Staff Report 60

General Lease – Industrial Use

APPLICANT:

BigBeau Solar, LLC

PROPOSED ACTION:

AREA, LAND TYPE, AND LOCATION:

120.17 acres, more or less, of State school land in a portion of Section 34, Township 10 North, Range 14 West, SBM, west of Mojave, Kern County.

AUTHORIZED USE:

Construction, use, maintenance, and decommissioning of a new solar energy facility.

TERM:

40 years, beginning August 20, 2020.

CONSIDERATION:

Base Rent in the amount of $43,290 per year, with an annual Consumer Price Index adjustment, or a Royalty Fee of 6 percent of gross income as described in Section 2, Paragraph 6 of the Lease and subject to modification by Lessor as specified in Section 2, Paragraph 6 and Section 3 - General Provisions, Paragraph 3(c), whichever is greater.

SPECIFIC LEASE PROVISIONS:

- Liability insurance in an amount no less than $2,000,000 per occurrence and $5,000,000 aggregate and umbrella liability insurance with minimum limits of $5,000,000 per occurrence and $5,000,000 aggregate; Lessee may satisfy all or part of the insurance requirement through maintenance of a staff-approved self-insurance program as specified in the lease.
- Bond or other surety in the amount of $1,500,000.
- Lessor's Executive Officer or designee may approve a subsidiary corporation wholly owned by Lessee to serve as operator of the facility.

BACKGROUND:

Most of the State's school lands are generally located in the California desert and are what remain of the nearly 5.5 million acres granted to California by Congress in 1853 to benefit public education. In 1984, the California Legislature enacted the School Land Bank Act. Revenue generated from school lands is deposited in the State Treasury for the benefit of the State Teachers' Retirement System.

The BigBeau Solar Project (Project) proposes to develop a photovoltaic (PV) solar facility and associated infrastructure necessary to generate a combined 128 megawatts (MW) of renewable electrical energy and up to 60 MW of a Battery Energy Storage System (BESS) in the southeastern portion of Kern County, west of Mojave. This area is recognized by the National Renewable Energy Laboratory as having solar and wind resources that are suitable for renewable energy development. While the majority of the site (approximately 2,125 acres) has either been purchased or leased by the project proponent, the Project also proposes to use part of a 160-acre school land parcel under the Commission's jurisdiction.

Kern County (County), as the lead agency under the California Environmental Quality Act (CEQA), prepared and certified an Environmental Impact Report (EIR) (SCH No. 2019071059) for the proposed Project on June 2, 2020. The County conducted tribal outreach and consultation in accordance with regulatory and statutory requirements (see detailed discussion under Tribal Cultural Resources below).

Of the proposed 128-MW-capacity system, up to 17 MW of solar PV modules, mounted either on a galvanized metal fixed-tilt or single-axis tracking system, would be constructed on 120.17 acres of the 160-acre school land parcel. The solar PV modules would be mounted on steel support posts that would be pile driven into the ground and connected to inverters. The PV panels 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. No battery storage would be constructed on State land.

The Project has an anticipated operational life of up to 35 years, after which the project proponent may choose to update site technology and recommission or to decommission the site and remove the systems and their components. Any plan to update site technology and recommission the site would require Commission authorization and possibly additional environmental review. All decommissioning and restoration activities on the lease premises would adhere to the requirements of the appropriate governing authorities and in accordance with all applicable federal, state, and county laws and regulations, including CEQA. A collection and recycling

program would be executed to promote recycling of Project components and minimize disposal in landfills. The area would be thoroughly cleaned, and all debris would be removed. At the time of decommissioning, the Applicant is aware that a lease amendment may be necessary if there is any change to the decommissioning plan analyzed in the EIR and incorporated into the lease.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

Public Resources Code sections 6005, 6216, 6217.5, 6501.1, 6503, and 8701; California Code of Regulations, title 2 sections 2000 and 2003.

STATE'S BEST INTERESTS:

The School Land Bank Act states that school lands are to be proactively managed and enhanced to provide an economic base in support of public schools, and requires the Commission to take all action necessary to fully develop school lands, indemnity interests, and attendant mineral interests into a permanent and productive resource base (Pub. Resources Code, § 8701). As a complement to the provisions of the School Land Bank Act, in 2008, the Commission adopted a Resolution supporting the environmentally responsible development of school lands for renewable energy projects.

As part of the State's overall energy policy goals, the proposed lease for a new solar energy facility is in the State's best interests because it would contribute to achieving the State's ambitious greenhouse gas emission reduction target of 40 percent below 1990 levels by 2030 (SB 32, 2016) and renewable energy procurement targets of 60 percent by 2030 and 100 percent by 2045 (SB 100, 2018).

The EIR identified environmental impacts to many issue areas, including but not limited to, Aesthetics, Air Quality, Biological Resources, Cultural/Tribal Cultural Resources, Hydrology/Water Quality, Noise, Wildfire, etc. (see Exhibits C and D). Most of these impacts would be mitigated to less than significant levels through implementation of the Mitigation Monitoring Program (Exhibit C). However, several cumulative impacts under Aesthetics, Air Quality, Biological Resources, Noise, and Wildfire were found to be significant and unavoidable even after mitigation.

Although there would be significant and unavoidable impacts by the proposed Project, there are many benefits, including regionwide or statewide environmental benefits, against its unavoidable environmental risks. In addition to achieving the State's greenhouse gas emission reduction targets provided above, other benefits from the proposed Project would include:

- Helping to meet the increasing demand for clean, safe, renewable electrical power.
- Minimizing environmental effects by using existing electrical distribution facilities, rights-of-way, roads, and other existing infrastructure, where practicable, and minimizing water use.
- Minimizing impacts to threatened species and endangered species.
- Producing and transmitting electricity safely and at a competitive cost.
- Supporting the economic development of Kern County, Los Angeles County, and the State of California.

The full list of benefits is provided in Exhibit D, Section B (Balancing of Benefits and Risks Associated with Lease Approval).

The proposed lease requires the Applicant to insure and indemnify the State for any liability incurred as a result of the lessee's activities on the lease premises and to maintain the improvements at its sole expense. The proposed lease also requires the payment of annual rent, generating revenue for the California State Teachers' Retirement System, consistent with Public Resources Code section 6217.5.

CLIMATE CHANGE:

As stated in *Safeguarding California Plan: 2018 Update* (California Natural Resources Agency 2018), climate change is projected to increase the frequency and severity of natural disasters related to flooding, fire, drought, extreme heat, and storms. The lease area is primarily open land with moderate to low vegetation fuels and are vulnerable to the above events, including drought and the threat of wildland fires. Regular maintenance of vegetation within the lease premises will help minimize the threat of fire hazards to the lease premises.

As provided above, the proposed Project would also help meet the increasing demand for clean, safe, renewable electrical power helping to reduce the generation of greenhouse gases that contribute to climate change.

ENVIRONMENTAL JUSTICE:

Staff reviewed environmental justice data for the area that indicated significant existing pollution burdens related to ozone, drinking water, and environmental cleanups including a very high cardiovascular disease rate. As part of an environmental justice outreach effort, staff contacted several environmental justice organizations in Kern County providing notification of the proposed lease. The letter sent to several environmental justice organizations included a brief description of the proposed lease and named a staff person as a point of contact. No comments on the proposed lease were received as a result of the outreach. Based on a review of the environmental analysis and other documentation, staff believes that the proposed

lease, including the Mitigation Monitoring Program, for a new solar energy generating facility at this location will not exacerbate these existing conditions.

TRIBAL CULTURAL RESOURCES:

As part of the information-gathering process for the cultural resources technical report for the proposed Project, the Applicant's environmental consultant conducted Native American outreach which included a Sacred Lands File (SLF) search conducted by the California Native American Heritage Commission (NAHC) on November 30, 2018, and outreach letters sent on January 17, 2019, to eight tribal groups affiliated within the Project site as indicated by the NAHC. The SLF search conducted by the NAHC stated that no Native American cultural resources are known be located within the Project site or its immediate vicinity.

As part of the County's government-to-government responsibilities pursuant to AB 52, on August 22, 2019, the County sent consultation notification letters via certified mail to California Native American tribes on the County's Master List for AB 52 consultation. Contacted tribes included Twenty-Nine Palms Band of Mission Indians, Manuel Band of Mission Indians, Tejon Indian Tribe, and Torres Martinez Desert Cahuilla Indians.

As a result of the cultural resources study conducted for the proposed Project, 67 cultural resources were documented or updated, and 28 of these were subject to archaeological test excavation. While no significant subsurface archaeological deposits were found during testing, and all resources were recommended as not eligible by the consultant, the County, through the Native American Tribal Consultation process as required by AB 52, had determined that not enough testing has occurred on seven of the sites to definitively reach a conclusion that the sites are less then significant cultural resources and are ineligible for listing or consideration as a tribal cultural resource. The specific sites in question include P-15-019560 through P-15-019566, all of which are prehistoric archaeological sites. However, the configuration of the proposed Project would result in complete avoidance of any construction or operational activities in these areas. Mitigation Measure MM 4.5-2 as part of the EIR and Mitigation Monitoring Program (Exhibit C) requires the project proponent to prepare a Cultural Resources Treatment Plan showing how these sites would be avoided during construction and operational activities prior to issuance of any grading or building permits. As such, no further testing was required as part of the CEQA evaluation, and with the proposed mitigation the resources would not be impacted by the Project and impacts would be less than significant. In addition, MM 4.5-3 requires the services of Native American Tribal Monitors during the implementation of the Project, working under the supervision of the Lead Archaeologist as identified through consultation with appropriate Native American tribes. The Native American Tribal Monitors shall be retained by the project proponent/operator to monitor, on a

full-time basis during ground-disturbing activities associated with Project-related construction.

CONCLUSION:
For the reasons stated above, staff believes issuance of this lease is in the best interests of the State.

OTHER PERTINENT INFORMATION:

1. Approval or denial of the application is a discretionary action by the Commission. Each time the Commission approves or rejects a use of school land, it exercises legislatively delegated authority and responsibility as trustee of the State's school lands as authorized by law. If the Commission denies the application, the Applicant has no right to a lease. Upon expiration or prior termination of the lease, the lessee also has no right to a new lease or to renewal of any previous lease.

2. An EIR, State Clearinghouse No. 2019071059, was prepared for this Project by Kern County and certified on June 2, 2020. The County also adopted Findings, a Statement of Overriding Considerations, and a Mitigation Monitoring Program prepared pursuant to the provisions of CEQA (Pub. Resources Code, § 21081.6, Cal. Code Regs., tit. 14, §§ 15091, 15096, 15093.) Staff reviewed these documents and prepared independent documents for the Commission's consideration contained in the attached Exhibits C (Mitigation Monitoring Program) and D (Findings and Statement of Overriding Considerations).

3. This action is consistent with Strategy 1.1 of the Commission's Strategic Plan to deliver the highest levels of public health and safety in the protection, preservation and responsible economic use of the lands and resources under the Commission's jurisdiction, and Strategy 2.1 to optimize returns for the responsible development and use of State lands and resources, both onshore and offshore. The action is also consistent with Key Action 2.1.2 to promote renewable energy and environmentally responsible resource and energy development projects.

4. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq. The proposed Project includes parcel 228-004 of the Significant Lands Inventory and classified as use category Class B, which authorizes limited use. Environmental values identified for the parcel include biological, endangered species (specifically in the range of desert tortoise), and recreational. As part of the EIR, protocol surveys were conducted for desert tortoise on the parcel with negative results and no signs of the species were found on the parcel. Although there were negative results of the

species present, approximately 40 acres of desert tortoise habitat (desert wash and desert scrub) will be preserved on the parcel providing a wildlife corridor for desert tortoise and other wildlife. A County road on the east side of the parcel and preservation area is designated as a collector road in the Kern County General Plan and will be retained as a public road and would continue to provide public access for any recreational opportunities in the preserved area.

Based upon Commission staff's review of the Significant Lands Inventory and the CEQA analysis in the EIR, the Project as proposed would not significantly affect those lands and is consistent with its use classification.

APPROVALS OBTAINED:

California Independent System Operator

Kern County

APPROVALS REQUIRED:

California Department of Fish and Wildlife

Lahontan Regional Water Quality Control Board

California State Water Resources Control Board

California Department of Transportation

EXHIBITS:

A. Land Description
B. Site and Location Map
C. Mitigation Monitoring Program
D. Findings and Statement of Overriding Considerations

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that an EIR, State Clearinghouse No. 2019071059, was prepared for this project by Kern County and certified on June 2, 2020, and that the Commission has reviewed and considered the information contained therein.

Adopt the Mitigation Monitoring Program, made in conformance with Public Resources Code section 21081.6, as contained in the attached Exhibit C.

Adopt the Findings, made in conformance with California Code of Regulations, title 14, sections 15091 and 15096, subdivision (h), as contained in Exhibit D.

Adopt the Statement of Overriding Considerations made in conformance with California Code of Regulations, title 14, sections 15093 and 15096, subdivision (h), as contained in Exhibit D.

STATE'S BEST INTERESTS:

Find that the proposed lease is in the best interests of the State.

SIGNIFICANT LANDS INVENTORY FINDING:

Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370 et seq.

AUTHORIZATION:

1. Authorize issuance of a General Lease – Industrial Use to the Applicant beginning August 20, 2020, for a term of 40 years, for construction, use, maintenance, and decommissioning of a new solar energy facility consisting of producing up to 17 megawatts on State-owned school land; as described in Exhibit A and shown on Exhibit B, attached and by this reference made a part hereof; Consideration: Base Rent in the amount of $43,290 per year with an annual Consumer Price Index adjustment; or 6 percent of gross income, whichever is greater with the State reserving the right to modify the rent periodically at each 10-year anniversary, as provided in the lease; liability insurance in an amount no less than $2,000,000 per occurrence and $5,000,000 aggregate and umbrella liability insurance with minimum limits of $5,000,000 per occurrence and $5,000,000 aggregate; Lessee may satisfy all or part of the insurance requirement through maintenance of a staff-approved self-insurance program; and surety bond or other security in an amount of $1,500,000.

2. Authorize the Executive Officer or designee to approve a subsidiary corporation wholly owned by Lessee to serve as operator of the solar facility.

EXHIBIT 'A'

W27128

PARCEL A

BEING A PORTION OF THE NORTHEAST QUARTER OF SECTION 34, TOWNSHIP 10 NORTH, RANGE 14 WEST, SAN BERNARDINO MERIDIAN, IN THE UNINCORPORATED AREA OF THE COUNTY OF KERN, STATE OF CALIFORNIA, SAID PORTION BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTH QUARTER CORNER OF SAID SECTION 34;

COURSE 1) THENCE SOUTH 89°38'03" EAST ALONG THE NORTH LINE OF SAID NORTHEAST QUARTER, A DISTANCE OF 1,746.49 FEET;

COURSE 2) THENCE DEPARTING SAID NORTH LINE SOUTH 01°22'39" WEST, A DISTANCE OF 10.90 FEET;

COURSE 3) THENCE SOUTH 03°24'49" WEST, A DISTANCE OF 282.46 FEET;

COURSE 4) THENCE SOUTH 13°32'01" EAST, A DISTANCE OF 1,305.57 FEET;

COURSE 5) THENCE SOUTH 22°50'23" EAST, A DISTANCE OF 587.36 FEET;

COURSE 6) THENCE SOUTH 02°47'25" EAST, A DISTANCE OF 284.27 FEET;

COURSE 7) THENCE SOUTH 02°40'00" EAST, A DISTANCE OF 273.29 FEET;

COURSE 8) THENCE SOUTH 01°24'42" EAST, A DISTANCE OF 5.00 FEET TO THE SOUTH LINE OF SAID NORTHEAST QUARTER;

COURSE 9) THENCE SOUTH 89°53'53" WEST ALONG SAID SOUTH LINE, A DISTANCE OF 2199.98 FEET TO THE CENTER CORNER OF SAID SECTION;

COURSE 10) THENCE NORTH 01°54'51" WEST ALONG THE WEST LINE OF SAID NORTHEAST QUARTER, A DISTANCE OF 2,681.97 FEET TO THE POINT OF BEGINNING.

CONTAINS 120.17 ACRES MORE OR LESS.

ACCOMPANYING PLAT IS HEREBY MADE PART OF THIS DESCRIPTION.

d'Artagnan Alba - LS 9052

7-10-2020
Date:

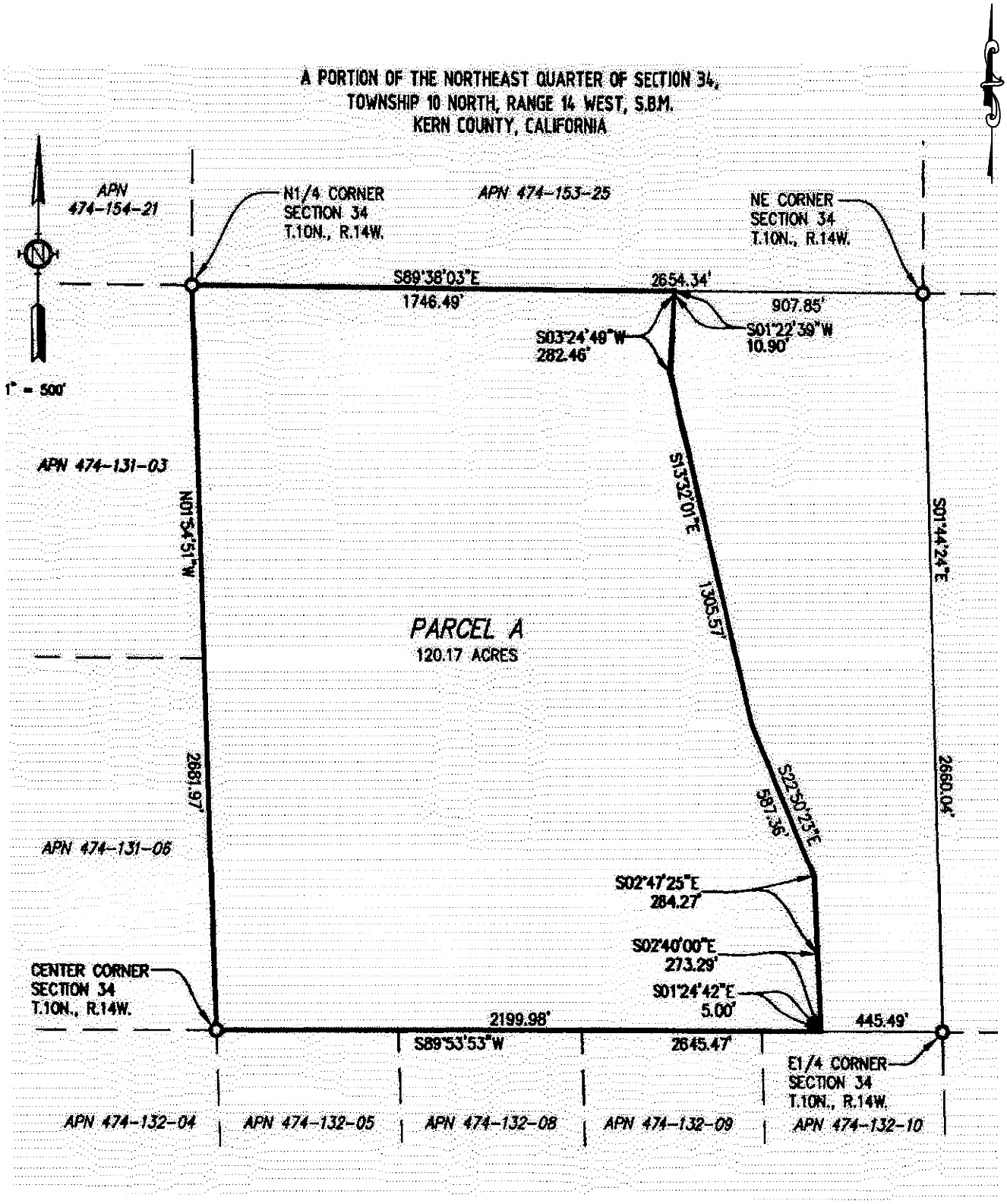


EXHIBIT A

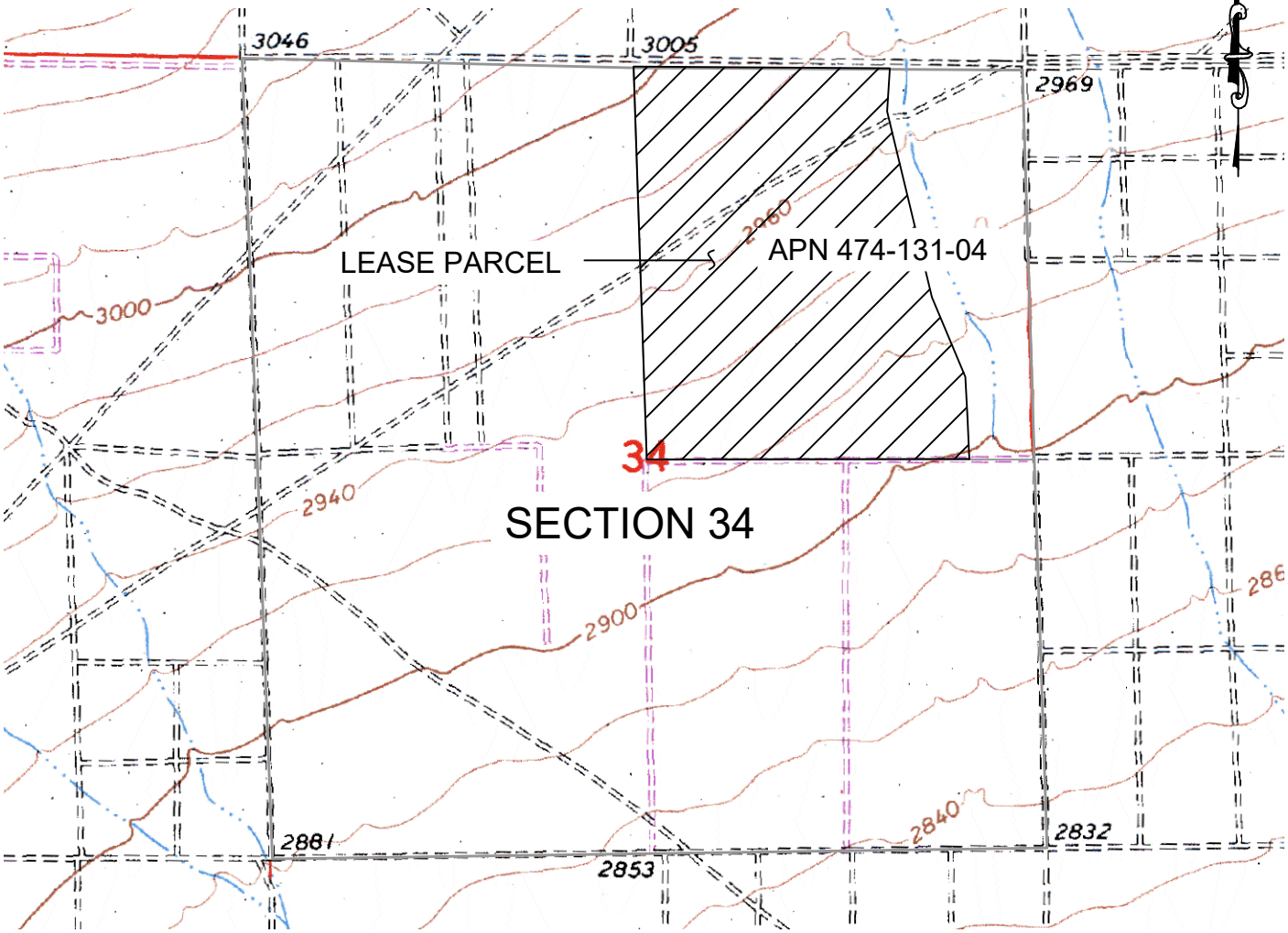
PAGE 2 OF 2

DJF 7/13/2020

LAND DESCRIPTION PLAT W27128, BIGBEAU SOLAR, LLC. KERN COUNTY	CALIFORNIA STATE LANDS COMMISSION

NO SCALE

SITE

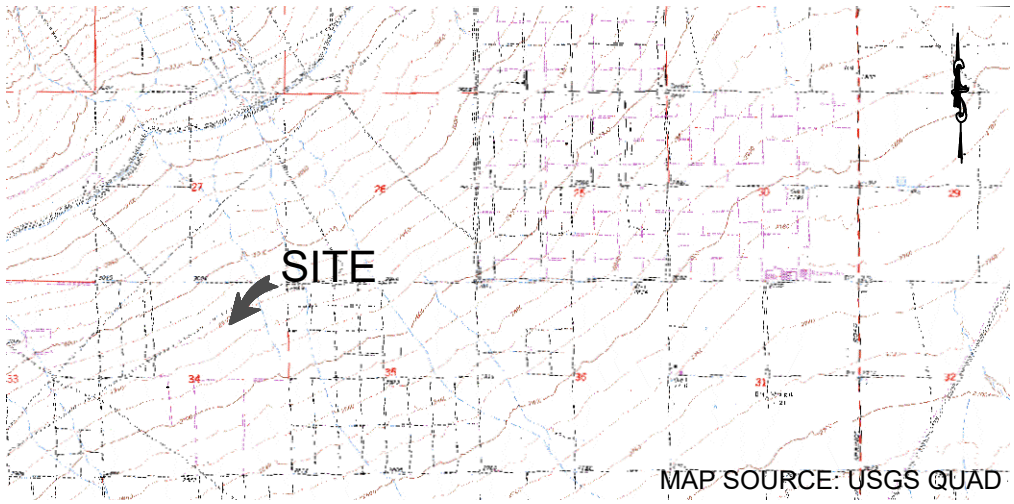


SCHOOL LANDS

PORTION OF SECTION 34, T10 N, R14W, S.B.M.

