit Services Department or County contracted consulting firm(s) at a cost to be borne by the project operator to substantiate those adequate funds exist to ensure deconstruction of all solar panels and support structures identified on the approved Decommission Plan. Should the project operator deconstruct the site on their own, the County will not pursue forfeiture of the financial assurance. Once deconstruction has occurred, financial assurance for that portion of the site will no longer be required and any financial assurance posted shall be adjusted or returned accordingly. Any funds not utilized through decommission of the site by the County shall be returned to the project operator. Should any portion of the solar field not be in operational condition for a consecutive period of 12 months that portion of the site shall be	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		deemed abandoned and shall be removed within 60 days from the date a written notice is sent to the property owner and solar field owner, as well as the project operator, by the County. Within this 60-day period, the property owner, solar field owner, or project operator may provide the director of the Kern County Planning and Natural Resources Department a written request and justification for an extension for an additional 12 months. The Kern County Planning and Natural Resources Director shall consider any such request at a Director's Hearing as provided for in Section 19.102.070 of the Kern County Zoning Ordinance. In no case shall a solar field that has been deemed abandoned be permitted to remain in place for more than 48 months from the date the solar facility was first deemed abandoned. **MM 4.11-3:** Prior to the operation of the solar facility, the operator shall consult with the Department of Defense to identify the appropriate Frequency Management Office officials to coordinate the use of telemetry to avoid potential frequency conflicts with military operations.	
4.12 Mineral Resources			
Impact 4.12-1: The project would result in the loss of availability of a known mineral resource that would be of value to the region and residents of the State.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.12-2: The project would 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	No mitigation measures are required.	No impact
Impact 4.12: Cumulative Impacts	Less than significant	No mitigation measures are required.	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.13 Noise			
Impact 4.13-1: The project would result in generation of a substantial temporary or permanent increase in the 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.	Significant and unavoidable	**MM 4.13-1:** The following measures are to be implemented to further reduce short-term noise levels associated with project construction and decommissioning: a. Equipment staging shall be located in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the project site during construction to the extent practical. The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site, where feasible. Equipment staging shall be located in areas that will create the greatest distance between construction-related noise sources and noise sensitive receptors nearest the project site during construction to the extent practical. The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site, where feasible. b. Construction equipment shall be fitted with noise-reduction features such as mufflers and engine shrouds that are no less effective than those originally installed by the manufacturer. c. Construction and decommissioning activities at the project site shall comply with the hourly restrictions for noise-generating construction activities, as specified in the County's Code of Ordinances, Chapter 8.36. Accordingly, construction activities shall be prohibited between the hours of 9 p.m. and 6 a.m. on weekdays, and between 9 p.m. and 8 a.m. on weekends. These hourly limitations shall not apply to activities where hourly limitations would result in increased safety risk to workers or the public, such as commissioning and maintenance activities that must occur after dark to ensure photovoltaic arrays are not energized, unanticipated emergencies requiring immediate attention, or security patrols.	Significant and unavoidable

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		d. Haul trucks shall not be allowed to idle for periods greater than five minutes, except as needed to perform a specified function (e.g., concrete mixing). e. Onsite vehicle speeds shall be limited to 15 miles per hour, or less (except in cases of emergency). f. Back-up beepers for all construction equipment and vehicles shall be broadband sound alarms or adjusted to the lowest noise levels possible, provided that the Occupational Safety and Health Administration and California Division of Occupational Safety and Health's safety requirements are not violated. On vehicles where back-up beepers are not available, alternative safety measures such as escorts and spotters shall be employed. **MM 4.13-2:** The construction contractor shall establish a Noise Disturbance Coordinator for the project during construction. The Noise Disturbance Coordinator shall be responsible for responding to any complaints about construction noise. The Noise Disturbance Coordinator shall determine the cause of the complaint and shall be required to implement reasonable measures to resolve the complaint. Contact information for the Noise Disturbance Coordinator shall be submitted to the Kern County Planning and Natural Resources Department prior to commencement of any ground disturbing activities. **MM 4.13-3:** Prior to commencement of any onsite construction activities (i.e., fence construction, mobilization of construction equipment, initial grading, etc.), including decommissioning, the project proponent/operator shall provide written notice to the public through mailing a notice, which shall include: a. The mailing notice shall be to all residences within 1,000 feet of the project site, 15 days or less prior to construction activities. The notices shall include the construction schedule and a telephone number and email address where complaints and questions can be registered with the noise disturbance coordinator.	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		b. A minimum of one sign, legible at a distance of 50 feet, shall be posted at the construction site, or adjacent to the nearest public access to the main construction entrance, throughout construction activities that shall provide the construction schedule (updated as needed) and a telephone number where noise complaints can be registered with the noise disturbance coordinator. c. Documentation that the public notice has been sent and the sign has been posted shall be provided to the Kern County Planning and Natural Resources Department.	