NO SCALE

LOCATION



MAP SOURCE: USGS QUAD

THIS EXHIBIT IS SOLELY FOR PURPOSES OF GENERALLY DEFINING THE LEASE PREMISES, IS BASED ON UNVERIFIED INFORMATION PROVIDED BY THE LESSEE OR OTHER PARTIES AND IS NOT INTENDED TO BE, NOR SHALL IT BE CONSTRUED AS, A WAIVER OR LIMITATION OF ANY STATE INTEREST IN THE SUBJECT OR ANY OTHER PROPERTY.

EXHIBIT B

W27128
BIGBEAU SOLAR, LLC
APN 474-131-04
GENERAL LEASE -
INDUSTRIAL USE
KERN COUNTY

DJF 7/30/2020

EXHIBIT C
CALIFORNIA STATE LANDS COMMISSION
MITIGATION MONITORING PROGRAM

BIG BEAU SOLAR PROJECT
(W27128, State Clearinghouse No. 2019071059)

The California State Lands Commission (Commission or CSLC) is a responsible agency under the California Environmental Quality Act (CEQA) for the Big Beau Solar Project (Project). The CEQA lead agency for the Project is Kern County (County).

In conjunction with approval of this Project, the Commission adopts this Mitigation Monitoring Program (MMP) for the implementation of mitigation measures for the portion(s) of the Project located on Commission lands. The purpose of a MMP is to impose feasible measures to avoid or substantially reduce the significant environmental impacts from a project identified in an Environmental Impact Report (EIR) or a Mitigated Negative Declaration (MND). State CEQA Guidelines section 15097, subdivision (a), states in part:[1]

> *In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.*

The lead agency certified an EIR, State Clearinghouse No. 2019071059, adopted a MMP for the whole of the Project (see Exhibit C, Attachment C-1), and remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with its program. The Commission's action and authority as a responsible agency apply only to the mitigation measures listed in Table C-1 below. The full text of each mitigation measure, as set forth in the MMP prepared by the CEQA lead agency and provided in Attachment C-1, is incorporated by reference in this Exhibit C. Any mitigation measures adopted by the Commission that differ substantially from those adopted by the lead agency are shown as follows:

- Additions to the text of the mitigation measure are <u>underlined</u>; and
- Deletions of the text of the mitigation measure are shown as ~~strikeout~~ or as otherwise noted.

---

[1] The State CEQA Guidelines are found at California Code of Regulations, title 14, section 15000 et seq.

Table C-1. Project Impacts and Applicable Mitigation Measures

Potential Impact	Mitigation Measure (MM)[2]	Difference Between CSLC MMP and Lead Agency MMP
Aesthetics 4.1-3	MM 4.1-1, MM 4.1-2, MM 4.1-3	None
Aesthetics 4.1-4	MM 4.1-4, MM 4.1-5, MM 4.1-6	None
Air Quality 4.3-1	MM 4.3-1, MM 4.3-2	None
Air Quality 4.3-2	MM 4.3-3, MM 4.3-4	None
Biological Resources 4.4-1	MM 4.4-1, MM 4.4-2, MM 4.4-3, MM 4.4-4, MM 4.4-5, MM 4.4-6, MM 4.4-7, MM 4.9-2	None
Biological Resources 4.4-2	MM 4.4-8, MM 4.4-9	None
Biological Resources 4.4-4	MM 4.4-10	None
Biological Resources 4.4-5	MM 4.4-1 through MM 4.4-10	None
Biological Resources 4.4-6	MM 4.4-1, MM 4.4-2, MM 4.4-4, MM 4.4-5	None
Cultural Resources 4.5-1 and 4.5-2	MM 4.5-1, MM 4.5-2, MM 4.5-3, MM 4.5-4	See Addition Below to MM 4.5-4
Cultural Resources 4.5-3	MM 4.5-5	See Addition Below to MM 4.5-5
Cultural Resources Cumulative	MM 4.5-1 through MM 4.5-5	See Addition Below to MM 4.5-4 and 4.5-5
Energy 4.6-1 and Cumulative	MM 4.3-1	None
Geology and Soils 4.7-6 and Cumulative	MM 4.7-1, MM 4.7-2, MM 4.7-3	None
Hazards and Hazardous Materials 4.9-1	MM 4.9-1, MM 4.17-1	None
Hazards and Hazardous Materials 4.9-2	MM 4.9-1, MM 4.9-2, MM 4.17-1	None
Hazards and Hazardous Materials 4.9-4	MM 4.14-1	None
Hazards and Hazardous Materials Cumulative	MM 4.9-1, MM 4.9-2, MM 4.14-1, MM 4.17-1	None
Hydrology and Water Quality 4.10-1, 4.10-3, 4.10-4, and 4.10-5	MM 4.10-1	None
Land Use and Planning Cumulative	MM 4.11-1, MM 4.11-2	None
Noise 4.12-1 and 4.12-3	MM 4.12-4	None
Noise Cumulative	MM 4.12-1, MM 4.12-2, MM 4.12-3	None
Public Services 4.14-1 and Cumulative	MM 4.14-1, MM 4.14-2	None
Transportation and Traffic 4.15-3 and 4.15-4	MM 4.15-1	None

[2] See Attachment C-1 for the full text of each MM taken from the MMP prepared by the CEQA lead agency.

Potential Impact	Mitigation Measure (MM)[2]	Difference Between CSLC MMP and Lead Agency MMP
Tribal Cultural Resources 4.16-1a, 4.16-1b, and Cumulative	MM 4.5-2	None
Utilities and Service Systems 4.17-1	MM 4.10-1	None
Utilities and Service Systems 4.17-3	MM 4.17-1	None
Wildfire 4.18-3	MM 4.14-1	None
Wildfire 4.18-4	MM 4.10-1	None
Wildfire Cumulative	MM 4.10-1, MM 4.14-1	None

Cultural Resources Impacts 4.5-1, 4.5-2, 4.5-3, and Cumulative:

Additions to existing MMs 4.5-4 and 4.5-5:

MM 4.5-4: 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. The Lead Archaeologist in consultation with the Native American monitor, 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 (CEQA) 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 CEQA 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. Diagnostic archaeological materials with research potential recovered during any investigation shall be curated at an accredited curation facility. The Lead Archaeologist, in consultation with a designated Native American monitor, shall 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. <u>California State Lands Commission staff shall be notified of any California Register of Historic Resources or National Register of Historic Resources-eligible resources or paleontological specimens discovered on lands under the jurisdiction of the Commission.</u> The final disposition of archaeological, historical, and paleontological resources recovered on State lands

under the jurisdiction of the California State Lands Commission must be approved by the Commission.

MM 4.5-5: If human remains are uncovered during project construction, the project contractor shall immediately halt work within 100 ft. 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. California State Lands Commission staff shall be notified of any human remains discovered on lands under the jurisdiction of the Commission so that the Commission may fulfill its responsibilities as the landowner.

ATTACHMENT C-1

Mitigation Monitoring Program

Adopted by the Kern County

ATTACHMENT C-1

EXHIBIT C

FINAL
Mitigation Measure Monitoring Plan (MMMP)

BigBeau Solar Project
By BigBeau Solar, LLC/ EDF Renewables, Inc

ZCC 13, Map 215, ZCC 44, Map 232
CUP 13, Map 215, CUP 14, Map 215
CUP 15, Map 215, CUP 41, Map 232
CUP 42, Map 232, CUP 43, Map 232
GPA 4, Map 215, SPA 32, Map 232

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.1	**Aesthetics**				
1.	**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: 1. 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. 2. 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. 3. 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. 4. Trash and food items shall be contained in closed secured containers 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.	Prior to issuance of grading building permits and during construction and operation	Kern County Planning and Natural Resources Department; Kern County Waste Management Department; Recycling Coordinator		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. Recycle construction waste to the extent feasible. C. Provide Kern County Planning and Natural Resources Department and Kern County Waste Management Department with copies of hauling receipts.			
2.	**MM 4.1-2** Prior to the issuance of the building permit for the solar facility, the project proponent/operator shall provide evidence for the following: The project proponent/operator shall identify and submit a proposed color scheme and treatment plan that will ensure all project facilities including operations and maintenance buildings, gen-tie poles, array facilities, etc. blend in with the colors found in the natural landscape. Any color	Prior to issuance of building permits	Kern County Planning and Natural Resources Department		
		Steps to Compliance:			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.1	**Aesthetics**				
	treatments shall result in matte or nonglossy finishes. The submitted color scheme and treatment plan shall be reviewed and approved by the Planning Director and the project shall continually comply with the approved plan	**A.** This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall submit plans including the proposed color treatment and use nonreflective materials as outlined in mitigation to the Planning and Natural Resources Department for review and approval.			
3.	**MM 4.1-3:** Wherever possible, within the proposed project boundary the natural vegetation shall remain undisturbed. Where disturbance of natural vegetation is necessary that disturbance shall occur in the manner that results in the greatest retention of root balls and native topsoil with mowing being the preferred and primary method of clearing. All natural vegetation adjacent to the proposed project boundary shall remain in place. 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. 1. 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. 2. 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, and a clear prohibition of the use of toxic rodenticides. 3. 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	During construction and prior to commencement of project operation and decommissioning	Kern County Planning and Natural Resources Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. Project proponent shall submit a Landscape Revegetation and Restoration Plan to the Kern County Planning and Natural Resources Department for review and approval prior to the commencement of project operations and decommissioning. C. The project proponent shall submit evidence of implementation of compliance to the Kern County Planning and Natural Resources Department with practices as outlined in mitigation.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.1	**Aesthetics**				
	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). 4. Vegetation/ground cover shall be continuously maintained on the site by the project operator to maintain fire safety requirements. 5. 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 temporarily disturbed areas prove in the second year to not be successful, 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 achieves native plant diversity, establishes perennials, and is consistent with conditions prior to implementation of the proposed project, where feasible.				
4.	**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.	Prior to site plan approvals and issuance of building permits, and during construction and operation	Kern County Public Works Department and Kern County Planning and Natural Resources Staff		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.1	**Aesthetics**				
		B. The project proponent shall ensure all outdoor lighting meet the minimum requirements for safety and security standards as well as provide the minimum illumination needed to achieve safety and security objectives as outlined in the mitigation. C. The Kern County Public Works Department and/or the Kern County Natural Resources Department shall verify compliance.			
5.	**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 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.	Prior to issuance of building permits	Kern County Planning and Natural Resources Department; Kern County Public Works Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall ensure that all panels and hardware utilizes advanced technologies utilized to the extent possible to minimize glare and spectral highlighting as outlined in mitigation. C. Specifications of such designs shall be submitted to the Kern County Planning and Natural Resources Department. D. The Kern County Public Works Department shall verify compliance in the field.			
6.	**MM 4.1-6:** Prior to the issuance of a building permit, the project operator shall demonstrate that all on-site buildings will utilize nonreflective materials, as approved by the Kern County Planning and Natural Resources.	Prior to issuance of building permits	Kern County Planning and Natural Resources Department; Kern County Public Works Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall submit plans including the proposed use of nonreflective materials as outlined in mitigation to the Planning and Natural Resources Department for approval. C. The Kern County Public Works Department shall verify compliance in the field.			
Justification: Changes or alterations to the project have been required to substantially reduce the potentially significant environmental effects identified in the Final EIR to the extent feasible.					

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.3	**Air Quality**				
7.	**MM 4.3-1**: Implement Diesel Emission-Reduction Measures During Construction. To control NO_X and 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) Off-road equipment engines over 25 horsepower shall be equipped with EPA Tier 3 or higher engines, unless Tier 3 construction equipment is not locally available. b) All equipment shall be maintained in accordance with the manufacturer's specifications. c) Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes. d) Notification shall be provided to trucks and vehicles in loading or unloading queues that their engines shall be turned off when not in use for more than 5 minutes. e) Electric equipment shall be used to the extent feasible in lieu of diesel or gasoline-powered equipment. f) All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce NO_X emissions. g) On-road and off-road diesel equipment shall use diesel particulate filters (or the equivalent) if permitted under manufacturer's guidelines. h) Existing electric power sources shall be used to the extent feasible. This measure would minimize the use of higher polluting gas or diesel generators. **i)** The hours of operation of heavy-duty equipment and/or the quantity of equipment in use shall be limited to the extent feasible.	During grading and construction	Kern County Public Works Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall submit evidence of implementation of compliance with practices as outlined in mitigation. C. The Kern County Public Works Department shall verify in the field during the construction phase of the project.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.3	**Air Quality**				
8.	**MM 4.3-2: Implement Fugitive Dust Control Plan During Construction.** To control fugitive PM emissions during construction, prior to the issuance of grading or building permits and any earthwork activities, the project proponent shall prepare a comprehensive Fugitive Dust Control Plan for review by the Kern County Planning and Natural Resources Department. The plan shall include all EKAPCD-recommended measures, including but not limited to, the following: a) 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 soils areas. Watering shall take place a minimum of three times daily where soil is being actively disturbed, unless dust is otherwise controlled by rainfall or use of a dust suppressant. b) Vehicle speed for all on site (i.e., within the project boundary) construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site. Signs identifying construction vehicle speed limits shall be posted along onsite roadways, at the site entrance/exit, and along unpaved site access roads. c) Vehicle speeds on all offsite unpaved roads (i.e., outside the project boundary) construction vehicles shall not exceed 25 mph. Signs identifying vehicle speed limits shall be posted along unpaved site access roads and at the site entrance/exit. d) All onsite unpaved roads and offsite unpaved public project-site access road(s) shall be effectively stabilized of dust emissions using water or EKAPCD-approved dust suppressants/palliatives, sufficient to prevent wind-blown dust exceeding 20 percent opacity at nearby residences or public roads. If water is used, watering shall occur a minimum of three times daily, sufficient to keep soil moist along actively used roadways. During the dry season, unpaved road surfaces and vehicle parking/staging areas shall be watered immediately prior to periods of high use (e.g., worker commute periods, truck convoys). Reclaimed (non-potable) water shall be used to the extent available and feasible. e) The amount of the disturbed area (e.g., grading, excavation) shall be reduced and/or phased where possible.	Prior to issuance of grading permits and during operation	Kern County Planning and Natural Resources Department; Kern County Public Works Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall submit Site Specific Dust Control Plan to the Kern County Public Works Department. C. The Kern County Public Works Department shall verify compliance of vehicular control measures in the field during the construction and decommissioning phases of the project. D. The notice shall be mailed to all parcels within 1,000 feet of the project site and one sign shall be posted at the construction site, no sooner than 15 days prior to construction. E. Documentation shall be sent to the Kern County Planning and Natural Resources Department. F. The Kern County Public Works Department shall verify in the field during the construction phase of the project.				

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.3	**Air Quality**				
	f) All disturbed areas shall be sufficiently watered or stabilized by EKAPCD-approved methods to prevent excessive dust. On dry days, watering shall occur a minimum of three times daily on actively disturbed areas. Watering frequency shall be increased whenever wind speeds exceed 15 mph or, as necessary, to prevent wind-blown dust exceeding 20 percent opacity at nearby residences or public roads. Reclaimed (non-potable) water shall be used to the extent available and feasible. g) All clearing, grading, earth moving, and excavation activities shall cease during periods when dust plumes of 20 percent or greater opacity affect public roads or nearby occupied structures. h) All disturbed areas anticipated to be inactive for periods of 30 days or more shall be treated to minimize wind-blown dust emissions. Treatment may include, but is not limited to, the application of an EKAPCD-approved chemical dust suppressant, gravel, hydro-mulch, revegetation/seeding, or wood chips. i) All active and inactive disturbed surface areas shall be compacted, where feasible. j) Equipment and vehicle access to disturbed areas shall be limited to only those vehicles necessary to complete the construction activities. k) Where applicable, permanent dust control measures shall be implemented as soon as possible following completion of any soil-disturbing activities. l) Stockpiles of dirt or other fine loose material shall be stabilized by watering or other appropriate methods sufficient to reduce visible dust emissions to a limit of 20 percent opacity. If necessary and where feasible, three-sided barriers shall be constructed around storage piles and/or piles shall be covered by use of tarps, hydro-mulch, woodchips, or other materials sufficient to minimize wind-blown dust. m) Water shall be applied prior to and during the demolition of onsite structures sufficient to minimize wind-blown dust.				

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.3	**Air Quality**				
	n) Where acceptable to the fire department and feasible, weed control shall be accomplished by mowing instead of disking, thereby leaving the ground undisturbed and with a mulch covering. o) All trucks hauling dirt, sand, soil, or other loose materials shall be covered or shall maintain at least 2 feet of freeboard (minimum vertical distance between top of the load and top of the trailer) in accordance with California Vehicle Code Section 23114. p) Gravel pads, grizzly strips, or other material track-out control methods approved for use by EKAPCD shall be installed where vehicles enter or exit unpaved roads onto paved roadways. q) Haul trucks and off-road equipment leaving the site shall be washed with water or high-pressure air, and/or rocks/grates at the project entry points shall be used, when necessary, to remove soil deposits and minimize the track-out/deposition of soil onto nearby paved roadways. r) During construction paved road surfaces adjacent to the site access road(s), including adjoining paved aprons, shall be cleaned, as necessary, to remove visible accumulations of track-out material. If dry sweepers are used, the area shall be sprayed with water prior to sweeping to minimize the entrainment of dust. Reclaimed water shall be used to the extent available. s) Portable equipment, 50 horsepower or greater, used during construction activities (e.g., portable generators, temporary concrete batch plant) shall require California statewide portable equipment registration (issued by CARB) or an EKAPCD permit. t) The Fugitive Dust Control Plan shall identify a designated person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures, as necessary, to minimize the transport of dust off site and to ensure compliance with identified fugitive dust control measures. Contact information for a hotline shall be posted on site should any complaints or concerns be received during working hours and holidays and weekend				

4.3	**Air Quality**				
	periods when work may not be in progress. The names and telephone numbers of such persons shall be provided to the EKAPCD Compliance Division prior to the start of any grading or earthwork. u) Signs shall be posted at the project site entrance and written notifications shall be provided a minimum of 30 days prior to initiation of project construction to residential land uses located within 1,000 feet of the project site. The signs and written notifications shall include the following information: (a) Project Name; (b) Anticipated Construction Schedule(s); and (c) Telephone Number(s) for designated construction activity monitor(s) or, if established, a complaint hotline. v) The designated construction monitor shall document and immediately notify EKAPCD of any air quality complaints received. If necessary, the project operator and/or contractor will coordinate with EKAPCD to identify any additional feasible measures and/or strategies to be implemented to address public complaints. w) Prior to construction of any concrete batch plant, the project proponent shall provide EKAPCD with documentation ensuring that any concrete batch plants will be sited at least 1,000 feet from sensitive receptors, including places such as daycare centers, hospitals, senior care facilities, residences, parks, and other areas where people may congregate. The concrete batch plant shall implement typical control measures to reduce fugitive dust, such as water sprays, enclosures, hoods, curtains, shrouds, movable and telescoping chutes, central dust collection systems, and other suitable technology, to reduce emissions to be equivalent to the EPA AP-42 controlled emission factors for concrete batch plants. The contractor shall provide EKAPCD with documentation that each batch plant meets this standard during operation.				
9.	**MM 4.3-3: Minimize Exposure to Potential Valley Fever–Containing Dust**. To minimize personnel and public exposure to potential Valley Fever–	Prior to and during construction	Kern County Planning and Natural Resources Department		

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.3	**Air Quality**				
	containing dust on and off site, the following control measures shall be implemented during project construction: 1. Equipment, vehicles, and other items shall be thoroughly cleaned of dust before they are moved off site to other work locations. 2. Wherever possible, grading and trenching work shall be phased so that earth-moving equipment is working well ahead or downwind of workers on the ground. 3. The area immediately behind grading or trenching equipment shall be sprayed with water before ground workers move into the area. 4. In the event that a water truck runs out of water before dust is sufficiently dampened, ground workers being exposed to dust shall leave the area until a truck can resume water spraying. 5. All heavy-duty earth-moving vehicles shall be closed-cab and equipped with a HEP-filtered air system. 6. Workers shall receive training to recognize the symptoms of Valley Fever, and shall be instructed to promptly report suspected symptoms of work-related Valley Fever to a supervisor. Evidence of training shall be provided to the Kern County Planning and Natural Resources Department within 5 days of the training session. 7. A Valley Fever informational handout shall be provided to all onsite construction personnel. The handout shall, at a minimum, provide information regarding the symptoms, health effects, preventative measures, and treatment. Additional information and handouts can be obtained by contacting the Kern County Public Health Services Department. 8. Onsite personnel shall be trained on the proper use of personal protective equipment, including respiratory equipment. National Institute for Occupational Safety and Health–approved respirators shall be provided to onsite personal, upon request. Evidence of training shall be provided to the Kern County Planning.		**Steps to Compliance:** A. This mitigation measure shall be incorporated as a condition of approval. B. All Valley Fever materials shall be provided to all construction personnel prior to construction activities. C. The project proponent shall ensure practices are implemented as outlined in mitigation. D. The project proponent shall submit all evidence of the training session materials, handout(s) and schedule to the Kern County Planning and Natural Resources Department within 5 days of the first training session.		

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.3	**Air Quality**				
10.	**MM 4.3-4:** 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.	Prior to issuance of grading permits	Kern County Public Health Services Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall pay the onetime fee to the Kern County Public Health Services Department.			
Justification: Changes or alterations to the project have been required to substantially reduce the potentially significant environmental effects identified in the Final EIR to the extent feasible.					

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.4	**Biological Resources**				
11.	**MM 4.4-1: Biological Monitoring.** Prior to the issuance of grading or building permits, the project operator shall retain a Lead Biologist who meets the qualifications of an Authorized Biologist as defined by U.S. Fish and Wildlife Service (USFWS) to oversee compliance with protection measures for all listed and other special-status species. The Lead Biologist shall be on the project site during construction of perimeter fencing and grading activities throughout the construction phase. The Lead Biologist shall have the right to halt all activities that are in violation of the special-status species protection measures. Work shall proceed only after hazards to special-status species are removed and the species is no longer at risk. The Lead Biologist shall have in her/his possession a copy of all the compliance measures while work is being conducted on the project site.	Prior to issuance of grading or building permits	Kern County Planning and Natural Resources Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall retain a Lead Biologist. C. The project proponent shall submit contact information for the Lead biologist to the Kern County Planning and Natural Resources Department or for approval prior to issuance of building and grading permits.			
12.	**MM 4.4-2: Construction Worker Environmental Awareness Training and Education Program.** Prior to the issuance of grading or building permits and for the duration of construction activities, within one week of employment all new construction workers at the project site, laydown area and/or transmission routes shall attend an Environmental Awareness Training and Education Program, developed and presented by the Lead Biologist. Any employee responsible for the operations and maintenance or decommissioning of the project facilities shall also attend the Environmental Awareness Training and Education Program. The program shall include information on the life history of the desert tortoise; burrowing owl; golden eagle, Swainson's hawk, and other raptors; nesting birds; American badger; desert kit fox; as well as other wildlife and plant species that may be encountered 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 operator is implementing to protect the species, reporting requirements, specific measures that each worker shall employ to avoid take of wildlife species, and penalties for violation of the Federal Endangered Species Act or California Endangered Species Act.	Prior to the issuance of grading or building permits, and for the duration of construction activities	Kern County Planning and Natural Resources Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. All construction workers shall attend the Construction Worker Environmental Awareness Training and Education Program prior to participating in construction activities; any employee responsible for the operation and maintenance (O&M) of the completed facilities shall also receive this training C. An acknowledgement form signed by each worker indicating that environmental training has been completed will be kept on record. D. A copy of the training materials, as well as a list of the names of all personnel who attended the training and copies of the signed acknowledgement forms shall be submitted to the Kern County Planning and Natural Resources Department upon the County's request.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.4	**Biological Resources**				
	i. An acknowledgement form signed by each worker indicating that Environmental Awareness Training and Education Program has been completed would be kept on record; ii. A sticker shall be placed on hard hats indicating that the worker has completed the Environmental Awareness Training and Education Program. Construction workers shall not be permitted to operate equipment within the construction areas unless they have attended the Environmental Awareness Training and Education Program and are wearing hard hats with the required sticker; iii. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the Environmental Awareness Training and Education Program and copies of the signed acknowledgement forms shall be submitted to the Kern County Planning and Community Development Department; and iv. The construction crews and contractor(s) shall be responsible for unauthorized impacts from construction activities to sensitive biological resources that are outside the areas defined as subject to impacts by project permits. v. An Operation and Maintenance-phase version of the WEAP will be maintained within the onsite O&M facility for review as may be necessary during the life of the project.				
13.	**MM 4.4-3: Avoidance and Protection of Biological Resources**. During construction, operations and maintenance, and decommissioning the project operator shall implement the following general avoidance and protective measures: a) All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid natural resources where possible. Construction-related activities outside of the impact zone shall be avoided. b) The project operator shall limit the areas of disturbance to the extent feasible. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas	During construction, operations and maintenance, and decommissioning the project	Kern County Public Works Department; Kern County Planning and Natural Resources Department; United States Fish and Wildlife Service; California Department of Fish and Wildlife; Authorized Lead Biologist		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall comply with this mitigation measure pertaining to construction activities and biological resources. C. A qualified biologist shall monitor all initial ground-disturbance activities as			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.4	**Biological Resources**				
	possible. These areas shall be flagged and disturbance activities, vehicles, and equipment shall be confined to these flagged areas. c) 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 (SWPPP). All detected erosion shall be remedied within two days of discovery or as described in the SWPPP. d) To prevent inadvertent entrapment of desert kit foxes, American badgers, or other wildlife during construction, all excavated, steep-walled holes or trenches more than two 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. All holes and trenches, whether covered or not, shall be inspected for trapped wildlife at the start and end of each workday. Before such holes or trenches are filled, they shall be thoroughly inspected by the Lead Biologist or approved biological monitor for trapped wildlife. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If a listed species is found trapped, all work shall cease immediately. If the animal is apparently uninjured, then the Lead Biologist shall directly supervise the provision of escape structures and/or trench modification to allow the trapped animal to escape safely. Work shall not resume in the vicinity of the animal, and it shall be allowed to leave the work area and project site on its own. If the listed animal is injured, then the Lead Biologist or approved biological monitor shall immediately contact the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife to identify an individual with the appropriate permit or authorization to handle listed species, who shall bring the animal to a pre-identified wildlife rehabilitation or veterinary facility for care. e) Burrowing owls, mammals, and nesting birds may use construction pipes, culverts, or similar structures for refuge or nesting. All towers shall be of the monopole variety and all hollow vertical structures, such as solar mount poles, or fencing poles, shall be capped immediately after installation to prevent bird entrapment. Therefore,	outlined in the mitigation. D. The project proponent shall submit a report of all monitor all initial construction and decommissioning ground-disturbance activities and to the Kern County Planning and Natural Resources Department. E. In consultation with the United States Fish and Wildlife Service and the California Department of Fish and Wildlife, the project proponent shall implement construction and operational monitoring in accordance with the specifications of the mitigation measure. F. The project proponent shall submit a Maintenance and Trash Abatement/Pest Management Program to the Kern County Planning and Natural Resources Department for approval. G. The Kern County Building Inspection Department shall verify in the field during construction.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.4	**Biological Resources**				
	all construction pipes, culverts, or similar structures with a diameter of four inches or more that are stored at a construction site for one or more overnight periods shall be thoroughly inspected 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 the Lead Biologist has been consulted and the animal has either moved from the structure on its own accord (for listed species) or until the animal has been captured and relocated (for non-listed species) by the Lead Biologist. If the animal is a listed species, then work shall immediately halt in the vicinity, and the animal shall be allowed to move from the structure and the work area of its own accord. The Lead Biologist will direct work stoppages near the animal to allow it to freely move out of the pipe and away from the work area. Listed species shall not be handled or captured by anyone without the appropriate permit or authorization. f) 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. g) 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. h) A speed limit of 15 miles per hour shall be enforced within the limits of the proposed project. i) A long-term trash abatement program shall be established for construction, operations and maintenance, and decommissioning. Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs. j) Workers shall be prohibited from bringing pets and firearms to the project area and from feeding wildlife. k) Intentional killing or collection of any plant or wildlife species shall be prohibited.				

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.4	**Biological Resources**				
	l) To enable kit foxes and other wildlife (e.g., American badger) to pass through the project site after construction, the security fence, and any permanent interior fencing shall be a wildlife friendly design that meets the goals of allowing wildlife to move freely through the project site during operation, leaving 4- to 7-inch openings or portals in the fence or the fence shall be raised 7 inches above the ground leaving a gap between the fence mesh and the ground. In the latter case the bottom of the fence fabric shall be knuckled (wrapped back to form a smooth edge) to protect wildlife that passes under the fence.				
14.	**MM 4.4-4: Preconstruction Clearance Surveys**. The Lead Biologist or approved biological monitor 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. Preconstruction surveys for special-status species shall be conducted within the project boundaries by the Lead Biologist or approved biological monitor within 14 days of the start of any vegetation clearing or grading activities. Methodology for preconstruction surveys shall be appropriate for each potentially occurring species-status species and shall follow U.S. Fish and Wildlife Service and/or 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 being disturbed. The Lead Biologist may use a variety of approaches (including but not limited to monitoring, track plates, and direct observation) and evidence (including burrow characteristics and presence of sign such as scat and tracks) to determine burrow activity. If any evidence of occupation of the project site special-status species is observed, a buffer shall be established by a qualified biologist that results in sufficient avoidance, as described below. If desert tortoise are found onsite during subsequent surveys or biological monitoring activities, construction activities shall cease to avoid the potential for take and consultation with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife shall be initiated to obtain the necessary	During construction and decommissioning of the project	Kern County Planning and Natural Resources Department; U.S. Fish and Wildlife Service; and California Department of Fish and Wildlife; Kern County Public Works Department/Building Inspection Division; Lead Biologist		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. A qualified biologist shall be retained by the project proponent and approved by the Kern County Planning and Natural Resources Department C. During fencing and grading activities, daily monitoring reports shall be prepared by the monitoring biologist(s). D. Documentation shall be sent to the Kern County Planning and Natural Resources Department. E. Consultation with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife shall be initiated to obtain the necessary incidental take permit authorizations or provide evidence such a permit is not required. Kern County Planning Natural Resources Department shall be included in all consultants and be kept apprised of consultations and the subsequent results.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.4	**Biological Resources**				
	incidental take permit authorizations or provide evidence such a permit is not required. Preconstruction surveys shall be conducted by a qualified biologist for the presence of American badger or desert kit fox dens within 14 days prior to commencement of construction activities. The surveys shall be conducted in areas of suitable habitat for American badger and desert kit fox, which includes desert scrub habitats. 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 prior to that portion of the project site disturbed. If potential dens are observed and avoidance is feasible, the following buffer distances shall be established prior to construction activities: • Desert kit fox or American badger potential den: 50 feet. • Desert kit fox or American badger active den: 100 feet. • Desert kit fox or American badger natal den: 500 feet. If avoidance of the potential dens is not possible, the following measures are required to avoid potential adverse effects to the American badger and desert kit fox: • If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent American badgers or desert kit foxes from re-using them during construction. • If the qualified biologist determines that potential dens may be active, an onsite passive relocation program shall be implemented. This program shall consist of excluding American badgers or desert kit foxes from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for seven days to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that American badgers or desert kit foxes have stopped using the dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction. During fencing and grading activities daily monitoring reports shall be prepared by the monitoring biologists. The Lead Biologist shall prepare a summary monitoring report documenting the effectiveness and practicality of				

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.4	**Biological Resources**				
	the protection measures that are in place and making recommendations for modifying the measures to enhance species protection, as needed. The report shall also provide information on the overall activities conducted related to biological resources, including the Environmental Awareness Training and Education Program, clearance/pre-activity surveys, monitoring activities, and any observed special-status species, including injuries and fatalities. These monitoring reports shall be submitted to the Kern County Planning and Community Development Department and relevant resource agencies, as applicable, on a monthly basis along with copies of all survey reports.				
15.	**MM 4.4-5: Preconstruction Desert Tortoise Surveys**. Within 14 days prior to the commencement of any ground-disturbing activities the project operator shall conduct preconstruction surveys for desert tortoise within the project area. The surveys shall be conducted in accordance with the U.S. Fish and Wildlife Service protocol (2010). If no burrows or tortoises are discovered during preconstruction surveys, no further mitigation is necessary. The desert tortoise is a federally and state threatened species and consequently, impacts that would cause "take" of the species would require the issuance of Incidental Take Permits from both the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to comply with the Federal Endangered Species Act and California Endangered Species Act. If burrows or tortoises are identified on the project site during preconstruction surveys, the project operator shall be required to consult with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife regarding take coverage, and adhere to the following minimum conditions: a) Develop a plan for desert tortoise translocation and monitoring prior to project construction. The plan shall provide the framework for implementing the following measures: i) If, upon consultation with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife, it is determined by both resource agencies that a permanent tortoise proof exclusion fence is required, a fence shall be installed around all construction and operation areas prior to the initiation of earth disturbing activities, in coordination with a qualified biologist. The fence shall be designed in such a manner to allow other wildlife to access through the	Within 14 days prior to the commencement of any ground-disturbing activities and during construction	Kern County Planning and Natural Resources Department; U.S. Fish and Wildlife Service; and California Department of Fish and Wildlife		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The surveys shall be conducted in accordance with U.S. Fish and Wildlife Service protocol (USFWS, 2010). C. Should desert tortoises be observed during preconstruction surveys, consultation with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife shall commence. D. The Authorized Biologist shall have the appropriate education and experience to accomplish biological monitoring and mitigation tasks. E. A Raven Management Plan shall be developed for the project site in consultation with the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife. F. Weekly inspection 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, the project proponent shall submit a report to California Department of Fish and Wildlife, U.S. Fish and Wildlife Service, and Kern County Planning and Natural Resources Department within five calendar days.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.4	**Biological Resources**				
	permanent security fence and be constructed of 0.5-inch mesh hardware cloth and extend 18 inches above ground and 12 inches below ground. Where burial of the fence is not possible, the lower 12 inches shall be folded outward against the ground and fastened to the ground so as to prevent desert tortoise entry. The fence shall be supported sufficiently to maintain its integrity, be checked at least monthly during construction and operations, and maintained when necessary by the project operator to ensure its integrity. Provisions shall be made for closing off the fence at the point of vehicle entry. Common raven perching deterrents shall be installed as part of the fence construction. ii) An Authorized Biologist shall conduct a preconstruction survey for desert tortoise within the construction site, as well as before and after installation of desert tortoise exclusionary fencing (if required to be installed) and project security fencing. An Authorized Biologist has the appropriate education and experience to accomplish biological monitoring and mitigation tasks and is approved by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. Two surveys without finding any desert tortoises or new desert tortoise sign shall occur prior to declaring the site clear of desert tortoises. iii) All burrows that could provide shelter for a desert tortoise shall be hand-excavated prior to ground-disturbing activities. iv) An Authorized Biologist shall remain on site until all vegetation necessary for the construction of the project is cleared and, at a minimum, conduct site and fence inspections on a monthly basis throughout construction in order to ensure project compliance with mitigation measures. v) An Authorized Biologist shall remain on-call throughout fencing and grading activities in the event a desert tortoise wanders onto the project site. vi) Mitigation for permanent loss of occupied desert tortoise habitat shall be mitigated at a 1:1 ratio to reduce potential effects to less-than-significant levels. Mitigation can be achieved through purchase of credit from an existing mitigation bank, such as the Desert		G. 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 submitted to the Kern County Planning and Natural Resources Department. H. Reports shall be submitted to U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and the Kern County Planning and Natural Resources Department.		

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.4	**Biological Resources**				
	Tortoise Natural Area, private purchase of mitigation lands, or onsite preservation, as approved by the resource agencies. b) A Raven Management Plan shall be developed for the project site. This plan shall include at a minimum: i) Identification of all common raven nests within the project area during construction. ii) Weekly inspections during construction under all nests in the project area for evidence of desert tortoise predation (e.g., scutes, shells, etc.). If evidence of desert tortoise predation is noted, a report shall be submitted to the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and the Kern County Planning and Community Development Department within five calendar days; and iii) Provisions for the management of trash that could attract common ravens during the construction, operations and maintenance, and decommissioning phases of the proposed project.				
16.	**MM 4.4-6: Preconstruction Burrowing Owl Surveys.** A qualified wildlife biologist (i.e., a wildlife biologist with previous burrowing owl survey experience) shall conduct preconstruction surveys of the permanent and temporary impact areas to locate active breeding or wintering burrowing owl burrows no fewer than 14 days prior to ground-disturbing activities (i.e., vegetation clearance, grading, tilling). 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 any potential burrows with fresh burrowing owl sign or presence of burrowing owls. Surveys may be conducted concurrently with desert tortoise preconstruction surveys. As each burrow is investigated, surveying biologists shall also look for signs of American badger and desert kit fox. Copies of the survey results shall be submitted to California Department of Fish and Wildlife and the Kern County Planning and Natural Resources Department.	No fewer than 14 days prior to the commencement of any ground-disturbing activities and during construction	Kern County Planning and Natural Resources Department; California Department of Fish and Wildlife		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. A qualified biologist shall conduct a pre-construction sweep of the project site for Burrowing Owls as specified in the mitigation measure. C. A qualified biologist shall conduct pre-construction nest surveys during the appropriate breeding seasons. D. The project proponent shall submit the findings of the pre-construction sweep to the California Department of Fish and Wildlife, California State Lands Commission, and the Kern County Planning and Natural Resources Department. E. The project proponent shall implement burrowing owl measures as specified in the mitigation measure and in consultation with the California Department of			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.4	**Biological Resources**				
	If burrowing owls are detected onsite, no ground-disturbing activities shall be permitted within a buffer of no fewer than 100 meters (330 feet) from an active burrow during the breeding season (i.e., February 1 to August 31), unless otherwise authorized by California Department of Fish and Wildlife. During the non-breeding (winter) season (i.e., September 1 to January 31), ground-disturbing work can proceed as long as the work occurs no closer than 50 meters (165 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with California Department of Fish and Wildlife. If burrow avoidance is infeasible during the non-breeding season or during the breeding season (February 1 through August 31) where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, a qualified biologist shall implement a passive relocation program in accordance with Appendix E1 (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the 2012 California Department of Fish and Wildlife Staff Report on Burrowing Owl Mitigation. If passive relocation is required, a qualified biologist shall prepare a Burrowing Owl Exclusion and Mitigation Plan and a Mitigation Land Management Plan in, accordance with the 2012 California Department of Fish and Wildlife Staff Report on Burrowing Owl Mitigation, for review by California Department of Fish and Wildlife prior to passive relocation activities. The Mitigation Land Management Plan shall include a requirement for the permanent conservation of offsite Burrowing Owl Passive Relocation Compensatory Mitigation. At a minimum, the following recommendations shall be implemented: i. Temporarily disturbed habitat shall be restored, if feasible, to pre-project conditions including decompacting soil and revegetating. ii. Permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat shall be mitigated such that the habitat acreage, number of burrows and burrowing owl impacted are replaced based on a site-specific analysis and shall include permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e.,		Fish and Wildlife, as appropriate. F. As directed by the agencies, the project proponent shall implement appropriate measures to prevent impacts and provide all documentation to the Kern County Planning and Natural Resources Department. G. The Kern County Planning and Natural Resources Department shall verify prior to issuing grading and building permits.		