Impact 4.13-2: The project would expose persons to or generation excessive ground borne vibration or ground borne noise levels.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.13-3: The project would create a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.13-4: The project is located within the Kern County Airport Land Use Compatibility Plan and would expose people residing or working in the project area to excessive noise levels.	Potentially significant	**MM 4.13-4:** The project contractor(s) shall implement a hearing protection plan for onsite construction workers in accordance with applicable California Division of Occupational Safety and Health Administration worker hearing conservation requirements. The plan shall include provisions for protecting onsite construction workers from high noise levels, such as the use of ear plugs or other hearing protection devices, and safety procedures for communicating with other onsite construction workers who may be using hearing protection devices, such as hand gestures and other visual communication.	Less than significant
Impact 4.13: Cumulative Impacts	Potentially significant	Implementation of Mitigation Measures MM 4.13-1 through MM 4.13-4 is required.	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.14 Public Services			
Impact 4.14-1: The project would result in substantial adverse physical impacts associated with the provision of new or physically altered government 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 fire protection services or police protection and law enforcement services.	Potentially significant	**MM 4.14-1:** Prior to the issuance of grading or building permits, the project proponent/operator shall develop and implement a Fire Safety Plan for use during construction, operation, and decommissioning. The project proponent/operator shall submit the plan, along with maps of the project site and access roads, to the Kern County Fire Department for review and approval. A copy of the approved fire safety plan shall be submitted to the Kern County Planning and Natural Resources Department. The fire safety plan shall contain notification procedures and emergency fire precautions including, but not limited to the following: a. All internal combustion engines, both stationary and mobile, shall be equipped with spark arresters. Spark arresters shall be in good working order. b. Light trucks and cars with factory-installed (type) mufflers shall be used only on roads where the roadway is cleared of vegetation. These vehicle types will maintain their factory-installed (type) muffler in good condition. c. Fire rules shall be posted on the project bulletin board at the contractor's field office and areas visible to employees. d. Equipment parking areas and small stationary engine sites shall be cleared of all extraneous flammable materials. e. Personnel shall be trained in the practices of the fire safety plan relevant to their duties. Construction and maintenance personnel shall be trained and equipped to extinguish small fires to prevent them from growing into more serious threats. f. The project proponent/operator shall make an effort to restrict the use of chainsaws, chippers, vegetation masticators, grinders, drill rigs, tractors, torches, and explosives to periods outside of the official fire season. When the above tools are used, water tanks equipped with hoses, fire rakes, and axes shall be easily accessible to personnel.	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		MM 4.14-2: The project proponent/operator shall implement the following mitigation steps at the project site: a. For facility operation, the project proponent/operator shall pay for impacts on countywide public protection, sheriff's patrol and investigative services, and fire services at a rate of $29.59 per 1,000 square feet of panel-covered ground for the facility operation and related onsite structures for the entire covered area of the project. The total amount shall be divided by 20 and paid on a yearly basis. Any operation that continues past 20 years shall pay the same yearly fee. If completed in phases, the annual amount shall be based on the square footage of ground covered by April 30 of each year of operation. Alternatively, the project proponent/operator may choose to pay the total amount, based on 20 years of operations, as a one-time lump sum rather than ongoing annual payments. The amount shall be paid to the Kern County Auditor/Controller by April 30 of each calendar year for each and every year of operation. Copies of payments made shall be submitted to the Kern County Planning and Natural Resources Department. b. Written verification of ownership of the project shall be submitted to the Kern County Planning and Natural Resources Department by April 15 of each calendar year. If the project is sold to a city, county, or utility company with assessed taxes that total less than $1,000 per megawatt per year, then that entity shall pay the taxes plus the amount necessary to equal the equivalent of $1,000 per megawatt. The amount shall be paid for all years of operation. The fee shall be paid to the Kern County Auditor/Controller by April 30 of each calendar year. c. The project proponent/operator shall work with the County to determine how the use of sales and use taxes from construction of the project can be maximized. This process shall include, but is not necessarily limited to, the project proponent/operator obtaining a street address within the unincorporated portion of Kern County for acquisition, purchasing and billing purposes, and registering this address with the State Board of Equalization.	