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.4	**Biological Resources**				
	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. iii. Permanently protect mitigation land through a conservation easement, deed restriction, or similar mechanism 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 operator may purchase available burrowing owl conservation bank credits. Land identified to mitigate for passive relocation of burrowing owl may be combined with other offsite mitigation requirements of the proposed project if the compensatory habitat is deemed suitable to support the species.				
17.	**MM 4.4-7: Nesting Birds and Raptors**. If construction is scheduled to commence during the non-nesting season (i.e., September 1 to January 31), no preconstruction surveys or additional measures are required. To avoid impacts to nesting birds in the project area, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within the project site for construction activities that are initiated during the breeding season (i.e., February 1 to August 31). The raptor survey shall focus on potential nest sites (e.g., cliffs, large trees, windrows) within a 0.5-mile buffer around the project site. Surveys shall be conducted no more than 14 days prior to construction activities. Surveys need not be conducted for the entire project site at one time; they may be phased so that surveys occur shortly before a portion of the project site is disturbed. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (e.g., 200–300 feet for common raptors; 0.5 mile for Swainson's hawk; 30–50 feet for passerine species) shall be established around active nests and no construction within the buffer allowed until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). For non-listed species, encroachment	No more than 7 days prior to construction activities	California Department of Fish and Wildlife; Kern County Planning and Natural Resources Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. 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. C. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. D. If active nests are found, a suitable buffer shall be established in consultation with the California Department of Fish and Wildlife around active nests and no construction within the buffer allowed until a qualified biologist has determined that the nest is no longer active. E. Copies of the completed surveys shall be submitted to Kern County Planning and Natural Resources Department.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.4	**Biological Resources**				
	into the avoidance buffer may occur at the discretion of a qualified biologist; however, for State-listed species, consultation with CDFW shall occur prior to encroachment into the aforementioned buffers.				
18.	**MM 4.4-8:** Prior to issuance of any grading or building permit, the project proponent/operator shall submit a final Jurisdictional Delineation report. A copy of this report shall also be provided to the Lahontan Regional Water Quality Control Board (RWQCB) and the County. The report shall include information as shown below as a plan if necessary and shall outline compliance to the following: 1. Delineation of all jurisdictional features at the project site. Potential jurisdictional features (ephemeral drainages) within the project boundary identified in the jurisdictional delineation report that are not anticipated to be directly impacted by project related activities shall be avoided. This may be shown in plan form. 2. Any material/spoils generated from project activities shall be located away from jurisdictional areas or special-status habitat 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. 3. Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage from contaminating the ground and generally at least 50 feet from the top of bank. 4. Any spillage of material will be stopped if it can be done safely. The contaminated area will be cleaned and any contaminated materials properly disposed. For all spills, the project foreman or designated environmental representative will be notified.	Prior to the issuance of grading and building permits and during and after construction activities	Kern County Planning and Natural Resources Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. If deemed necessary, obtain appropriate permits from the Lahontan Regional Water Quality Control Board and the California Department of Fish and Wildlife. C. Correspondence and copies of reports shall be submitted to the Kern County Planning and Natural Resources Department.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.4	**Biological Resources**				
19.	**MM 4.4-9:** Prior to ground disturbance activities that would impact aquatic features, the project proponent/operator shall be subject to provisions as identified below: 1) The project proponent/operator shall file a complete Report of Waste Discharge with the RWQCB to obtain Waste Discharge Requirements and shall also consult with California Department of Fish and Wildlife (CDFW) on the need for a streambed alteration agreement. Copies of reports shall be submitted to the County. 2) Based on consultation with RWQCB and CDFW, if permits are required for the project site, appropriate permits shall be obtained prior to disturbance of jurisdictional resources. 3) Compensatory mitigation for impacts to unvegetated streambeds/washes shall be identified prior to disturbance of the features at a minimum 1:1 ratio, as approved by the RWQCB or CDFW either through onsite or offsite mitigation, or purchasing credits from an approved mitigation bank. 4) The project proponent/operator shall comply with the compensatory mitigation required and proof of compliance, along with copies of permits obtained from RWQCB and/or CDFW, which shall be provided to the County. 5) A Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared that outlines the compensatory mitigation in coordination with the RWQCB and CDFW. a) If onsite mitigation is proposed, the HMMP 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). b) The HMMP shall include remedial measures in the event that performance criteria are not met. c) If mitigation is implemented off site, mitigation lands shall be comprised of similar or higher quality and preferably located in Kern County. Offsite land shall be preserved through a deed	Prior to issuance of grading and building permits	Kern County Planning and Natural Resources Department; United States Fish and Wildlife Service; and California Department of Fish and Wildlife		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. If deemed necessary, obtain appropriate permits from the Lahontan Regional Water Quality Control Board and the California Department of Fish and Wildlife. C. Correspondence and copies of reports shall be submitted to the Kern County Planning and Natural Resources Department.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.4	**Biological Resources**				
	restriction or conservation easement and the HMMP shall identify an approach for funding assurance for the long-term management of the conserved land. Alternatively, the applicant may purchase credits from an approved mitigation bank. d) Copies of any coordination, permits, etc., with RWQCB and CDFW shall be provided to the County.				
20.	**MM 4.4-10:** The project site shall be fenced to keep terrestrial wildlife species from entering the project site during construction, but will provide openings post-construction to enable wildlife to move freely through the project site during operation (e.g., create 4- to 7-inch portals or openings in the fence raising the fence 7 inches above the ground and knuckling the bottom of the fence [i.e., wrapping the fencing material back to form a smooth edge] to protect wildlife passing underneath). A desert tortoise exclusion fence is not required unless desert tortoise are found on site during the preconstruction surveys. This 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 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 a qualified biologist at a regular interval 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. Outside temporarily fenced exclusion areas, the project 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.	Prior to and during construction	Kern County Planning and Natural Resources Department; United States Fish and Wildlife Service; and California Department of Fish and Wildlife		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. Should desert tortoise burrows or individual desert tortoise be observed during preconstruction surveys, consultation with California Department of Fish and Wildlife and U.S. Fish and Wildlife Service shall commence. C. Fencing shall be installed prior to issuance of grading or building permits and shall be maintained during all phases of construction and decommissioning. D. The fencing shall be inspected by a qualified biologist at a regular interval and immediately after all major rainfall events through the duration of construction and decommissioning activities.			
Justification: Changes or alterations to the project have been required to substantially reduce the potentially significant environmental effects identified in the Final EIR to the extent feasible.					

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.5	**Cultural Resources**				
21.	**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 unique 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 conduct 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 to 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. A copy of the proposed training materials shall be provided to the Planning and Natural Resources Department prior to the issuance of any grading or building permit. 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 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 Lead Archaeologist to ensure all employees receive appropriate training before the work on-site.	Prior to the start of any ground disturbing activities	Kern County Planning and Natural Resources Department; Qualified Archaeologist and Native American monitor		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The qualified archeologist must meet the Secretary of the Interior's Standards for professional archaeology (U.S. Department of the Interior, 2011). C. The qualified archaeologist shall conduct a Cultural Resources Sensitivity Training for all construction personnel working on the project. D. If necessary, implement recommended procedures in consultation with qualified archaeologist and Native American monitor. E. If cultural materials or artifacts are discovered, halt all work and contact a qualified archaeologist and Native American monitor to assess finds and recommend procedures.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.5	**Cultural Resources**				
22.	**MM 4.5-2** Prior to this issuance of any grading or building permit, the project operator shall submit to the Kern County Planning and Natural Resources Department a Cultural Resources Treatment Plan. The plan shall: 1) Provide an overview of best management practices to be utilized during construction activities to ensure protection of cultural resources. 2) Outline the process for evaluation of any unanticipated cultural discoveries during project construction activities. 3) Include provisions showing how sites P-15-019560 through p-15-019566 will be avoided during construction and operational activities. .	Prior to the issuance of any grading or building permit	Kern County Planning and Natural Resources Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. Project operator shall complete a Cultural Resources Treatment Plan that includes best management practices and a process for evaluation of any unanticipated cultural resources during construction activities. C. The Kern County Planning and Natural Resources Department shall review and approve the Cultural Resources Treatment Plan prior to any ground disturbing activities.			
23.	**MM 4.5-3:** During implementation of the project, the services of Native American Tribal Monitors, 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, on a full-time basis, ground-disturbing activities associated with project-related construction activities, as follows: a) All initial excavation and initial ground-disturbing activities within the project site, shall be monitored by archaeological and Native American monitors. 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 daily logs and the Lead Archaeologist shall submit monthly written updates to the Kern County Planning and Natural Resources Department. After	During all ground disturbing activities	Kern County Planning and Natural Resources Department; Qualified Archaeologist and Native American Tribal monitor		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The services of a qualified Native American monitor shall be retained by the project proponent to monitor, on a full-time basis, to monitor all ground-disturbing activities associated with project-related construction activities within 50 feet of all known prehistoric archaeological sites. C. The Native American monitor shall keep daily logs and the qualified archaeologist shall submit monthly written updates to the Kern County Planning and Natural Resources Department. D. After monitoring has been completed, the qualified Native American monitor shall prepare a monitoring report that details the results of monitoring, which shall be submitted to the Kern County Planning and Natural Resources Department.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.5	**Cultural Resources**				
	monitoring has been completed, the Lead Archaeologist shall prepare a monitoring report detailing the results of monitoring, which shall be submitted to the Kern County Planning and Natural Resources Department.				
24.	**MM 4.5-4:** 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. The Lead Archaeologist in consultation with the Native American monitor, 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 (CEQA) 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 CEQA 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. Diagnostic archaeological materials with research potential recovered during any investigation shall be curated at an accredited curation facility. The Lead Archaeologist, in consultation with a designated Native American monitor, shall 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. The final disposition of archaeological, historical, and	During grading or construction activities	Kern County Planning and Natural Resources Department; Kern County Public Works Department; Qualified Archaeologist and Native American monitor		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall retain a qualified archaeologist to monitor grading and other earth-disturbing activities and, if activities uncover historical resources, to assess finds and recommended procedures. C. The Kern County Planning and Natural Resources Department shall review and approve all reports, correspondence, and determinations regarding historical resources prepared by the qualified archaeologist. D. Kern County Building Inspectors will verify compliance in the field prior to and during the construction period.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.5	**Cultural Resources**				
	paleontological resources recovered on State lands under the jurisdiction of the California State Lands Commission must be approved by the Commission.				
25.	**MM 4.5-5:** If human remains are uncovered during project construction, the project contractor shall immediately halt work within 100 ft. 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.	During construction activities	Kern County Planning and Natural Resources Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. If human remains are discovered, the project proponent shall immediately halt all work and contact the Kern County Coroner to evaluate the remains, and follow the procedures and protocols set forth in Section 15064.5 (e)(1) of the *CEQA Guidelines*. C. If the remains are determined to be Native American, the County Coroner shall contact the Native American Heritage Commission to assess the find. D. The Kern County Planning and Natural Resources Department shall verify compliance with the mitigation.			
Justification: Changes or alterations to the project have been required to substantially reduce the potentially significant environmental effects identified in the Final EIR to the extent feasible.					

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.7	**Geology and Soils**				
26.	**MM 4.7-1:** The project proponent shall retain a qualified paleontologist, defined as a paleontologist meeting the Society for Vertebrate Paleontology's Professional Standards (SVP, 2010), to carry out all mitigation measures related to paleontological resources. 1. Prior to the start of any ground disturbing activities, the qualified paleontologist shall conduct a Paleontological Resources Awareness Training program for all construction 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. 2. Paleontological Resources Awareness Training may be conducted in conjunction with other awareness training requirements. 3. 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. 4. The Paleontological Resources Awareness Training Guides shall be kept onsite and available for all personnel to review and be familiar with as necessary.	Prior to the start of any ground disturbing activities and during construction	Kern County Planning and Natural Resources Department; Qualified Paleontologist		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The qualified paleontological shall be retained by the project proponent to conduct training. C. If necessary, the project proponent shall retain a qualified paleontologist to assess finds and recommended procedures. D. If necessary, additional avoidance, testing, and evaluation or data recovery excavations shall occur by a qualified paleontologist.			
27.	**MM 4.7-2:** 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 12 feet or deeper below ground surface in areas mapped as younger Quaternary alluvium and for all ground disturbance within the mapped older Quaternary Alluvium within the western portion of Gen-Tie Option 3, should that alternative be selected.	During construction activities and when construction has been completed.	Kern County Planning and Natural Resources Department; Qualified Paleontologist		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.7	**Geology and Soils**				
	1) 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. a) 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. 2) Paleontological monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The qualified paleontologist shall have authority to temporarily divert excavation operations away from exposed fossils to collect associated data and recover the fossil specimens if deemed necessary. 3) Following the completion of construction, the paleontologist shall prepare a report 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.	B. The project proponent shall retain a qualified paleontologist to assess finds and recommended procedures. C. Following the completion of construction, the paleontologist shall prepare a report documenting the absence or discovery of fossil resources onsite. D. If necessary, additional avoidance, testing, and evaluation or data recovery excavations shall occur by a qualified paleontologist. E. The Kern County Planning and Natural Resources Department shall review and approve all reports, correspondence.			
28.	**MM 4.7-3:** 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. The final disposition of archaeological, historical, and	During construction activities	Kern County Planning and Natural Resources Department; Qualified Paleontologist		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. If a paleontological resource is found, the qualified paleontologist shall evaluate the significance of the resources and recommend appropriate treatment measures.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.7	**Geology and Soils**				
	paleontological resources recovered on State lands under the jurisdiction of the California State Lands Commission must be approved by the Commission.				
Justification: Changes or alterations to the project have been required to substantially reduce the potentially significant environmental effects identified in the Final EIR to the extent feasible.					

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.9	**Hazards and Hazardous Materials**				
29.	**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: a. Delineate hazardous material and hazardous waste storage areas. b. Describe proper handling, storage, transport, and disposal techniques. c. Describe methods to be used to avoid spills and minimize impacts in the event of a spill. d. Describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction. e. Establish public and agency notification procedures for spills and other emergencies, including fires. f. Describe federal, state, or local agency coordination, as applicable, and clean-up efforts that would occur in the event of an accidental release. g. Include procedures to avoid or minimize dust from existing residual pesticide and herbicide use 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 California Environmental Reporting System shall be submitted to the Kern County Planning and Natural Resources Department for inclusion in the project's permanent record.	Prior to issuing grading or building permits	Kern County Planning and Natural Resources Department; California Environmental Protection Agency; Kern County Public Health Services Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall submit a hazardous materials business plan to the California Environmental Protection Agency (which administers CERS) for review and approval. C. The project proponent shall provide the hazardous materials business plan to all contractors working on the project and shall ensure that one copy is available at the project site at all times. D. A copy of the approved hazardous materials business plan shall be submitted to the Kern County Planning and Natural Resources Department. E. Submit final hazardous material business plan to the Kern County Environmental Health Services Department/Hazardous Materials Section for review and approval.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.9	**Hazards and Hazardous Materials**				
30.	**MM 4.9-2:** The project proponent shall continuously comply with the following: a) The construction contractor or project personnel shall use herbicides that are approved for use in California, and are appropriate for application adjacent to natural vegetation areas (i.e., non-agricultural use). 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. 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.	During construction and operation	Kern County Planning and Natural Resources Department; Kern County Public Health Services Department/ Environmental Health Services Division		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall use herbicides as described in mitigation during construction and operations. C. The Kern County Public Health Services Department/Environmental Health Services Division shall verify compliance and licenses. D. Evidence of compliance shall be submitted to the Kern County Planning and Natural Resources Department.			
Justification: Changes or alterations to the project have been required to substantially reduce the potentially significant environmental effects identified in the Final EIR to the extent feasible.					

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.10	**Hydrology and Water Quality**				
31.	**MM 4.10-1:** Prior to the issuance of a grading permit, the project proponent shall complete a final drainage plan designed to evaluate and minimize potential increases in runoff from the project site. The study and plan shall include the following: 1) A numerical stormwater model for the project site that evaluates existing and proposed (with project) drainage conditions during storm events ranging up to the 100-year event. 2) An assessment of the potential for erosion and sedimentation in light of modeled changes in stormwater flow across the project area that would result from project implementation. 3) Engineering recommendations to be incorporated into the project 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 on-site or off-site. 4) A specification that the final design of the solar arrays shall include 1 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 1 foot or as required by Kern County's Floodplain Ordinance. The 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.	Prior to the issuance of a grading permit	Kern County Public Works Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall complete a final hydrologic study and drainage plan designed to evaluate and minimize potential increases in runoff from the project site. C. 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.			
Justification: Changes or alterations to the project have been required to substantially reduce the potentially significant environmental effects identified in the Final EIR to the extent feasible.					

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.11	**Land Use**				
32.	**MM 4.11-1:** Prior to issuance of any building permit, the project operator shall provide a Decommissioning 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 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	Prior to the issuance of building permits	Kern County Engineering, Surveying, and Permit Services Department; Kern County Planning and Natural Resources Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall prepare a Decommissioning Plan and submit the appropriate financial assurances to the Kern County Engineering, Surveying, and Permit Services Department.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.11	**Land Use**				
	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 twelve 12 months that portion of the site shall be deemed abandoned and shall be removed within sixty (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 sixty (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 twelve (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 forty-eight (48) months from the date, the solar facility was first deemed abandoned.				
33.	**MM 4.11-2:** Prior to the operation of the solar facility, the operator shall contact 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.	Prior to operation	U.S. Department of Defense		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. Prior to the operation of the solar facility, the operator shall consult with the U.S. 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.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**

4.11	**Land Use**
Justification: Changes or alterations to the project have been required to substantially reduce the potentially significant environmental effects identified in the Final EIR to the extent feasible.	

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.12	**Noise**				
34.	**MM 4.12-1:** The following measures are to be implemented to further reduce short-term noise levels associated with project construction and decommissioning: a) 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 9:00 p.m. to 6:00 a.m. on weekdays, and between 9:00 p.m. to 8:00 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. b) Equipment staging and laydown areas shall be located at the furthest practical distance from nearby residential land uses. To the extent possible, staging and laydown areas should be located at least 500 feet of existing residential dwellings. c) 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. 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.	During construction and decommissioning activities	Kern County Planning and Natural Resources Department; Kern County Public Works Department; Noise Disturbance Coordinator		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The construction contractor shall ensure that all construction equipment is equipped with manufacturer-approved mufflers and baffles. D. Contact information for the Disturbance Coordinator shall be submitted to the Kern County Planning and Natural Resources Department prior to commencement of any ground disturbing activities. E. The project proponent shall comply with the Kern County Noise Ordinance. F. The Kern County Public Works Department will verify compliance in the field during inspection.				

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.12	**Noise**				
35.	**MM 4.12-2:** Prior to the issuance of grading permits, a "noise disturbance coordinator" shall be established. The project operator shall submit evidence of methods of implementation and shall continuously comply with the following during construction. The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting to early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved.	Prior to the issuance of grading permits, and during construction and decommissioning activities	Kern County Planning and Natural Resources Department; Kern County Public Works Department; Noise Disturbance Coordinator		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The construction contractor shall establish a Noise Disturbance Coordinator for the project during construction. C. The Noise Disturbance Coordinator shall respond to any local complaints about construction noise. D. The disturbance coordinator shall determine the cause of the noise complaint and shall be required to implement reasonable measures such that the complaint is resolved.			
36.	**MM 4.12-3:** Prior to the issuance of grading permits, the project operator shall submit evidence of the following: Construction contracts shall specify that notices shall be sent out to all residences within 1,000 feet of the construction areas at least 15 days prior to commencement of construction. The notices shall include the construction's schedule and a telephone number where complaints can be registered with the noise disturbance coordinator. A sign legible at a distance of 50 feet shall also be posted at the construction site throughout construction, which includes the same details as the notices.	Prior to the issuance of grading permits	Kern County Public Works Department; Kern County Planning and Natural Resources Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall submit evidence to the Kern County Planning and Natural Resources Department of written notice distribution, prior to issuance of a grading permit. C. The project proponent shall submit evidence to the Kern County Planning and Natural Resources Department, prior to issuance of a grading permit, that a minimum of one sign, legible at a distance of 50 feet, has been 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.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.12	**Noise**				
		D. The Kern County Public Works Department shall verify compliance in the field during inspection.			
37.	**MM 4.12-4:** The project shall be designed to ensure that operational noise levels at nearby sensitive receptors, depending on their location within or outside of the WSSP area, would not exceed the applicable WSSP or County noise standards. Techniques that can be incorporated into the BESS design to achieve compliance with the applicable noise standards may include, but are not limited to, the following: • Place HVAC units on the far side of the BESS containers relative to the nearest off-site sensitive receptors to allow the containers to act as a barrier to provide noise attenuation. • Erect permanent noise barriers of sufficient height to attenuate noise levels from the BESS containers. • Provide a sufficient buffer distance between the BESS containers and the nearest off-site receptor. • The adequacy of the selected noise control technique(s) shall be demonstrated in an acoustical study submitted to and approved by the County prior to the issuance of building permits.	Prior to the start of construction activities	Kern County Public Works Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall ensure practices are implemented as outlined in mitigation. C. The Kern County Public Works Department shall verify compliance.			
Justification: Changes or alterations to the project have been required to substantially reduce the potentially significant environmental effects identified in the Final EIR to the extent feasible.					

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.14	**Public Services**				
38.	**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: 1. All internal combustion engines, both stationary and mobile, shall be equipped with spark arresters. Spark arresters shall be in good working order. 2. 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. 3. Fire rules shall be posted on the project bulletin board at the contractor's field office and areas visible to employees. 4. Equipment parking areas and small stationary engine sites shall be cleared of all extraneous flammable materials. 5. 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. 6. 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.	Prior to issuance of building and grading permits, and during construction and operation	Kern County Fire Department; Kern County Planning and Natural Resources Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent/operator shall submit the Fire Safety Plan, along with maps of the project site and access roads, to the Kern County Fire Department for review and approval. C. The project proponent shall provide Kern County Planning and Natural Resources Department a copy of the approved Fire Safety Plan.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.14	**Public Services**				
39.	**MM 4.14-2:** The project proponent/operator shall implement the following mitigation steps at the project site: 1. 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 operations that continues past 20 years will 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. 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. 2. 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. 3. 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. As an alternative to the aforementioned process, the project proponent/operator may make	Prior to issuance of building and grading permits and during construction and operation	Kern County Planning and Natural Resources Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. Prior to the issuance of any building permits, the project proponent shall pay for impacts on countywide public protection, sheriff's patrol and investigative services, and fire services project proponent C. Written verification of ownership of the project shall be submitted to the Kern County Planning and Natural Resources Department D. Prior to the issuance of any building permits on the property, the project proponent shall submit a letter detailing the hiring efforts prior to commencement of construction E. The Kern County Public Works Department shall verify compliance in the field.				

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.14	**Public Services**				
	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. 4. Prior to the issuance of any building permits on the property, the project operator shall submit a letter detailing the hiring efforts prior to commencement of construction, which encourages all contractors of the project site to hire at least 50 percent of their workers from local Kern County communities. The project operator shall provide the contractors a list of training programs that provide skilled workers and shall require the contractor to advertise locally for available jobs, notifying the training programs of job availability, all in conjunction with normal hiring practices of the contractor.				
Justification: Changes or alterations to the project have been required to substantially reduce the potentially significant environmental effects identified in the Final EIR to the extent feasible.					

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.15	**Transportation**				
40.	**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 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. 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 Kern County Planning and Natural Resources Department, the Kern County Public Works Department- Development Review, and the California Department of Transportation.	Prior to issuance of construction and building permits; during construction, operations, and decommissioning	Kern County Planning and Natural Resources Department; Kern County Public Works Department/Building and Development Division; California Department of Transportation		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. The project proponent shall submit a traffic control plan to the Kern County Roads Department for review and approval. C. The project proponent shall obtain necessary encroachment permits from Kern County Roads Department and California Department of Transportation, if necessary. D. The project proponent shall provide the Planning and Natural Resources Department with a copy of an approved traffic control plan, encroachment permits and executed secured agreements, which includes identification of roads to be used during construction. E. The project proponent shall submit preconstruction and post-construction videos documenting repairs to roads used during construction, as outlined in mitigation. F. The Planning and Natural Resources Department shall review videos and documentation and verify compliance.			

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.15	**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 DVD format. The County, in consultation with the project proponent/operator's engineer, shall determine the extent of remediation required, if any.				
Justification: Changes or alterations to the project have been required to substantially reduce the potentially significant environmental effects identified in the Final EIR to the extent feasible.					

Kern County Mitigation Measure Monitoring Program – Big Beau Solar Project					
Impact	**Mitigation Measure**	**Time Frame for Implementation**	**Responsible Monitoring Agency**	**Date**	**Initials**
4.17	**Utilities and Service Systems**				
41.	**MM 4.17-1:** During construction and operation, debris and waste generated shall be recycled to the extent feasible. 1. 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. 2. 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. 3. 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. 4. Contact information of the coordinator shall be provided to the Kern County Planning and Natural Resources Department prior to issuance of building permits. 5. 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.	Prior to issuing building permits, during grading, construction, operations and decommissioning	Kern County Planning and Natural Resources Department; Kern County Waste Management Department		
		Steps to Compliance: A. This mitigation measure shall be incorporated as a condition of approval. B. Prior to issuance of building permits, designate onsite-recycling coordinator, provide name, and phone number to Kern County Waste Management Department and the Kern County Public Works Department. C. Recycle construction waste to the extent feasible. D. Provide Kern County Planning and Natural Resources Department and Kern County Waste Management Department with a site plan showing the recycling storage area prior to the issuance of grading or building permits for the site. E. Provide Kern County Planning and Natural Resources Department and Kern County Waste Management Department with copies of hauling receipts. F. Kern County Public Works Department will verify in the field during the construction period.			
Justification: Changes or alterations to the project have been required to substantially reduce the potentially significant environmental effects identified in the Final EIR to the extent feasible.					

EXHIBIT D – BIG BEAU SOLAR PROJECT

CALIFORNIA STATE LANDS COMMISSION STATEMENT OF FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATIONS

1.0 INTRODUCTION

The California State Lands Commission (Commission or CSLC), acting as a responsible agency under the California Environmental Quality Act (CEQA), makes these findings and this Statement of Overriding Considerations to comply with CEQA as part of its discretionary approval to authorize issuance of a 40-year General Lease – Industrial Use lease, to EDF Renewable, Inc, for use of School Lands associated with the proposed Big Beau Solar Project (Project). (See generally Pub. Resources Code, § 21069; State CEQA Guidelines, § 15381.)[1] The Commission has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The Commission also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions. (Pub. Resources Code, §§ 6301, 6306, 6009, subd. (c).) All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust.

The Commission is a responsible agency under CEQA for the Project because the Commission must approve a lease for the Project to go forward and because the Kern County (County), as the CEQA lead agency, has the principal responsibility for approving the Project and has completed its environmental review under CEQA. The County analyzed the environmental impacts associated with the Project in a Final Environmental Impact Report (EIR) (State Clearinghouse [SCH] No. 2019071059) and, in June 2, 2020, certified the EIR and adopted a Mitigation Monitoring Program (MMP) and Findings, and a Statement of Overriding Considerations.

The Project involves the construction and operation of a solar facility on approximately 2,285 acres of public and private lands across 196 parcels. The Commission action will approve activities on a 160-acre School Lands Parcel. The Project would generate up to 128 MW of electricity and deliver it to the grid, with up to 60 megawatts (MW) of a Battery Energy Storage System (BESS). Approval of a Conditional Use Permit (CUP) for construction and operation of commercial solar electrical generating facilities will require an Amendment to the County's General Plan.

The County determined that the Project could have significant environmental effects on the following environmental resources:

- Aesthetics

[1] CEQA is codified in Public Resources Code section 21000 et seq. The State CEQA Guidelines are found in California Code of Regulations, title 14, section 15000 et seq.

- Air Quality
- Biological Resources
- Cultural Resources
- Energy
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Public Services
- Transportation and Traffic
- Tribal Cultural Resources
- Utilities and Service Systems
- Wildfire

Of the 15 resources areas noted above, Project components within the Commission's jurisdiction (i.e., school lands) could have significant environmental effects on all of the resource areas above.

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. However, when considered along with impacts of other closely related or nearby projects, including newly proposed projects, the effects could be cumulatively significant. Of the 15 resources areas noted above, five of the resource areas within the Commission's jurisdiction were determined to have significant and unavoidable cumulative impacts. The EIR determined that the following impacts on the projects were determined to have a significant and unavoidable cumulative impact that cannot be avoided after all regulatory, statutory, and feasible and reasonable mitigation measures:

- Aesthetics
- Air Quality
- Biological Resources
- Noise
- Wildfire

In certifying the Final EIR and approving the Project, the County imposed various mitigation measures for Project-related significant effects on the environment as conditions of Project approval and concluded that Project-related impacts would be substantially lessened with implementation of these mitigation measures such that the impacts would be less than significant. However, even with the integration of all feasible mitigation, the County concluded in the EIR that some of the identified impacts would remain significant. As a result, the County adopted a Statement of Overriding Considerations to support its approval of the Project despite the significant and unavoidable impacts. The County determined that, after mitigation, the Project may still have significant impacts on Aesthetics, Air Quality, and Noise. The County also concluded that, after all feasible mitigation, the Project's significant and unavoidable

cumulative impacts cannot be avoided after all regulatory, statutory, and feasible and reasonable mitigation measures are applied. The County determined that, after mitigation, the Project may still have cumulative significant impacts on Biological Resources and Wildfire. Because these five resource areas will have significant impacts on school lands after all feasible applied mitigation under the jurisdiction of the Commission, the Commission also adopts the Statement of Overriding Considerations set forth in this exhibit as part of its approval.

As a responsible agency, the Commission complies with CEQA by considering the EIR and reaching its own conclusions on whether, how, and with what conditions to approve a project. In doing so, the Commission may require changes in a project to lessen or avoid the effects, either direct or indirect, of that part of the project which the Commission will be called on to carry out or approve. In order to ensure the identified mitigation measures and/or Project revisions are implemented, the Commission adopts the Mitigation Monitoring Program (MMP) as set forth in Exhibit C as part of its Project approval.

2.0 ADMINISTRATIVE RECORD OF PROCEEDINGS AND CUSTODIAN OF THE RECORD

These Findings are supported by substantial evidence contained in the EIR and other relevant information provided to the Commission or existing in its files, all of which is contained in the administrative record. The administrative record is located at the California State Lands Commission, 100 Howe Avenue, Suite 100-South, Sacramento, CA 95825. The custodian for the administrative record is the California State Lands Commission Division of Environmental Planning and Management.

3.0 FINDINGS

The Commission's role as a responsible agency affects the scope of, but not the obligation to adopt, findings required by CEQA. Findings are required under CEQA by each "public agency" that approves a project for which an EIR has been certified that identifies one or more significant impacts on the environment (Pub. Resources Code, § 21081, subd. (a); State CEQA Guidelines, § 15091, subd. (a).) Because the EIR certified by the County for the Project identifies potentially significant impacts that fall within the scope of the Commission's approval, the Commission makes the Findings set forth below as a responsible agency under CEQA. (State CEQA Guidelines, § 15096, subd. (h); *Riverwatch v. Olivenhain Mun. Water Dist.* (2009) 170 Cal.App.4th 1186, 1202, 1207.

While the Commission must consider the environmental impacts of the Project as set forth in the EIR, the Commission's obligation to mitigate or avoid the direct or indirect environmental impacts of the Project is limited to those parts which it decides to carry out, finance, or approve (Pub. Resources Code, § 21002.1, subd. (d); State CEQA Guidelines, §§ 15041, subd. (b), 15096, subds. (f)-(g).) Accordingly, because the Commission's exercise of discretion involves only issuing a 40-year General Lease – Industrial Use lease for this Project, the Commission is responsible for considering only

the environmental impacts related to lands or resources subject to the Commission's jurisdiction. With respect to all other impacts associated with implementation of the Project, the Commission is bound by the legal presumption that the EIR fully complies with CEQA.

The Commission has reviewed and considered the information contained in the Project EIR. All significant adverse impacts of the Project identified in the EIR relating to the Commission's approval of a 40-year General Lease – Industrial Use lease, which would allow the construction and operation of a solar facility on approximately 2,285 acres of land, both publicly and privately-owned, across 196 parcels, which are included herein and organized according to the resource affected.

These Findings, which reflect the independent judgment of the Commission, are intended to comply with CEQA's mandate that no public agency shall approve or carry out a project for which an EIR has been certified that identifies one or more significant environmental effects unless the agency makes written findings for each of those significant effects. Possible findings on each significant effect are:

(1) Changes or alterations have been required in, or incorporated into, the Project that avoid or substantially lessen the significant environmental effect as identified in the Final EIR.

(2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the Commission. Such changes have been adopted by such other agency or can and should be adopted by such other agency.

(3) Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the Final EIR.[2]

A discussion of supporting facts follows each Finding.

- Whenever Finding (1) occurs, the mitigation measures that lessen the significant environmental impact are identified in the facts supporting the Finding.
- Whenever Finding (2) occurs, the agencies with jurisdiction are specified. These agencies, within their respective spheres of influence, have the responsibility to adopt, implement, and enforce the mitigation discussed.
- Wherever Finding (3) is made, the Commission has determined that, even after implementation of all feasible mitigation measures and consideration of feasible alternatives, the identified impact will exceed the significance criteria set forth in the EIR. Furthermore, to the extent that potentially feasible measures have been alleged or proposed, the Findings explain why certain economic, legal, social, technological or other considerations render such possibilities infeasible. The significant and unavoidable impacts requiring Finding (3) are identified in the

[2] See Public Resources Code section 21081, subdivision (a) and State CEQA Guidelines section 15091, subdivision (a).

Final EIR, discussed in the Responses to Comments, and explained below. Having done everything it can to avoid and substantially lessen these effects consistent with its legal authority and CEQA, the Commission finds in these instances that overriding economic, legal, social, and other benefits of the approved Project outweigh the resulting significant and unavoidable impacts. The Statement of Overriding Considerations adopted as part of this exhibit applies to all such unavoidable impacts as required by CEQA. (Pub. Resources Code, § 21081, subd. (b); State CEQA Guidelines, §§ 15092 and 15093.)

The mitigation measures are briefly described in these Findings; more detail on the mitigation measures is included in the Final EIR.

A. SUMMARY OF FINDINGS

Based on public scoping, the proposed Project will have No Impact on the following environmental issue areas:

- Mineral Resources
- Recreation

The EIR subsequently identified the following impacts as Less Than Significant:

- Agricultural and Forest Resources
- Greenhouse Gas Emissions
- Population and Housing

For the remaining potentially significant effects, the Findings are organized by significant impacts within the EIR issue areas as presented below.

B. POTENTIALLY SIGNIFICANT IMPACTS

The impacts identified in Table 1 were determined in the Final EIR to be potentially significant absent mitigation. After application of mitigation, however, several impacts were determined to be less than significant (LTSM). For the full text of each mitigation measure (MM), please refer to Exhibit C, Attachment C-1.

However, even with the integration of all feasible mitigation, the County concluded in the EIR that the other identified potentially significant impacts will remain significant. Table 1 identifies those impacts that the County determined would be, after mitigation, significant and unavoidable (SU).

Table 1 – Significant Impacts by Issue Area

Environmental Issue Area	Impact Nos.	
	LTSM	**SU**
Aesthetics	4.1-1, 4.1-2, 4.1-4	4.1-3 and Cumulative Impacts

Air Quality	4.3-2	4.3-1, Cumulative Impacts
Biological Resources	4.4-1, 4.4-2, 4.4-4, 4.4-5	Cumulative Impacts
Cultural Resources	4.5-1, 4.5-2, 4.5-3, 4.5-6, Cumulative Impacts	
Energy	4.6-1, Cumulative Impacts	
Geology and Soils	4.7-6, Cumulative Impacts	
Hazards and Hazardous Materials	4.9-1, 4.9-2, 4.9-4, Cumulative Impacts	
Hydrology and Water Quality	4.10-1, 4.10-3, 4.10-4, 4.10-5,	
Land Use and Planning	Cumulative Impacts	
Noise	4.12-3	4.12-1, Cumulative Impacts
Public Services	4.14-1, Cumulative Impacts	
Transportation and Traffic	4.15-3	
Tribal Cultural Resources	4.16-1a, 4.16-1b, Cumulative Impacts	
Utilities and Service Systems	4.17-1, 4.17-3	
Wildfire	4.18-3, 4.18-4	Cumulative Impacts

As a result, the Commission adopts the Statement of Overriding Considerations set forth as part of this Exhibit to support its approval of the Project despite the significant and unavoidable impacts.

C. IMPACTS REDUCED TO LESS THAN SIGNIFICANT LEVELS WITH MITIGATION (LTSM)

The impacts identified below were determined in the Final EIR to be potentially significant absent mitigation; after application of mitigation, however, the impacts were determined to be less than significant.

1. AESTHETICS

CEQA FINDING NO. 4.1-4

Impact: **Aesthetics 4.1-4. Create a new source of substantial light or glare.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project have the potential to result in a new source of substantial light or glare.

Implementation of MMs 4.1-4, 4.1-5, and 4.1-6 have been incorporated into the Project to reduce this impact to a less than significant level.

MM 4.1-4: Project site complies with the applicable provisions of the Dark Skies Ordinance (Chapter 19.81 of the Kern County Zoning Ordinance).

MM 4.1-5: Solar panels and hardware are designed to minimize glare and spectral highlighting.

MM 4.1-6: All on-site buildings will utilize nonreflective materials.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

2. AIR QUALITY

CEQA FINDING NO. 4.3-1

Impact: **Air Quality 4.3-1. Construction and operation of the Project would conflict applicable air quality plan.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

The project would conflict with or obstruct implementation of the applicable air quality plan.

Implementation of MMs 4.3-1 and 4.3-2 have been incorporated into the Project to reduce this impact to a less than significant level.

MM 4.3-1: Implement Diesel Emission-Reduction Measures During Construction.

MM 4.3-2: Implement Fugitive Dust Control Plan During Construction.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.3-2

Impact: **Air Quality 4.3-2. Construction and operation of the Project would expose sensitive receptors to substantial pollutant concentrations.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project would expose sensitive receptors to substantial pollutant concentrations.

Implementation of MMs 4.3-3 and 4.3-4 have been incorporated into the Project to reduce this impact to a less than significant level.

MM 4.3-3: Minimize Exposure to Potential Valley Fever–Containing Dust.

MM 4.3-4: Payment of a one-time fee to Kern County Public Health Services Department in the amount of $3,200 for Valley Fever public awareness programs.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

3. BIOLOGICAL RESOURCES

CEQA FINDING NO. 4.4-1

Impact: **Biological Resources 4.4-1. Substantial adverse effect to any special-status species.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project would have an adverse effect to any species identified as a candidate, sensitive, or a special-status species identified as a candidate, sensitive, or a in local or regional plans, policies, or regulations or by California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS).

Implementation of MMs 4.4-1 through 4.4-7, and 4.9-2 have been incorporated into the Project to reduce this impact to a less than significant level.

MM 4.4-1: Biological Monitoring.

MM 4.4-2: Construction Worker Environmental Awareness Training and Education Program.

MM 4.4-3: Avoidance and Protection of Biological Resources.

MM 4.4-4: Preconstruction Clearance Surveys.

MM 4.4-5: Preconstruction Desert Tortoise Surveys.

MM 4.4-6: Preconstruction Burrowing Owl Surveys.

MM 4.4-7: Nesting Birds and Raptors.

MM 4.9-2: The Project proponent/operator shall continuously comply with Herbicide application requirements.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.4-2

Impact: **Biological Resources 4.4-2. Have a substantial adverse effect on any riparian habitat or other sensitive natural communities.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project would have a substantial adverse effect on any riparian habitat or other sensitive natural community, or jurisdictional waters, identified in local or regional plans, policies, or regulations by CDFW or USFWS.

Implementation of MMs 4.4-8 and 4.4-9 have been incorporated into the Project to reduce this impact to a less than significant level.

MM 4.4-8: Prior to issuance of any grading or building permit, the Project proponent/operator shall submit a final Jurisdictional Delineation report.

MM 4.4-9: The Project proponent/operator shall be subject to provisions as identified by Regional Water Quality Control Board and CDFW Prior to ground disturbance activities.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.4-4

Impact: **Biological Resources 4.4-4. 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.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of 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.

Implementation of MM 4.4-10 has been incorporated into the Project to reduce this impact to a less than significant level.

MM 4.4-10: The project site shall be fenced to keep specific terrestrial wildlife species from entering the project and allowing other species to pass through the site during construction.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.4-5

Impact: **Biological Resources 4.4-5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING

Activities proposed as part of the Project would have a conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Implementation of MMs 4.4-1 through 4.4-10 above have been incorporated into the Project to reduce this impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.4-6

Impact: **Biological Resources 4.4-5. The project would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING

Activities proposed as part of the Project would have a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan.

Implementation of MMs 4.4-1, 4.4-2, 4.4-4, and 4.4-5 above have been incorporated into the Project to reduce this impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

4. CULTURAL RESOURCES

CEQA FINDING NO. 4.5-1

Impact: **Cultural Resources 4.5-1. Cause a substantial adverse change in the significance of a historical resource, as defined in CEQA Guidelines Section 15064.5.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project would Cause a substantial adverse change in the significance of a historical resource, as defined in CEQA Guidelines Section 15064.5.

Implementation of MM 4.5-1 through 4.5-4 have been incorporated into the Project to reduce this impact to a less than significant level.

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)

MM 4.5-2: Submit to the Kern County Planning and Natural Resources Department a Cultural Resources Treatment Plan.

MM 4.5-3: During implementation of the Project, the services of Native American Tribal Monitors, 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, on a full-time basis, ground-disturbing activities associated with project-related construction activities.

MM 4.5-4: Inadvertent discovery of cultural resources during implementation of the project.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.5-2

Impact: **Cultural Resources 4.5-2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project would cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5.

Implementation of MM 4.5-1 through 4.5-4 above have been incorporated into the Project to reduce this impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.5-3

Impact: **Cultural Resources 4.5-3. Disturb any human remains, including those interred outside of formal cemeteries.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could disturb any human remains, including those interred outside of formal cemeteries.

Implementation of MM 4.5-5 has been incorporated into the Project to reduce this impact to a less than significant level.

MM 4.5-5: Human remains are discovered and uncovered during Project construction.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.5

Impact: **Cumulative Cultural Resources Impacts.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project would have a cumulative environmental impact on cultural resources.

Implementation of MMs 4.5-1 through 4.5-5 above have been incorporated into the Project to reduce this cumulative impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this cumulative impact is reduced to a less than significant level.

5. ENERGY

CEQA FINDING NO. 4.6-1

Impact: **Energy 4.6.1. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation.

Implementation of MM 4.3-1 described under Air Quality has been incorporated into the Project to reduce this impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.6-2

Impact: **Cumulative Energy Impacts.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project would result in a cumulative environmental impact on energy.

Implementation of MM 4.3-1 described under Air Quality has been incorporated into the Project to reduce this cumulative impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this cumulative impact is reduced to a less than significant level.

6. GEOLOGY AND SOILS

CEQA FINDING NO. 4.7-6

Impact: **Geology and Soils 4.7-6. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Implementation of MMs 4.7-1, 4.7-2, and 4.7-3 have been incorporated into the Project to reduce this impact to a less than significant level.

MM 4.7-1: The Project proponent/contractor shall retain a qualified paleontologist, defined as a paleontologist meeting the Society for Vertebrate Paleontology's Professional Standards (SVP, 2010), to carry out all mitigation measures related to paleontological resources.

MM 4.7-2: A qualified paleontologist or designated monitor shall monitor all ground-disturbing activity.

MM 4.7-3: If a paleontological resource is found, the Project contractor shall cease ground-disturbing activities within 50 feet of the find.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.7

Impact: **Cumulative Geology and Soils Impact.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project would result in a cumulative environmental impact on geology and soils.

Implementation of MMs 4.7-1, 4.7-2, and 4.7-3 above have been incorporated into the Project to reduce this cumulative impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

7. HAZARDS AND HAZARDOUS MATERIALS

CEQA FINDING NO. 4.9-1

Impact: **Hazards and Hazardous Materials 4.9-1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Implementation of MMs 4.9-1 and 4.17-1 under Utilities and Service Systems have been incorporated into the Project to reduce this impact to a less than significant level.

MM 4.9-1: Prior to the issuance of grading or building permits, the Project proponent/operator shall prepare a hazardous materials business plan and submit it to the Kern County Environmental Health Services Division/Hazardous Materials Section for review and approval.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.9-2

Impact: **Hazards and Hazardous Materials 4.9-2. 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.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could 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.

Implementation of MMs 4.9-1 above, MMs 4.9-2 below, and MM 4.17-1 have been incorporated into the Project to reduce this impact to a less than significant level.

MM 4.9-2: The Project proponent/operator shall continuously comply with Herbicide application requirements.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.9-4

Impact: **Hazards and Hazardous Materials 4.9-4. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires.

Implementation of MM 4.14-1 under Public Services has been incorporated into the Project to reduce this impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.9

Impact: **Cumulative Hazards and Hazardous Materials Impacts.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project would have a cumulative environmental impact on hazards and hazardous materials.

Implementation of MM 4.9-1, 4.9-2, 4.14-1, and 4.17-1 have been incorporated into the Project to reduce these cumulative impacts to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described

above, this cumulative impact is reduced to a less than significant level.

8. HYDROLOGY AND WATER QUALITY

CEQA FINDING NO. 4.10-1

Impact: **Hydrology and Water Quality 4.10-1. Violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality.

Implementation of MM 4.9-1 under Hazards and Hazardous Materials has been incorporated into the Project to reduce this impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.10-3

Impact: **Hydrology and Water Quality 4.10-3. 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 which would result in substantial erosion and/or sedimentation on- or off-site.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could 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 which would result in substantial erosion and/or sedimentation on- or off-site.

Implementation of MM 4.10-1 has been incorporated into the Project to reduce this impact to a less than significant level.

MM 4.10-1: Prior to the issuance of a grading permit, the Project proponent/operator shall complete a final drainage plan designed to evaluate and minimize potential increases in runoff from the Project site.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.10-4

Impact: **Hydrology and Water Quality 4.10-4. 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 which would substantially increase the rate or amount of surface runoff which would result in flooding on- or off site.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could 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 which would substantially increase the rate or amount of surface runoff which would result in flooding on- or off site.

Implementation of MM 4.10-1 above has been incorporated into the Project to reduce this impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.10-5

Impact: **Hydrology and Water Quality 4.10-5. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

Implementation of MM 4.10-1 above has been incorporated into the Project to reduce this impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

9. LAND USE AND PLANNING

CEQA FINDING NO. 4.11	
Impact:	**Cumulative Land Use and Planning Impacts.**
Finding(s):	(1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project has the potential to contribute to a cumulative influence on proposed land uses in and around the project site.

Implementation of MM 4.11-1 and 4.11-2 have been incorporated into the Project to reduce this cumulative impact to a less than significant level.

MM 4.11-1: Prior to issuance of any building permit, the project operator shall provide 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.

MM 4.11-2: 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.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this cumulative impact is reduced to a less than significant level.

10. NOISE

CEQA FINDING NO. 4.12-1

Impact: **Noise 4.12-1. The project would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could result in generation of a substantial temporary or permanent increase in operational 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.

Implementation of MM 4.12-4has been incorporated into the Project to reduce the operational Project impacts to a less than significant level.

MM 4.12-4: The project shall be designed to ensure that operational noise levels at nearby sensitive receptors, depending on their location within or outside of the Water Supply Stabilization Project (WSSP) area, would not exceed the applicable WSSP or County noise standards. Techniques that can be incorporated into the Project design to achieve compliance with the applicable noise standards.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.12-3

Impact: **Cumulative Noise 4.12-3. The project construction activities and noise associated with other projects in proximity to the Project site.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could result in generation of construction noise associated with other projects in proximity to the Project site could occur at the same time as the proposed project, but would have limited cumulative contributions because of their distance from the project site.

Implementation of MM 4.12-4 above has been incorporated into the Project to reduce the construction impacts to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

11. PUBLIC SERVICES

CEQA FINDING NO. 4.14-1

Impact: **Public Services 4.14-1. Result in the 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 law enforcement protection services.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could result in the 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 law enforcement protection services.