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		As an alternative to the aforementioned process, the project proponent/operator may make arrangements with Kern County for a guaranteed single payment that is equivalent to the amount of sales and use taxes that would have otherwise been received (less any sales and use taxes actually paid); with the amount of the single payment to be determined via a formula approved by Kern County. The project proponent/operator shall allow the County to use this sales tax information publicly for reporting purposes.	
Impact 4.14: Cumulative Impacts	Potentially significant	Implementation of Mitigation Measures MM 4.14-1 and MM 4.14-2 is required.	Less than significant
4.15 Traffic and Transportation			
Impact 4.15-1: The project would conflict with a program, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, as follows: Kern County General Plan LOS "D."	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.15-2: The project would conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards developed by the county congestion management agency for designated roads or highways.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.15: Cumulative Impacts	Potentially significant	**MM 4.15-1:** Prior to the issuance of construction or building permits, the project proponent/operator shall: a. Prepare and submit a Construction Traffic Control Plan to Kern County Public Works Department – Development Review and the California Department of Transportation offices for District 9, as appropriate, for approval. The Construction Traffic Control Plan must be prepared in accordance with both the	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		California Department of Transportation Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following issues: i. Timing of deliveries of heavy equipment and building materials; ii. Directing construction traffic with a flag person; iii. Placing temporary signing, lighting, and traffic control devices if required, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic; iv. Ensuring access for emergency vehicles to the project sites; v. Temporarily closing travel lanes or delaying traffic during materials delivery, transmission line stringing activities, or any other utility connections; vi. Maintaining access to adjacent property; and vii. Specifying both construction-related vehicle travel and oversize load haul routes, minimizing construction traffic during the AM and PM peak hour, distributing construction traffic flow across alternative routes to access the project sites, and avoiding residential neighborhoods to the maximum extent feasible. Monitoring shall be conducted on a weekly basis by the project proponent/operator and any deficiencies shall be corrected immediately. Proof of compliance shall be available and furnished at the request of the Kern County Public Works Department-Development Review and the California Department of Transportation at any time during construction of gen-tie facilities. b. Obtain all necessary encroachment permits for the work within the road right-of-way or use of oversized/overweight vehicles that will utilize county maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
		Kern County Planning and Natural Resources Department, the Kern County Public Works Department-Development Review, and the California Department of Transportation. c. Enter into a secured agreement with Kern County to ensure that any County roads that are demonstrably damaged by project-related activities are promptly repaired and, if necessary, paved, slurry-sealed, or reconstructed as per requirements of the State and/or Kern County. d. Submit documentation that identifies the roads to be used during construction. The project proponent/operator shall be responsible for repairing any damage to non-county maintained roads that may result from construction activities. The project proponent/operator shall submit a preconstruction video log and inspection report regarding roadway conditions for roads used during construction to the Kern County Public Work Department-Development Review and the Kern County Planning and Natural Resources Department. e. Within 30 days of completion of construction, the project proponent/operator shall submit a post-construction video log and inspection report to the County. This information shall be submitted in digital video disc format. The County, in consultation with the project proponent/operator's engineer, shall determine the extent of remediation required, if any.	