Implementation of MM 4.14-1 and 4.14-2 have been incorporated into the Project to reduce this impact to a less than significant level.

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.

MM 4.14-2: Implement the following mitigation steps at the Project site: pay for impacts on countywide public protection, sheriff's patrol and investigative services, and fire services, 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. 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, and proof of 50 percent or greater of contractors hiring their workers from local Kern County communities.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.14

Impact: **Cumulative Public Services Impacts.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could result in the cumulative impacts for the project are considered significant if the incremental effects of the individual projects are considerable when viewed in connection with the effects of past projects, and the effects of other projects located in the vicinity of the project site.

Implementation of MM 4.14-1 and 4.14-2 have been incorporated into the Project to reduce this cumulative impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this cumulative impact is reduced to a less than significant level.

12. TRANSPORTATION AND TRAFFIC

CEQA FINDING NO. 4.15-3

Impact: **Transportation and Traffic 4.15-3. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Implementation of MM 4.15-1 has been incorporated into the Project to reduce this impact to a less than significant level.

MM 4.15-1: Prepare and submit a Construction Traffic Control Plan, obtain all necessary encroachment permits for the work within the road right-of-way, 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. Submit documentation that identifies the roads to be used during construction

and submit a post-construction video log and inspection report to the County within 30 days of end of construction.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.15-4

Impact: **Transportation and Traffic 4.15-4. The project would result in inadequate emergency access.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project would result in inadequate emergency access.

Implementation of MM 4.15-1 above has been incorporated into the Project to reduce this impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

13. TRIBAL CULTURAL RESOURCES

CEQA FINDING NO. 4.16-1a

Impact: **Tribal Cultural Resources 4.16-1a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074, 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).**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could 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).

Implementation of MM 4.5-2 under Cultural Resources above has been incorporated into the Project to reduce this impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.16-1b

Impact: **Tribal Cultural Resources 4.16-1b. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources section 21074, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could 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 resource to a California Native American tribe.

Implementation of MM 4.5-2 under Cultural Resources above has been incorporated into the Project to reduce this impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.16

Impact: **Cumulative Tribal Cultural Resources Impacts.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project that could cause a substantial adverse change in cumulative impacts to tribal cultural resources could occur if other related projects, in conjunction with the proposed project, had or would have impacts on cultural resources that, when considered together, would be significant.

Implementation of MM 4.5-2 has been incorporated into the Project to reduce this cumulative impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this cumulative impact is reduced to a less than significant level.

14. UTILITIES AND SERVICE SYSTEMS

CEQA FINDING NO. 4.17-1

Impact: **Utilities and Service Systems 4.17-1. Require or result in the relocation or construction of new or expanded utilities and service systems.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project could result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects.

Implementation of MM 4.10-1 under Hydrology and Water Quality above has been incorporated into the Project to reduce this impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.17-3

Impact: **Utilities and Service Systems 4.17-3. The project would not comply with Federal, State, and Local management and reduction statutes and regulations related to solid waste.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project would not comply with Federal, State, and Local management and reduction statutes and regulations related to solid waste.

Implementation of MM 4.17-1 has been incorporated into the Project to reduce this impact to a less than significant level.

MM 4.17-1: During construction and operation, debris and waste generated shall be recycled to the extent feasible.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

15. WILDFIRE

CEQA FINDING NO. 4.18-3

Impact: **Wildfire 4.18-3. Substantially impair an adopted emergency response plan or emergency evacuation plan.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of 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.

Implementation of MM 4.14-1 under Public Services above has been incorporated into the Project to reduce this impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

CEQA FINDING NO. 4.18-4

Impact: **Wildfire 4.18-4. The project would not comply with Federal, State, and Local management and reduction statutes and regulations related to solid waste.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project would not 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.

Implementation of MM 4.10-1 under Hydrology and Water Quality above has been incorporated into the Project to reduce this impact to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. With the mitigation described above, this impact is reduced to a less than significant level.

D. SIGNIFICANT AND UNAVOIDABLE IMPACTS

The following impacts were determined in the Final EIR to be significant and unavoidable. The Statement of Overriding Considerations adopted as part of this exhibit applies to all such unavoidable impacts as required by CEQA. (Pub. Resources Code, § 21081, subd. (b); State CEQA Guidelines, §§ 15092 and 15093.)

1. AESTHETICS

CEQA FINDING NO. 4.1-3

Impact: **Aesthetics Impact 4.1-3: Potential to result in substantially degrade the existing visual character or quality of public views of the site.**

Finding(s):
(1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project that have the potential to result in 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.) The project is not in an urbanized area. Therefore, the Project would not conflict with applicable zoning and other regulations governing scenic quality within urbanized areas of Kern County.

Implementation of MM 4.1-1, 4.1-2, and 4.1-3 have been incorporated into the Project and would reduce the severity of Impact 4.1-3, although not necessarily to a less than significant level.

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.

MM 4.1-2: Prior to the issuance of the building permit for the solar facility, the project proponent/operator shall identify and submit a proposed color scheme and treatment plan that will ensure all project facilities including operations and maintenance buildings, gen-tie poles, array facilities, etc. blend in with the colors found in the natural landscape.

MM 4.1-3: Wherever possible, within the proposed project boundary the natural vegetation shall remain undisturbed. Where disturbance of natural vegetation is necessary that disturbance shall occur in the manner that results in the greatest retention of root balls and native topsoil with mowing being the preferred and primary method of clearing. All natural vegetation adjacent to the proposed project boundary shall remain in place. 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.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

CEQA FINDING NO. 4.1

Impact: **Cumulative Aesthetic Impacts.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project would result in a cumulatively considerable aesthetic impact.

Implementation of MMs 4.1-1 through 4.1-6 have been incorporated into the Project and would reduce the severity of the cumulative impact, although not necessarily to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant

and unavoidable.

2. AIR QUALITY

CEQA FINDING NO. 4.3-1

Impact: **Air Quality 4.3-1: The project would conflict with or obstruct implementation of the applicable air quality plan.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project that have the potential to result in a conflict with or obstruct implementation of the applicable air quality plan.

Implementation of MMs 4.3-1 and 4.3-2 have been incorporated into the Project and would reduce the severity of Impact Air Quality 4.3-1, although not necessarily to a less than significant level.

MM 4.3-1: Implement Diesel Emission-Reduction Measures During Construction.

MM 4.3-2: Implement Fugitive Dust Control Plan During Construction.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

CEQA FINDING NO. 4.3-3

Impact: **Air Quality 4.3-3: Cumulative Air Quality Impacts.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

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.

Implementation of MMs 4.3-1 through 4.3-4 have been incorporated into the Project and would reduce the severity of Impact Air Quality 4.3-3, although not necessarily to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

3. BIOLOGICAL RESOURCES

CEQA FINDING NO. 4.4

Impact: **Cumulative Biological Resources Impacts.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project that have the potential to result in cumulative impacts that will be significant and unavoidable to transient wildlife species, including burrowing owls, Swainson's hawk, other raptors, desert kit fox, and migratory birds.

Implementation of MMs 4.4-1 through 4.4-10 have been incorporated into the Project and would reduce the severity of Cumulative Biological Resources Impacts, although not necessarily to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This cumulative impact is considered significant and unavoidable.

4. NOISE

CEQA FINDING NO. 4.12-1

Impact: **Noise 4.12-1: The project would result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project that have the potential to result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity Water Supply Stabilization Project of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

Implementation of MMs 4.12-1, 4.12-2, 4.12-3, and 4.12-4 have been incorporated into the Project and would reduce the severity of Impact Noise 4.12-1, although not necessarily to a less than significant level.

MM 4.12-1: The following measures are to be implemented to further reduce short-term noise levels associated with project construction and decommissioning: hourly restrictions for noise-generating construction activities, as specified in the County's Code of Ordinances, Equipment staging and laydown areas shall be located at the furthest practical distance from nearby residential land uses, 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, Haul trucks shall not be allowed to idle for periods greater than five minutes, except as needed to perform a specified function, Onsite vehicle speeds shall be limited to 15 miles per hour, or less, and 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.

MM 4.12-2: Prior to the issuance of grading permits, a "noise disturbance coordinator" shall be established. The project operator shall submit evidence of methods of implementation and shall continuously comply with the following during construction: The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting to early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved.

MM 4.12-3: Prior to the issuance of grading permits, the project operator shall submit evidence of the following: Construction contracts shall specify that notices

shall be sent out to all residences within 1,000 feet of the construction areas at least 15 days prior to commencement of construction. The notices shall include the construction's schedule and a telephone number where complaints can be registered with the noise disturbance coordinator. A sign legible at a distance of 50 feet shall also be posted at the construction site throughout construction, which includes the same details as the notices.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

CEQA FINDING NO. 4.12

Impact: **Cumulative Noise Impacts.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Construction and decommissioning of the proposed project would have a cumulative environmental impact on noise.

Implementation of MMs 4.12-1 through 4.12-3 have been incorporated into the Project and would reduce the severity of the Cumulative Noise Impact, although not necessarily to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This impact is considered significant and unavoidable.

5. WILDFIRE

CEQA FINDING NO. 4.18

Impact: **Cumulative Wildfire Impacts.**

Finding(s): (1) Changes or alterations have been required in, or incorporated into, the project that mitigate or avoid the significant environmental effect as identified in the EIR.

(3) Specific economic, legal, social, technological, or other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

FACTS SUPPORTING THE FINDING(S)

Activities proposed as part of the Project that have the potential to result in cumulative impacts that will be significant and unavoidable. The location in a rural area and limited infrastructure, the project and related projects have the potential to result in cumulative impacts related to exposing people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes and, thus, would result in a significant and unavoidable cumulative impact.

Implementation of MMs 4.10-1 and 4.14-1 have been incorporated into the Project and would reduce the severity of Cumulative Wildfire Impacts, although not necessarily to a less than significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION. This cumulative impact is considered significant and unavoidable.

E. FINDINGS ON ALTERNATIVES

As explained in *California Native Plant Society* v. *City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1000:

> *When it comes time to decide on project approval, the public agency's decision-making body evaluates whether the alternatives [analyzed in the EIR] are actually feasible…. At this final stage of project approval, the agency considers whether '[s]pecific economic, legal, social, technological, or other considerations…make infeasible the mitigation measures or alternatives identified in the environmental impact report.' Broader considerations of policy thus come into play when the decisionmaking body is considering actual feasibility than when the EIR preparer is assessing potential feasibility of the alternatives [citations omitted].*

The four alternatives analyzed in the EIR represent a reasonable range of potentially feasible alternatives that could reduce one or more significant impacts of the Project. These alternatives include:

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

As presented in the EIR, the alternatives were described and compared with each other and with the proposed Project.

Under State CEQA Guidelines section 15126.6, subdivision (e)(2), if the No Project Alternative is identified as the environmentally superior alternative, the EIR must also identify an environmentally superior alternative among the other alternatives. Based on the analysis contained in the EIR, Alternative 4 has been identified as the

environmentally superior alternative to the proposed Project that is capable of achieving the Project objective. No one alternative would eliminate the significant and adverse impacts of the proposed Project.

The County independently reviewed and considered the information on alternatives provided in the EIR and in the record. The EIR reflects the County's independent judgment as to alternatives. The County found that the Project provides the best balance between the Project goals and objectives and the Project's benefits. The four CEQA alternatives proposed and evaluated in the EIR were rejected as being infeasible for reasons provided in the County's Findings Regarding Alternatives (Attachment D-1, page 133).

Based upon the objectives identified in the Final EIR and the detailed mitigation measures imposed upon the Project, the Commission has determined that the Project should be approved, subject to such mitigation measures (Exhibit C, Mitigation Monitoring Program).

4.0 STATEMENT OF OVERRIDING CONSIDERATIONS

A. INTRODUCTION

This section addresses the Commission's obligations under Public Resources Code section 21081, subdivisions (a)(3) and (b). (See also State CEQA Guidelines, §§ 15091, subd. (a)(3), 15093.) Under these provisions, CEQA requires the Commission to balance, as applicable, the economic, legal, social, technological, or other benefits, including regionwide or statewide environmental benefits, of the Lease approval related to the Big Beau Solar Project against the backdrop of the Project's unavoidable significant environmental impacts. For purposes of CEQA, if the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable significant environmental effects, those effects may be considered acceptable and the decision-making agency may approve the underlying project. (State CEQA Guidelines § 15092, subd. (b)(2)(B).) CEQA, in this respect, does not prohibit the Commission from approving the Lease even if the Project activities as authorized under the Lease may cause significant and unavoidable environmental effects.

This Statement of Overriding Considerations presents a list of (1) the specific significant effects on the environment attributable to the approved Project that cannot feasibly be mitigated to below a level of significance, (2) benefits derived from the approved Project, and (3) specific reasons for approving the Project.

Although the County and Commission have imposed mitigation measures to reduce impacts, impacts remain that are considered significant after application of all feasible mitigation. Significant impacts of the approved Project fall under five resource areas: Aesthetics, Air Quality, Biological Resources, Noise, and Wildfire (see Table 2). These impacts are specifically identified and discussed in more detail in the Commission's CEQA Findings and in the County's Final EIR. While the Commission has required all

feasible mitigation measures, these impacts remain significant for purposes of adopting this Statement of Overriding Considerations.

Table 2 – Significant and Unavoidable Impacts Identified for the Approved Project

Impact	Impact Description
Aesthetics	
4.1-3: Construction-related Impacts to Aesthetics	The proposed project would substantially degrade the existing visual character or quality of the site and its surroundings. When introduced into the project viewshed, the industrial nature of the project would substantially change the existing visual character of the landscape as viewed from sensitive receptors for the life of the project. The project facilities would add cultural modifications to the project site's landscape from certain viewpoints. Operation of a solar power generation and battery storage facility of this size would introduce new infrastructure and other anthropogenic features; alter the existing visual character of the landscape from one that is rural to more industrial in nature; be seen by viewers of high, moderately high, and moderate sensitivity; and reduce existing scenic quality through the intrusion of human-made elements on land that is currently largely undeveloped. Native vegetation would be left in place around the project site where feasible, allowing for a natural screening of project components, and the proposed project would incorporate a 100-foot building set-back for solar arrays, the operations and maintenance building, and other project features from the project property lines in areas directly adjacent to residential parcels. Implementation of mitigation measures would help to reduce visual impacts associated with the proposed project by limiting vegetation removal, planting native vegetation, providing privacy fencing, reducing the visibility of project features, and ensuring that the site is kept free of debris and trash. Nevertheless, even with implementation of these measures, project level impacts to visual character and quality would remain significant and unavoidable.
4.1 Cumulative Aesthetics Impacts	The proposed project would result in cumulative aesthetics impacts. The project in combination with the cumulative projects would have significant and unavoidable impacts related to aesthetics. If construction at the locally cumulative project locations were to occur at the same time as, or consecutively before or after, construction of the proposed project, equipment from these sites would combine with similar activities and equipment from the project site. Construction of the proposed project and the other cumulative projects in the immediate project vicinity would lead to the continued presence of construction equipment on roads and in the landscape in the local project region for several years, and cause a substantial cumulative visual impact. In addition, with regard to operation, if the solar project applications in the vicinity of the proposed project are realized, the project, in combination with these cumulative projects, would result in a cumulatively considerable visual impact. Furthermore, the project and other projects in the region would be required to implement

Impact	Impact Description
	various mitigation measures to reduce impacts. However, the conversion of thousands of acres in a presently rural area to solar and wind energy production uses cannot be mitigated to a degree that impacts are no longer significant. These have the potential to result in cumulative impacts to aesthetics when considered together with the proposed project. As such, the proposed project and other projects in the region would result in significant and unavoidable impacts related to aesthetics, even after implementation of mitigation. Additionally, mitigation measures would assist in reducing impacts to scenic resources created by the cumulative scenario. However, where the existing natural basin and range landscape still currently predominate, the industrial character of spatially extensive, highly prominent wind and solar projects would come to strongly dominate, substantially degrading the existing visual character and quality. The resulting cumulatively considerable visual impact would be significant and unavoidable.
Air Quality	
4.3-1: Construction-related Impacts to Air Quality	The proposed project would conflict with or obstruct implementation of the applicable air quality plan. Compliance with Eastern Kern County Air Pollution Control District (EKAPCD) Rule 402 and implementation of standard dust control procedures would substantially reduce effects on air quality resulting from the release of fugitive dust during construction. However; while mitigation measures would be implemented during construction of the project that would reduce emissions of criteria air pollutants, emissions of NOX and PM10, they would not be reduced below the EKAPCD significance threshold. Therefore, the proposed project would result in a significant and unavoidable impact for NOx and PM10 emissions during construction.
4.3-3: Cumulative Air Quality Impacts	The proposed project would result in a cumulatively considerable net increase of a criteria pollutant for which the projects' region (EKADPC) is nonattainment under applicable federal or state ambient air quality standards (including released emissions that exceed quantitative thresholds for ozone precursors). There are a number of projects within a 6-mile radius that have the potential for overlapping construction schedules. The associated emissions of NOx and PM10, when cumulatively considered, could be above the respective significance thresholds and therefore could result in significant impacts related to the generation of fugitive dust, particulate matter exhaust, and ozone precursors. However, given the project exceeds the EKAPCD standard for construction-related PM10 and NOx emissions, and the potential for cumulatively considerable impacts associated with construction-related NOx, construction of the project would result in a significant and unavoidable cumulative impact.

Impact	Impact Description
	Emissions from the simultaneous construction of multiple cumulative projects in conjunction with the proposed project could result in an exceedance of EKAPCD's annual and/or daily significance thresholds. Given that the project area is currently nonattainment of state standards for ozone and PM10, which represents an existing adverse condition, and since the proposed project's construction emissions would exceed the EKAPCD annual threshold for NOX and PM10, the proposed project's contribution to air quality impacts related to construction would be cumulatively considerable, and the associated cumulative impact as it relates to CEQA would be significant and unavoidable even with implementation of mitigation measures.
Biological Resources	
4.4 Cumulative Biological Resources Impacts	The proposed project would result in cumulative biological resources impacts. There are a number of special-status species that currently utilize the project site and surrounding vicinity. Implementation of the project in addition to the other projects under way or proposed within Kern County would impact habitat for transient wildlife species, including burrowing owls, loggerhead shrike, yellow-headed blackbird, other raptors, migratory birds, and desert kit fox. The project site contains habitat that support insects, rodents, and small birds that provide a prey base for raptors and terrestrial wildlife. In addition, based on the literature review and database search completed for the project, the region is known to support a diversity of special-status species, most of which are expected to utilize the project site on at least a transient basis. Given the number of present and reasonably foreseeable future development projects in the Antelope Valley, the proposed project, when combined with other projects, would result in a significant and unavoidable cumulative loss of foraging and nesting habitat for special-status species even with implementation of mitigation measures.
Noise	
4.12-1: Construction-related Impacts to Noise	The proposed project would result in the generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance. With project implementation, maximum noise levels generated by project construction equipment would range from approximately 74 to 88 dBA Lmax at a reference distance of 50 feet and average noise levels generated by project construction phases would range from approximately 79 to 95 dBA Leq at a reference distance of 50 feet. Sensitive land uses in the project site vicinity that would be exposed to project construction noise levels include the sparsely distributed residential dwellings that are in the vicinity of the project site. Chapter 8.36 of the Kern County Municipal Code includes established hours of construction and limitations on construction related noise impacts on adjacent sensitive receptors. Noise producing construction activities are prohibited between the hours of

Impact	Impact Description
	9:00 p.m. and 6:00 a.m. on weekdays and 9:00 p.m. and 8:00 a.m. on weekends, when they are audible to a person with average hearing ability at a distance of 150 feet from the construction site, or if the construction site is within 1,000 feet of an occupied residential dwelling. Given the fact that construction activities could generate noise greater than the standard 65dB(a) for the Kern County General Plan and 55 dB(A) for short period of times, temporary construction and decommissioning impacts are considered significant and unavoidable even with implementation of mitigation measures.
4.12 Cumulative Noise Impacts	The proposed project would result in cumulative noise impacts. The cumulative projects nearest to the project site are all either adjacent or close to the proposed project. Therefore, should construction of the proposed project and any of the cumulative projects occur currently, cumulative construction noise impacts would occur. As construction of the proposed project would result in significant and unavoidable impacts, the construction of the proposed project concurrently with the construction of adjacent and nearby cumulative projects, if it were to occur, would result in a cumulatively considerable contribution to construction noise impacts in the vicinity of the project. Therefore, the cumulative impact would be significant and unavoidable even with implementation of mitigation measures.
Wildfire	
4.18: Cumulative Wildfire Impacts	The proposed project would result in cumulative wildfire impacts. The project site is not classified as being within a high fire hazard severity zone, the project site is located in a rural, sparsely developed area with limited population, is not located along an identified emergency evacuation route or within an adopted emergency evacuation plan, and would be in compliance with Fire Code and Building Code requirements. Nevertheless, given the location in a rural area and limited infrastructure, the project and related projects have the potential to result in a cumulative impact related to conflicting with an adopted emergency response plan or emergency evacuation plan, exposing people to pollutant concentrations from a wildfire, the installation or maintenance of associated infrastructure, exposing people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes and, thus, would result in a significant and unavoidable cumulative impact even with implementation of mitigation measures.

B. BALANCING OF BENEFITS AND RISKS ASSOCIATED WITH LEASE APPROVAL

State CEQA Guidelines section 15093, subdivision (a) requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project.

Overriding considerations that support Project approval are as follows:

1) The proposed project would help to meet the increasing demand for clean, safe, renewable electrical power.

2) The proposed project would establish a solar PV power-generating facility and associated infrastructure that are of a sufficient size and configuration to produce approximately 128 MW of electricity and up to 60 MW of battery energy storage.

3) The proposed project would produce and transmit electricity at a competitive cost.

4) The proposed project would minimize environmental effects by:

    a) Using existing electrical distribution facilities, ROW, roads, and other existing infrastructure, where practicable;
    b) Minimizing impacts to threatened species and endangered species;
    c) Minimizing water use; and
    d) Reducing greenhouse gas emissions.

5) The proposed project would supply clean, safe, renewable energy.

6) The proposed project would support the economic development of Kern County, Los Angeles County, and the State of California.

7) The proposed project would produce and transmit electricity at a competitive cost and in a manner that is eligible for commercial financing.

8) The proposed project would assist the state of California in achieving the Renewable Portfolio Standard (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, by providing a significant new source of renewable energy (California State Assembly Bill [AB] 32, Senate Bill [SB] 1078, SB 107, SB 350, and SB 2).

9) The proposed project would enhance existing electrical distribution infrastructure and provide greater support to existing and future customer loads.

10) The proposed project would generate an estimated 220 construction jobs with a peak workforce of 450 workers and up to 12 full time equivalent (FTE) jobs on site, and provide increased business for local contractors and vendors.

C. COMMISSION ADOPTION OF STATEMENT OF OVERRIDING CONSIDERATIONS

As noted above, under Public Resources Code section 21081, subdivisions (a)(3) and (b) and State CEQA Guidelines section 15093, subdivision (a), the decision-making agency is required to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or state-wide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve a project.

For purposes of CEQA, if these benefits outweigh the unavoidable significant environmental effects of a proposed project, the decision-making agency may approve the underlying project. CEQA, in this respect, does not prohibit the Commission from approving the Project, even if the activities authorized by that approval may cause significant and unavoidable environmental effects. This balancing is particularly difficult given the significant and unavoidable impacts on the resources discussed in the EIR and these Findings. Nevertheless, the Commission finds, as set forth below, that the benefits anticipated by implementing the Project outweigh and override the expected significant effects.

The Commission has balanced the benefits of the Project against the significant unavoidable impacts that will remain after approval of the lease associated with the Approved Project and with implementation of all feasible mitigation in the EIR that is adopted as enforceable conditions of the Commission's approval of the Project. Based on all available information, the Commission finds that the benefits of the approved Project outweigh the significant and unavoidable adverse environmental effects and considers such effects acceptable. The Commission adopts and makes this Statement of Overriding Considerations with respect to the impacts identified in the EIR and these Findings that cannot be reduced to a less than significant level. Each benefit set forth above or described below constitutes an overriding consideration warranting approval of the project, independent of the other benefits, despite each and every significant unavoidable impact.

D. CONCLUSION

The Commission has considered the Final EIR and all of the environmental impacts described therein including those that cannot be mitigated to a less than significant level and those that may affect Public Trust uses of State sovereign land. Based on the foregoing and pursuant to Public Resources Code section 21081 and State CEQA Guidelines sections 15096 subdivision (h) and 15093, the Commission has considered the fiscal, economic, legal, social, environmental, and public health and safety benefits of the Project and has balanced them against the Project's significant and unavoidable and unmitigated adverse environmental impacts and, based upon substantial evidence in the record, has determined that the benefits of the Project outweigh the adverse environmental effects. The Commission finds that the remaining significant unavoidable impacts of the Project are acceptable in light of these benefits. Such benefits outweigh

such significant and unavoidable impacts of the Project and provide the substantive and legal basis for this Statement of Overriding Considerations.

The Commission finds that to the extent that any impacts identified in the Final EIR remain unmitigated, mitigation measures have been required to the extent feasible, although the impacts could not be reduced to a less than significant level.

Based on the above discussion, the Commission finds that the benefits of the Project outweigh the significant unavoidable impacts that could remain after mitigation is applied and considers such impacts acceptable.

ATTACHMENT D-1

Kern County
Findings and Statement of
Overriding Considerations

EXHIBIT A **ATTACHMENT D-1**

FINDINGS OF FACT IN SUPPORT OF FINDINGS
RELATED TO SIGNIFICANT ENVIRONMENTAL IMPACTS

State CEQA Guidelines Section 15091

for

BigBeau Solar Project

By BigBeau Solar, LLC/EDF Renewables Development, Inc.

ZCC 13, Map 215
ZCC 44, Map 232
CUP 13, Map 215
CUP 14, Map 215
CUP 15, Map 215
CUP 41, Map 232
CUP 42, Map 232
CUP 43, Map 232
GPA 4, Map 215
SPA 32, Map 232

Final Environmental Impact Report

SCH# 2019071059

Lead Agency: Kern County Planning and Natural Resource Department

EXHIBIT A

SECTION I. INTRODUCTION

The following findings of fact are based in part on the information contained in the Draft and Final Environmental Impact Report (EIR) for the BigBeau Solar Project (project or proposed project), as well as additional facts found in the complete record of proceedings. The Final EIR is hereby incorporated by reference and is available for review at the Kern County Planning and Natural Resource Department (Planning Department), 2700 M Street, Suite 100, Bakersfield, California 93301, during normal business hours, and is also available on the Planning and Natural Resource Department's website.

SECTION II. FINDINGS REGARDING THE POTENTIAL ENVIRONMENTAL EFFECTS OF THE PROJECT

The Planning and Natural Resource Department issued a Notice of Preparation of a Draft EIR on the proposed project. Based on the Initial Study and Notice of Preparation, a determination was made that the Final EIR would contain a comprehensive analysis of environmental issues identified in Appendix G of the California Environmental Quality Act (CEQA) Guidelines and not screened out during the Notice of Preparation. With respect to all impacts identified as "less than significant" or as having "no impact" in the Final EIR, the Planning Commission finds that those impacts have been described accurately and are less than significant or have no impact. Despite concluding that certain impacts would be less than significant or would have no impact, the Final EIR nonetheless incorporates mitigation measures in the form of complying with the goals, policies, and implementation measures of the Kern County General Plan, applicable Specific Plans, Conditional Use Permit (CUP) requirements, or other adopted regulations. The Planning Commission finds that these effects are less than significant or have no impact before and after implementation of these mitigation measures.

In addition, some impacts in the EIR were found to be "significant" but were able to be mitigated to less-than-significant levels, and others were found to be "significant and unavoidable." The Planning Commission finds that those impacts have been described accurately and are less than significant with the implementation of mitigation or are significant and unavoidable.

AESTHETICS

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

The proposed project would not have a substantial adverse effect on a scenic vista (Impact 4.1-1).

The proposed project would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (Impact 4.1-2).

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

Significant Effect

The proposed project could create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area (Impact 4.1-4).

Description of Significant Impact

Construction of the project would generally occur during daytime hours between 6:00 a.m. and 9:00 p.m. and would continue to no later than 9 p.m. in order to meet the construction schedule. No overnight construction is expected to occur. During evening construction, construction crews would use minimal illumination in order to perform the work safely. All lighting would be directed downward and shielded to focus illumination on the desired work areas only, and to prevent light spillage onto adjacent properties. During construction, dusk-to-dawn security lighting would be required for the temporary construction staging area, parking area, construction office trailer entries, and site access points. Lighting is not planned for typical construction activities because construction activities would occur primarily during daylight. Per Mitigation Measure MM 4.1-4, any nighttime construction would use lighting designed to provide the minimum illumination needed, thereby minimizing adverse impacts on any nearby residents. As a result, construction of the project would result in less-than-significant impacts to nighttime views.

As described in more detail in Chapter 3, *Project Description*, of the EIR, the project would include security lighting. Permanent motion sensitive, directional security lights would be installed to provide adequate illumination around the substation areas and points of ingress/egress during nighttime hours. All lighting would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties. All lighting would also conform to applicable Kern County Dark Sky Ordinance requirements. Lighting would be used from dusk to dawn once the facilities are operational and would be designed to avoid light trespass, spillover lighting or lighting annoyance. Nevertheless, to avoid potential impacts, the project would be required to implement Mitigation Measure MM 4.1-4, which requires compliance with the Dark Sky Ordinance and for all lighting to be directed downwards and shielded. Following compliance with Mitigation Measure MM 4.1-4, impacts related to lighting would be less than significant during project operation.

Although solar facility glare potential is much lower than is commonly perceived, solar panels have the potential to create some glare. Although the project may produce glare, it is not expected to cause extreme visual discomfort or impairment of vision for residents because the panels are designed to absorb as much sunlight as possible and, therefore, would have minimal reflectivity. Similarly, and also due to their low reflectivity, the panels would not be expected to cause visual impairment for motorists on area roadways. This is because local motorists would pass well under the angle of refraction (i.e., less than 30 degrees). Effects on eastbound motorists would likely be greatest in the early evening hours, when the sun is at its lowest arc in the western horizon. Glare would have its greatest impact on westbound travelers in the early morning hours, when the sun is rising in the east. To further reduce glare potential, the project would be required to implement Mitigation Measures MM 4.1-5 and MM 4.1-6, which require the use of non-reflective and non-glare materials when feasible. With implementation of these mitigation measures, impacts would be less than significant.

Finding

The proposed project has the potential to create a new source of substantial light or glare that would adversely affect day or nighttime views in this area. However, implementation of Mitigation Measures 4.1-4 through 4.1-6, described below, would reduce this impact to a less-than-significant level.

Level of Significance

With implementation of Mitigation Measures MM 4.1-4 through MM 4.1-6, impacts would be less than significant.

Brief Explanation of the Rational for Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts related to creating a new source of substantial light or glare that would adversely affect day or nighttime views in the project area. Implementation of Mitigation Measures 4.1-4 through 4.1-6, described below, would reduce impacts to a less-than-significant level.

Kern County

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 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 the issuance of a building permit, the project operator shall demonstrate that all on-site buildings will utilize nonreflective materials, as approved by the Kern County Planning and Natural Resources.

State Lands Commission

MM 4.1-4: Prior to final activation of the solar facility, the project proponent shall demonstrate to 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 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 California State Lands Commission.

MM 4.1-6: Prior to the issuance of a building permit, the project operator shall demonstrate that all on-site buildings will utilize nonreflective materials, as approved by the Kern County Planning and Natural Resources.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

Significant Effect

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) (Impact 4.1-3).

Description of Significant Impact

Although the O&M facility, battery containers, towers, substation, and gen-tie line would not be visible to viewers at the locations of the simulated key views, they may be visible from other local roadways and residences near these facilities. In addition, the light-gray chain-link fence could detract from views and create a perceived visual barrier. These features would create visual intrusions in the landscape and detract from views if not properly designed.

Operation of a solar power generation and battery storage facility of this size would introduce new infrastructure and other anthropogenic features; alter the existing visual character of the project's landscape from one that is rural to more industrial in nature; be seen by viewers of high, moderately high, and moderate sensitivity; and reduce existing scenic quality through the intrusion of human-made elements on land that is currently largely undeveloped. Native vegetation would be left in place around the proposed project area where feasible, allowing for a natural screening of project components, and the proposed project would incorporate a 100-foot building set-back for solar arrays, the O&M building, and other project features from the project property lines in areas directly adjacent to residential parcels. Implementation of Mitigation Measures MM 4.1-1 through MM 4.1-3 would help to further reduce visual impacts associated with the proposed project by limiting vegetation removal, planting native vegetation, providing privacy fencing, reducing the visibility of project features, and ensuring that the site is kept free of debris and trash. However, even with implementation of Mitigation Measures MM 4.1-1 through MM 4.1-3, impacts to visual character and quality would be significant and unavoidable.

Furthermore, a decommissioning plan, as required by Mitigation Measure MM 4.11-1 (see Section 4.11, *Land Use*, of the EIR for full mitigation text) would ensure that project facilities would be decommissioned and removed and that the site would be revegetated to pre-construction conditions to support, at a minimum, uses that would be consistent with pre-construction uses.

Finding

The proposed project has the potential to substantially degrade the existing visual character or quality of public views of the site and its surroundings. However, implementation of Mitigation Measures MM 4.1-1 through MM 4.1-3, described below, would reduce this impact.

Level of Significance

Impacts would be significant and unavoidable with implementation of mitigation.

EXHIBIT A

Brief Explanation of the Rational for Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts related to substantially degrading the existing visual character or quality of public views of the project site and its surroundings. Even with implementation of Mitigations Measures MM 4.1-1 thought 4.1-3, impacts would be 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:

1. 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.
2. 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.
3. 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.
4. Trash and food items shall be contained in closed secured containers 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.

MM 4.1-2: Prior to the issuance of the building permit for the solar facility, the project proponent/operator shall provide evidence for the following:

The project proponent/operator shall identify and submit a proposed color scheme and treatment plan that will ensure all project facilities including operations and maintenance buildings, gen-tie poles, array facilities, etc. blend in with the colors found in the natural landscape. All color treatments shall result in matte or nonglossy finishes. The submitted color scheme and treatment plan shall be reviewed and approved by the Planning Director and the project shall continually comply with the approved plan.

MM 4.1-3: Wherever possible, within the proposed project boundary the natural vegetation shall remain undisturbed. Where disturbance of natural vegetation is necessary that disturbance shall occur in the manner that results in the greatest retention of root balls and native topsoil with mowing being the preferred and primary method of clearing. All natural vegetation adjacent to the proposed project boundary shall remain in place. 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.

1. 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.
2. 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, and a clear prohibition of the use of toxic rodenticides.
3. 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).
4. Vegetation/ground cover shall be continuously maintained on the site by the project operator to maintain fire safety requirements. (RTC 5/1/20)
5. 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 temporarily disturbed areas prove in the second year to not be successful, 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 achieves native plant diversity, establishes perennials, and is consistent with conditions prior to implementation of the proposed project, where feasible. (RTC 5/1/20)

State Lands Commission

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:

1. 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.
2. 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.

3. 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.

4. Trash and food items shall be contained in closed secured containers 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.

MM 4.1-2: Prior to the issuance of the building permit for the solar facility, the project proponent/operator shall provide evidence for the following:

The project proponent/operator shall identify and submit a proposed color scheme and treatment plan that will ensure all project facilities including operations and maintenance buildings, gen-tie poles, array facilities, etc. blend in with the colors found in the natural landscape. All color treatments shall result in matte or nonglossy finishes. The submitted color scheme and treatment plan shall be reviewed and approved by the Planning Director and the project shall continually comply with the approved plan.

MM 4.1-3: Wherever possible, within the proposed project boundary the natural vegetation shall remain undisturbed. Where disturbance of natural vegetation is necessary that disturbance shall occur in the manner that results in the greatest retention of root balls and native topsoil with mowing being the preferred and primary method of clearing. All natural vegetation adjacent to the proposed project boundary shall remain in place. 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.

1. 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.

2. 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, and a clear prohibition of the use of toxic rodenticides.

3. 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).

4. Vegetation/ground cover shall be continuously maintained on the site by the project operator to maintain fire safety requirements.

5. 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 temporarily disturbed areas prove in the second year to not be successful, 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 achieves native plant diversity, establishes perennials, and is consistent with conditions prior to implementation of the proposed project, where feasible.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

The proposed project would not have any cumulative effects on aesthetics that would be less than significant.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

Significant Effect

The proposed project would result in a cumulatively considerable aesthetic impact.

Description of Significant Impact

As shown in Table 3-5, *Cumulative Project List*, of the EIR, there are 56 projects in the area including several utility-scale solar and wind energy production facilities. These have the potential to result in cumulative impacts to aesthetics when considered together with the project. Unobstructed views of regional topographical features and undeveloped lands would be less available as acreage is developed with various projects, including solar projects that would contain PV panels and new transmission lines.

As the discussion provided above indicates, the project would result in significant and unavoidable impacts related to visual character despite implementation of mitigation. While other projects in the region would also be required to implement various mitigation measures to reduce impacts, the conversion of thousands of acres in a presently rural area to solar and wind energy production uses cannot be mitigated to a degree that impacts are no longer significant. Even with implementation of Mitigation Measures MM 4.1-1 through MM 4.1-6, the project's contribution to significant impacts associated with visual character in the Antelope Valley would be cumulative significant and unavoidable.

Level of Significance

Cumulative impacts would be significant and unavoidable for the project, even with implementation of mitigation.

Brief Explanation of the Rational for Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures MM 4.1-1 through MM 4.1-6 would reduce impacts but not to less-than-significant levels. Impacts would remain significant and unavoidable. See Mitigation Measures MM 4.1-1 through MM 4.1-6, described above.

AGRICULTURE AND FOREST RESOURCES

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

The proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use (Impact 4.2-1).

The proposed project would not conflict with existing zoning for agricultural use or Williamson Act Contracts (Impact 4.2-2)

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

The proposed project would not have any environmental effects related to agriculture and forestry resources that are potentially significant and no mitigation is required.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The proposed project would not have any environmental effects on agriculture and forestry resources that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

Significant Effect

The proposed project would have the potential to result in a cumulative environmental impact on agriculture and forestry resources.

Description of Significant Impact

The geographic scope for cumulative agricultural and forest impacts is considered the Antelope Valley. This geographic scope was selected because the land within the region possesses relatively similar agricultural opportunities, soil conditions, climate, and water availability. As shown in Table 3-5, *Cumulative Projects List*, of Chapter 3, *Project Description*, of the EIR, there are approximately 56 solar and non-solar projects proposed or approved throughout the Antelope Valley in Kern County and in the

desert portion of Kern County outside the Antelope Valley. Of the approximately 56 total projects in Kern County, 43 would be located within 6 miles of the project site and 13 would be located within 1 mile of the project site.

Of the approximately 56 total projects throughout the Antelope Valley in Kern County, 10 would be located on grazing land and one would be located on Prime farmland and may contribute to a loss of farmland.

Although the project would develop a solar facility on land zoned for agricultural uses, the proposed project would not result in the loss of farmland as the project site does not support agricultural uses, past or present. Further, the development of solar power generating facilities on the project site is not anticipated to affect the potential for agricultural production to occur in adjacent or distant areas within the Antelope Valley. Therefore, the proposed project's contribution to cumulative impacts related to agriculture in Kern County would be less than cumulatively considerable.

Finding

The project has the potential to result in less-than-significant cumulatively considerable impacts related to agriculture and forestry resources. Therefore, these impacts would be less than significant and no mitigation measures are required.

Level of Significance

Cumulative impacts would be less than significant.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. However, impacts would be less than significant and no mitigation measures are required.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

The proposed project would not have a significant and unavoidable cumulative environmental impact on agriculture and forestry resources.

AIR QUALITY

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

None of the proposed project's environmental effects on air quality have been found to result in no impacts or only less-than-significant impacts.

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

Significant Effect

Construction and operation of the proposed project would expose sensitive receptors to substantial pollutant concentrations (Impact 4.3-2).

Description of Significant Impact

As discussed in Section 4-3, Air Quality, exposure of sensitive receptors to Toxic Air Contaminants (TACs), CO hotspots, visibility impacts, and asbestos would be less than significant and not require any mitigation measures. Mitigation Measure MM 4.3-2, described below for Significant and Unavoidable Impacts, would further reduce TAC impacts to a less-than-significant level.

However, the project has the potential to generate fugitive dust and suspend Valley Fever spores with the dust that could then reach nearby sensitive receptors. It is possible that onsite workers could be exposed to valley fever as fugitive dust is generated during construction. As such, the risk of exposure and contraction of Valley Fever as a result of the project would be increased from the existing conditions, and MM 4.3-3 is required to ensure that construction workers take the proper precautions to avoid Valley Fever exposure. In addition, MM 4.3-4 is proposed to ensure appropriate public awareness regarding Valley Fever. Therefore, implementation of the Mitigation Measure MM 4.3-3 and MM 4.3-4 would minimize the exposure to Valley Fever during construction and impacts would be reduced to less-than-significant levels.

Finding

The proposed project could expose sensitive receptors to substantial pollutant concentrations. However, implementation of Mitigation Measures MM 4.3-1 and MM 4.3-2, described below for Significant and Unavoidable Impacts, and MM 4.3-3 and MM 4.3-4, described below, would reduce this impact to a less-than-significant level.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts on sensitive receptors. Implementation of Mitigation Measures MM 4.3-2 through MM 4.3-4 would reduce impacts to a less-than-significant level.

Kern County

MM 4.3-3: **Minimize Exposure to Potential Valley Fever–Containing Dust.** To minimize personnel and public exposure to potential Valley Fever–containing dust on and off site, the following control measures shall be implemented during project construction:

1. Equipment, vehicles, and other items shall be thoroughly cleaned of dust before they are moved off site to other work locations.
2. Wherever possible, grading and trenching work shall be phased so that earth-moving equipment is working well ahead or downwind of workers on the ground.
3. The area immediately behind grading or trenching equipment shall be sprayed with water before ground workers move into the area.
4. In the event that a water truck runs out of water before dust is sufficiently dampened, ground workers being exposed to dust shall leave the area until a truck can resume water spraying.
5. All heavy-duty earth-moving vehicles shall be closed-cab and equipped with a HEP-filtered air system.

6. Workers shall receive training to recognize the symptoms of Valley Fever, and shall be instructed to promptly report suspected symptoms of work-related Valley Fever to a supervisor. Evidence of training shall be provided to the Kern County Planning and Natural Resources Department within 5 days of the training session.
7. A Valley Fever informational handout shall be provided to all onsite construction personnel. The handout shall, at a minimum, provide information regarding the symptoms, health effects, preventative measures, and treatment. Additional information and handouts can be obtained by contacting the Kern County Public Health Services Department.
8. Onsite personnel shall be trained on the proper use of personal protective equipment, including respiratory equipment. National Institute for Occupational Safety and Health–approved respirators shall be provided to onsite personal, upon request. Evidence of training shall be provided to the Kern County Planning.

MM 4.3-4: 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.

State Lands Commission

MM 4.3-3: **Minimize Exposure to Potential Valley Fever–Containing Dust.** To minimize personnel and public exposure to potential Valley Fever–containing dust on and off site, the following control measures shall be implemented during project construction:

1. Equipment, vehicles, and other items shall be thoroughly cleaned of dust before they are moved off site to other work locations.
2. Wherever possible, grading and trenching work shall be phased so that earth-moving equipment is working well ahead or downwind of workers on the ground.
3. The area immediately behind grading or trenching equipment shall be sprayed with water before ground workers move into the area.
4. In the event that a water truck runs out of water before dust is sufficiently dampened, ground workers being exposed to dust shall leave the area until a truck can resume water spraying.
5. All heavy-duty earth-moving vehicles shall be closed-cab and equipped with a HEP-filtered air system.
6. Workers shall receive training to recognize the symptoms of Valley Fever, and shall be instructed to promptly report suspected symptoms of work-related Valley Fever to a supervisor. Evidence of training shall be provided to the Kern County Planning and Natural Resources Department within 5 days of the training session.
7. A Valley Fever informational handout shall be provided to all onsite construction personnel. The handout shall, at a minimum, provide information regarding the symptoms, health effects, preventative measures, and treatment. Additional information and handouts can be obtained by contacting the Kern County Public Health Services Department.

8. Onsite personnel shall be trained on the proper use of personal protective equipment, including respiratory equipment. National Institute for Occupational Safety and Health–approved respirators shall be provided to onsite personal, upon request. Evidence of training shall be provided to the Kern County Planning.

MM 4.3-4: 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.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

Significant Effect

The project would conflict with or obstruct implementation of the applicable air quality plan (Impact 4.3-1).

Description of Significant Impact

In general, a project would not interfere with the applicable air quality plan if it is consistent with growth assumptions used to form the applicable air quality plan and if the project implements all reasonably available and feasible air quality control measures. Project impacts during operation would be less than significant.