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.16 Tribal Cultural Resources			
Impact 4.16-1a: The project would 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 that is 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).	No impact	No mitigation measures are required.	No impact
Impact 4.16-1b: The project would cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources 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 that is 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 Resources Code section 5024.1, the lead agency shall consider the significance of the	No impact	No mitigation measures are required.	No impact

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
resource to a California Native American tribe.			
Impact 4.16: Cumulative Impacts	No impact	No mitigation measures are required.	No impact
4.17 Utilities and Service Systems			
Impact 4.17-1: The project would require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which would cause significant environmental effects.	Significant and unavoidable	Implementation of Mitigation Measures MM 4.7-3 and MM 4.10-1 through MM 4.10-3 is required.	Significant and unavoidable
Impact 4.17-2: The project would have insufficient water supplies available to serve the project from existing entitlements and resources, and new or expanded entitlement is needed.	Potentially significant	Implementation of Mitigation Measure MM 4.10-2 is required.	Less than significant
Impact 4.17-3: The project would result in a determination by the waste water 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.	Less than significant	No mitigation measures are required.	Less than significant

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
Impact 4.17-4: The project would 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.	Potentially significant	**MM 4.17-1:** During construction, operation, and decommissioning, debris and waste generated shall be recycled to the extent feasible. a. An onsite Recycling Coordinator shall be designated by the project proponent/operator to facilitate recycling as part of the Maintenance, Trash Abatement and Pest Management Program. b. The Recycling Coordinator shall facilitate recycling of all construction waste through coordination with contractors, local waste haulers, and/or other facilities that recycle construction/demolition wastes. c. The onsite Recycling Coordinator shall also be responsible for ensuring wastes requiring special disposal are handled according to State and County regulations that are in effect at the time of disposal. d. Contact information of the coordinator shall be provided to the Kern County Planning and Natural Resources Department prior to issuance of building permits. e. The project proponent/operator shall provide a storage area for recyclable materials within the fenced project area that is clearly identified for recycling. This area shall be maintained on the site during construction, operations and decommissioning. A site plan showing the recycling storage area shall be submitted prior to the issuance of any grading or building permit for the site.	Less than significant
Impact 4.17-5: The project would comply with federal, State, and local management and reduction statutes and regulations related to solid waste.	Potentially significant	Implementation of Mitigation Measure MM 4.17-1 is required.	Less than significant
Impact 4.17: Cumulative Impacts	Significant and unavoidable	Implementation of Mitigation Measures MM 4.7-3, MM 4.10-1 through MM 4.10-3, and MM 4.17-1 is required.	Significant and unavoidable

TABLE 1-9: SUMMARY OF IMPACTS, MITIGATION MEASURES, AND LEVELS OF SIGNIFICANCE

Impact	Level of Significance before Mitigation	Mitigation Measures	Level of Significance after Mitigation
4.18 Wildfire			
Impact 4.18-1: The project would substantially impair an adopted emergency response plan or emergency evacuation plan.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.18-2: The project would, 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.	Less than significant	No mitigation measures are required.	Less than significant
Impact 4.18-3: The project would 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 to the environment.	Potentially significant	Implementation of Mitigation Measure MM 4.14-1 is required.	Less than significant
Impact 4.18-4: The project would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire instability, or drainage changes.	Potentially significant	Implementation of Mitigation Measure MM 4.10-1 is required.	Less than significant
Impact 4.18: Cumulative Impacts	Significant and unavoidable	Implementation of Mitigation Measures MM 4.10-1 and MM 4.14-1 is required.	Significant and unavoidable