The project would comply with all applicable EKAPCD rules and regulations, such as EKAPCD Rule 401 (Visible Emissions) and EKAPCD Rule 402 (Fugitive Dust). The project would not conflict with or propose to change existing land uses or result in population growth. The project would exceed the EKAPCD's significance threshold for NO_X and PM_{10}. As such, the project would implement Mitigation Measure MM 4.3-1, which would require implementation of EPA Tier 3 or higher engines, among other measures. The project would also implement Mitigation Measure MM 4.3-2, which would require implementation of a Fugitive Dust Control Plan during construction of the project. While the implementation of these mitigation measures would reduce emissions of NO_X and PM_{10} during construction of the project, these emissions would not be reduced below the EKACPD significance threshold.

As the MDAB is in non-attainment for ozone (of which NO_X is a precursor) and PM_{10} and the project would result in significant temporary levels of NO_X and PM_{10} emissions during construction, the project could conflict with or delay the attainment of the standard. Therefore, the project would result in a significant and unavoidable impact.

The project is anticipated to operate for 30 to 35 years, after which the land could be converted to other uses in accordance with applicable land use regulations in effect at that time if its CUP is not extended. The project will be required to develop a decommissioning plan and financial assurances for review and approval by the Kern County Planning and Natural Resources Department. All decommissioning and restoration activities would adhere to the requirements of the appropriate governing authorities and in accordance with all applicable federal, State, and County regulations.

At such time as the facility is decommissioned, equipment operation and site restoration activities would result in impacts to air quality. Given the fact that much of the construction equipment necessary to construct the project would also be required to decommission the site, it is reasonable to assume that decommissioning activities would be similar in nature to activities associated with construction of the

project. Impacts would be less than those of construction, as no grading would occur. Even though no grading would occur during decommissioning of the project, it is conservatively assumed that decommissioning would similarly exceed EKAPCD's significance thresholds related to emissions of NO_X and $PM_{10,}$ as with construction of the project. The project would also implement Mitigation Measures MM 4.3-1 and MM 4.3-2 in order to reduce emissions of NO_X and PM_{10} during decommissioning. Similar to construction of the project, impacts related to emissions of NO_X and PM_{10} would continue to be above the EKAPCD's significance thresholds. However, as with construction of the project, while emissions are considered temporary and not a long-term emissions source, short-term exceedances during decommissioning could obstruct EKAPCD's ability to achieve further progress toward attainment of the 8-hour O_3 ambient air quality standard. Therefore, similar to construction, the project would conflict with or obstruct the air quality planning goals set forth by EKAPCD, and decommissioning would result in a significant and unavoidable impact.

Finding

The proposed project would result in conflict or obstruction of the implementation of applicable air quality plans. Even with the implementation of Mitigation Measures MM 4.3-1 and 4.3-2, described below, cumulative impacts would be significant and unavoidable.

Level of Significance

Impacts would be significant and unavoidable with implementation of mitigation.

Brief Explanation of the Rationale for Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts that would conflict or obstruct implementation of applicable air quality control plans. Even with implementation of Mitigation Measures MM 4.3-1 and 4.3-2, impacts from NO_x and PM_{10} would be significant and unavoidable during construction and decommissioning. Impacts from all other emissions would be less than significant.

Kern County

MM 4.3-1: **Implement Diesel Emission-Reduction Measures During Construction.** To control NO_X and 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) Off-road equipment engines over 25 horsepower shall be equipped with EPA Tier 3 or higher engines, unless Tier 3 construction equipment is not locally available.

b) All equipment shall be maintained in accordance with the manufacturer's specifications.

c) Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes.

d) Notification shall be provided to trucks and vehicles in loading or unloading queues that their engines shall be turned off when not in use for more than 5 minutes.

e) Electric equipment shall be used to the extent feasible in lieu of diesel or gasoline-powered equipment.

f) All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce NO_X emissions.

g) On-road and off-road diesel equipment shall use diesel particulate filters (or the equivalent) if permitted under manufacturer's guidelines.

h) Existing electric power sources shall be used to the extent feasible. This measure would minimize the use of higher polluting gas or diesel generators.

i) The hours of operation of heavy-duty equipment and/or the quantity of equipment in use shall be limited to the extent feasible.

MM 4.3-2: **Implement Fugitive Dust Control Plan During Construction.** To control fugitive PM emissions during construction, prior to the issuance of grading or building permits and any earthwork activities, the project proponent shall prepare a comprehensive Fugitive Dust Control Plan for review by the Kern County Planning and Natural Resources Department. The plan shall include all EKAPCD-recommended measures, including but not limited to, the following:

a) 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 soils areas. Watering shall take place a minimum of three times daily where soil is being actively disturbed, unless dust is otherwise controlled by rainfall or use of a dust suppressant.

b) Vehicle speed for all on site (i.e., within the project boundary) construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site. Signs identifying construction vehicle speed limits shall be posted along onsite roadways, at the site entrance/exit, and along unpaved site access roads.

c) Vehicle speeds on all offsite unpaved roads (i.e., outside the project boundary) construction vehicles shall not exceed 25 mph. Signs identifying vehicle speed limits shall be posted along unpaved site access roads and at the site entrance/exit.

d) All onsite unpaved roads and offsite unpaved public project-site access road(s) shall be effectively stabilized of dust emissions using water or EKAPCD-approved dust suppressants/palliatives, sufficient to prevent wind-blown dust exceeding 20 percent opacity at nearby residences or public roads. If water is used, watering shall occur a minimum of three times daily, sufficient to keep soil moist along actively used roadways. During the dry season, unpaved road surfaces and vehicle parking/staging areas shall be watered immediately prior to periods of high use (e.g., worker commute periods, truck convoys). Reclaimed (non-potable) water shall be used to the extent available and feasible.

e) The amount of the disturbed area (e.g., grading, excavation) shall be reduced and/or phased where possible.

f) All disturbed areas shall be sufficiently watered or stabilized by EKAPCD-approved methods to prevent excessive dust. On dry days, watering shall occur a minimum of three times daily on actively disturbed areas. Watering frequency shall be increased whenever wind speeds exceed 15 mph or, as necessary, to prevent wind-blown dust

exceeding 20 percent opacity at nearby residences or public roads. Reclaimed (non-potable) water shall be used to the extent available and feasible.

g) All clearing, grading, earth moving, and excavation activities shall cease during periods when dust plumes of 20 percent or greater opacity affect public roads or nearby occupied structures.

h) All disturbed areas anticipated to be inactive for periods of 30 days or more shall be treated to minimize wind-blown dust emissions. Treatment may include, but is not limited to, the application of an EKAPCD-approved chemical dust suppressant, gravel, hydro-mulch, revegetation/seeding, or wood chips.

i) All active and inactive disturbed surface areas shall be compacted, where feasible.

j) Equipment and vehicle access to disturbed areas shall be limited to only those vehicles necessary to complete the construction activities.

k) Where applicable, permanent dust control measures shall be implemented as soon as possible following completion of any soil-disturbing activities.

l) Stockpiles of dirt or other fine loose material shall be stabilized by watering or other appropriate methods sufficient to reduce visible dust emissions to a limit of 20 percent opacity. If necessary and where feasible, three-sided barriers shall be constructed around storage piles and/or piles shall be covered by use of tarps, hydro-mulch, woodchips, or other materials sufficient to minimize wind-blown dust.

m) Water shall be applied prior to and during the demolition of onsite structures sufficient to minimize wind-blown dust.

n) Where acceptable to the fire department and feasible, weed control shall be accomplished by mowing instead of disking, thereby leaving the ground undisturbed and with a mulch covering.

o) All trucks hauling dirt, sand, soil, or other loose materials shall be covered or shall maintain at least 2 feet of freeboard (minimum vertical distance between top of the load and top of the trailer) in accordance with California Vehicle Code Section 23114.

p) Gravel pads, grizzly strips, or other material track-out control methods approved for use by EKAPCD shall be installed where vehicles enter or exit unpaved roads onto paved roadways.

q) Haul trucks and off-road equipment leaving the site shall be washed with water or high-pressure air, and/or rocks/grates at the project entry points shall be used, when necessary, to remove soil deposits and minimize the track-out/deposition of soil onto nearby paved roadways.

r) During construction paved road surfaces adjacent to the site access road(s), including adjoining paved aprons, shall be cleaned, as necessary, to remove visible accumulations of track-out material. If dry sweepers are used, the area shall be sprayed with water prior to sweeping to minimize the entrainment of dust. Reclaimed water shall be used to the extent available.

s) Portable equipment, 50 horsepower or greater, used during construction activities (e.g., portable generators, temporary concrete batch plant) shall require California statewide portable equipment registration (issued by CARB) or an EKAPCD permit.

t) The Fugitive Dust Control Plan shall identify a designated person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures, as necessary, to minimize the transport of dust off site and to ensure compliance with identified fugitive dust control measures. Contact information for a hotline shall be posted on site should any complaints or concerns be received during working hours and holidays and weekend periods when work may not be in progress. The names and telephone numbers of such persons shall be provided to the EKAPCD Compliance Division prior to the start of any grading or earthwork.

u) Signs shall be posted at the project site entrance and written notifications shall be provided a minimum of 30 days prior to initiation of project construction to residential land uses located within 1,000 feet of the project site. The signs and written notifications shall include the following information: (a) Project Name; (b) Anticipated Construction Schedule(s); and (c) Telephone Number(s) for designated construction activity monitor(s) or, if established, a complaint hotline.

v) The designated construction monitor shall document and immediately notify EKAPCD of any air quality complaints received. If necessary, the project operator and/or contractor will coordinate with EKAPCD to identify any additional feasible measures and/or strategies to be implemented to address public complaints.

w) Prior to construction of any concrete batch plant, the project proponent shall provide EKAPCD with documentation ensuring that any concrete batch plants will be sited at least 1,000 feet from sensitive receptors, including places such as daycare centers, hospitals, senior care facilities, residences, parks, and other areas where people may congregate. The concrete batch plant shall implement typical control measures to reduce fugitive dust, such as water sprays, enclosures, hoods, curtains, shrouds, movable and telescoping chutes, central dust collection systems, and other suitable technology, to reduce emissions to be equivalent to the EPA AP-42 controlled emission factors for concrete batch plants. The contractor shall provide EKAPCD with documentation that each batch plant meets this standard during operation.

State Lands Commission

MM 4.3-1: **Implement Diesel Emission-Reduction Measures During Construction.** To control NO_X and 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) Off-road equipment engines over 25 horsepower shall be equipped with EPA Tier 3 or higher engines, unless Tier 3 construction equipment is not locally available.

b) All equipment shall be maintained in accordance with the manufacturer's specifications.

c) Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 5 minutes.

d) Notification shall be provided to trucks and vehicles in loading or unloading queues that their engines shall be turned off when not in use for more than 5 minutes.

e) Electric equipment shall be used to the extent feasible in lieu of diesel or gasoline-powered equipment.

f) All construction vehicles shall be equipped with proper emissions control equipment and kept in good and proper running order to substantially reduce NOX emissions.

g) On-road and off-road diesel equipment shall use diesel particulate filters (or the equivalent) if permitted under manufacturer's guidelines.

h) Existing electric power sources shall be used to the extent feasible. This measure would minimize the use of higher polluting gas or diesel generators.

i) The hours of operation of heavy-duty equipment and/or the quantity of equipment in use shall be limited to the extent feasible.

MM 4.3-2: **Implement Fugitive Dust Control Plan During Construction.** To control fugitive PM emissions during construction, prior to the issuance of grading or building permits and any earthwork activities, the project proponent shall prepare a comprehensive Fugitive Dust Control Plan for review by the Kern County Planning and Natural Resources Department.

The plan shall include all EKAPCD-recommended measures, including but not limited to, the following:

a) 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 soils areas. Watering shall take place a minimum of three times daily where soil is being actively disturbed, unless dust is otherwise controlled by rainfall or use of a dust suppressant.

b) Vehicle speed for all on site (i.e., within the project boundary) construction vehicles shall not exceed 15 mph on any unpaved surface at the construction site. Signs identifying construction vehicle speed limits shall be posted along onsite roadways, at the site entrance/exit, and along unpaved site access roads.

c) Vehicle speeds on all offsite unpaved roads (i.e., outside the project boundary) construction vehicles shall not exceed 25 mph. Signs identifying vehicle speed limits shall be posted along unpaved site access roads and at the site entrance/exit.

d) All onsite unpaved roads and offsite unpaved public project-site access road(s) shall be effectively stabilized of dust emissions using water or EKAPCD-approved dust suppressants/palliatives, sufficient to prevent wind-blown dust exceeding 20 percent opacity at nearby residences or public roads. If water is used, watering shall occur a minimum of three times daily, sufficient to keep soil moist along actively used roadways. During the dry season, unpaved road surfaces and vehicle parking/staging areas shall be watered immediately prior to periods of high use (e.g., worker commute periods, truck convoys). Reclaimed (non-potable) water shall be used to the extent available and feasible.

e) The amount of the disturbed area (e.g., grading, excavation) shall be reduced and/or phased where possible.

f) All disturbed areas shall be sufficiently watered or stabilized by EKAPCD-approved methods to prevent excessive dust. On dry days, watering shall occur a minimum of three times daily on actively disturbed areas. Watering frequency shall be increased whenever wind speeds exceed 15 mph or, as necessary, to prevent wind-blown dust exceeding 20 percent opacity at nearby residences or public roads. Reclaimed (non-potable) water shall be used to the extent available and feasible.

g) All clearing, grading, earth moving, and excavation activities shall cease during periods when dust plumes of 20 percent or greater opacity affect public roads or nearby occupied structures.

h) All disturbed areas anticipated to be inactive for periods of 30 days or more shall be treated to minimize wind-blown dust emissions. Treatment may include, but is not limited to, the application of an EKAPCD-approved chemical dust suppressant, gravel, hydro-mulch, revegetation/seeding, or wood chips.

i) All active and inactive disturbed surface areas shall be compacted, where feasible.

j) Equipment and vehicle access to disturbed areas shall be limited to only those vehicles necessary to complete the construction activities.

k) Where applicable, permanent dust control measures shall be implemented as soon as possible following completion of any soil-disturbing activities.

l) Stockpiles of dirt or other fine loose material shall be stabilized by watering or other appropriate methods sufficient to reduce visible dust emissions to a limit of 20 percent opacity. If necessary and where feasible, three-sided barriers shall be constructed around storage piles and/or piles shall be covered by use of tarps, hydro-mulch, woodchips, or other materials sufficient to minimize wind-blown dust.

m) Water shall be applied prior to and during the demolition of onsite structures sufficient to minimize wind-blown dust.

n) Where acceptable to the fire department and feasible, weed control shall be accomplished by mowing instead of disking, thereby leaving the ground undisturbed and with a mulch covering.

o) All trucks hauling dirt, sand, soil, or other loose materials shall be covered or shall maintain at least 2 feet of freeboard (minimum vertical distance between top of the load and top of the trailer) in accordance with California Vehicle Code Section 23114.

p) Gravel pads, grizzly strips, or other material track-out control methods approved for use by EKAPCD shall be installed where vehicles enter or exit unpaved roads onto paved roadways.

q) Haul trucks and off-road equipment leaving the site shall be washed with water or high-pressure air, and/or rocks/grates at the project entry points shall be used, when necessary, to remove soil deposits and minimize the track-out/deposition of soil onto nearby paved roadways.

r) During construction, paved road surfaces adjacent to the site access road(s), including adjoining paved aprons, shall be cleaned, as necessary, to remove visible accumulations of track-out material. If dry sweepers are used, the area shall be sprayed

with water prior to sweeping to minimize the entrainment of dust. Reclaimed water shall be used to the extent available.

s) Portable equipment, 50 horsepower or greater, used during construction activities (e.g., portable generators, temporary concrete batch plant) shall require California statewide portable equipment registration (issued by CARB) or an EKAPCD permit.

t) The Fugitive Dust Control Plan shall identify a designated person or persons to monitor the fugitive dust emissions and enhance the implementation of the measures, as necessary, to minimize the transport of dust off site and to ensure compliance with identified fugitive dust control measures. Contact information for a hotline shall be posted on site should any complaints or concerns be received during working hours and holidays and weekend periods when work may not be in progress. The names and telephone numbers of such persons shall be provided to the EKAPCD Compliance Division prior to the start of any grading or earthwork.

u) Signs shall be posted at the project site entrance and written notifications shall be provided a minimum of 30 days prior to initiation of project construction to residential land uses located within 1,000 feet of the project site. The signs and written notifications shall include the following information: (a) Project Name; (b) Anticipated Construction Schedule(s); and (c) Telephone Number(s) for designated construction activity monitor(s) or, if established, a complaint hotline.

v) The designated construction monitor shall document and immediately notify EKAPCD of any air quality complaints received. If necessary, the project operator and/or contractor will coordinate with EKAPCD to identify any additional feasible measures and/or strategies to be implemented to address public complaints.

w) Prior to construction of any concrete batch plant, the project proponent shall provide EKAPCD with documentation ensuring that any concrete batch plants will be sited at least 1,000 feet from sensitive receptors, including places such as daycare centers, hospitals, senior care facilities, residences, parks, and other areas where people may congregate. The concrete batch plant shall implement typical control measures to reduce fugitive dust, such as water sprays, enclosures, hoods, curtains, shrouds, movable and telescoping chutes, central dust collection systems, and other suitable technology, to reduce emissions to be equivalent to the EPA AP-42 controlled emission factors for concrete batch plants. The contractor shall provide EKAPCD with documentation that each batch plant meets this standard during operation.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

The proposed project would not have any cumulative effects on air quality that would be less than significant.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

Significant Effect

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 (Impact 4.3-3).

Description of Significant Impact

The project is located within the Kern County portion of the MDAB, which is an area that is designated as non-attainment for federal and State ozone standards as well as State PM_{10} standards, and is under the jurisdiction of the EKAPCD. The EKAPCD's approach for assessing cumulative impacts is based on the forecasts of attainment and ambient air quality standards in accordance with requirements of the federal and State clean air acts.

As discussed in Section 4.3, *Air Quality*, there are 13 projects within a 6-mile radius of the project site that the project applicant has identified as having the potential to contribute to cumulative effects. Three of these are also within the 1-mile radius of the project site. Of the projects identified within a 6-mile radius, four have been approved, three are in process, three are operational, and one is currently in the application phase. Projects that are currently operational were not included in the cumulative construction emissions analysis. These include Holliday Rock Company, RE Rosamond One, and RE Rosamond Two. Due to the lack of specific construction schedules and operational dates, construction and operation of the remaining projects were assumed to be concurrent with the project to provide a conservative analysis.

The discussion provided in Section 4.3, *Air Quality*, evaluates localized impacts, including projects located within a 1- and 6- mile radius; evaluates consistency with existing air quality plans; and compares project emissions to CARB emission projections for the region, consistent with the criterion provided in Kern County's Guidelines for Preparing an Air Quality Assessment for Use in Environmental Impact Reports.

With implementation of Mitigation Measures MM 4.3-1 and MM 4.3-2, construction-generated emissions of NO_X would be reduced to approximately 39 tons/year and emissions of PM_{10} would be reduced to approximately 39 tons/year. Implementation of the proposed Mitigation Measures would ensure compliance with applicable EKAPCD rules and regulations, including Rule 402 (Fugitive Dust); however, proposed Mitigation Measures would not reduce NO_X or PM_{10} emissions to below the EKAPCD significance threshold. Mitigation measures would ensure use of only Tier 3 off-road equipment to address exhaust emissions of NO_X and PM_{10}.

Because mitigated NO_X emissions would exceed thresholds, which were developed by EKAPCD in consideration of achieving attainment status under the NAAQS and CAAQS for O_3, construction NO_X emissions from the project would contribute a significant level of air pollution within Kern County and the MDAB.

Finding

The proposed project in combination with other projects would result in a net increase in criteria pollutants for an area in non-attainment. Even with implementation of Mitigation Measures MM 4.3-1 through MM 4.3-4, described above, cumulative impacts would be significant and unavoidable.

Level of Significance

Cumulative impacts would be significant and unavoidable, even with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Even with implementation of Mitigation Measures 4.3-1 through 4.3-4, described above, impacts would be significant and unavoidable for cumulative construction and decommissioning impacts. Cumulative impacts related to operations would be less than significant.

BIOLOGICAL RESOURCES

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

The proposed project would not have a substantial adverse effect on federally protected wetlands through direct removal, filling, hydrological interruption, or other means (Impact 4.4-3).

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

Significant Effect

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 California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (Impact 4.4-1).

Description of Significant Impact

The proposed project has the potential to impact special-status plants and wildlife through the loss of habitat, as well as direct and indirect impacts on species, such as mortality of individuals, interference with reproductive success, introduction of invasive species, and habitat degradation. Potential impacts to special-status plants and wildlife from construction, operation and maintenance, and decommissioning are discussed in detail in Section 4.4, *Biological Resources*, of the EIR.

Finding

The project has the potential to impact special-status plants and wildlife through the loss of habitat, as well as direct and indirect impacts on species, such as mortality of individuals, interference with reproductive success, introduction of invasive species, and habitat degradation. However, with the implementation of Mitigation Measures MM 4.4-1 through MM 4.4-7, described below, in addition to Mitigation Measure MM 4.9-2 described further below for Findings regarding project impacts on Hazards and Hazardous Materials, these impacts would be reduced to a less-than-significant level.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures MM 4.4-1 through MM 4.4-7, described below, and MM 4.9-2

described in Findings for Hazards and Hazardous Materials, would reduce impacts to less-than-significant levels.

Kern County

MM 4.4-1: **Biological Monitoring.** Prior to the issuance of grading or building permits, the project operator shall retain a Lead Biologist who meets the qualifications of an Authorized Biologist as defined by U.S. Fish and Wildlife Service (USFWS) to oversee compliance with protection measures for all listed and other special-status species. The Lead Biologist shall be on the project site during construction of perimeter fencing and grading activities throughout the construction phase. The Lead Biologist shall have the right to halt all activities that are in violation of the special-status species protection measures. Work shall proceed only after hazards to special-status species are removed and the species is no longer at risk. The Lead Biologist shall have in her/his possession a copy of all the compliance measures while work is being conducted on the project site.

MM 4.4-2: **Construction Worker Environmental Awareness Training and Education Program**. Prior to the issuance of grading or building permits and for the duration of construction activities, within one week of employment all new construction workers at the project site, laydown area and/or transmission routes shall attend an Environmental Awareness Training and Education Program, developed and presented by the Lead Biologist. Any employee responsible for the operations and maintenance or decommissioning of the project facilities shall also attend the Environmental Awareness Training and Education Program.

The program shall include information on the life history of the desert tortoise; burrowing owl; golden eagle, Swainson's hawk, and other raptors; nesting birds; American badger; desert kit fox; as well as other wildlife and plant species that may be encountered 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 operator is implementing to protect the species, reporting requirements, specific measures that each worker shall employ to avoid take of wildlife species, and penalties for violation of the Federal Endangered Species Act or California Endangered Species Act.

i. An acknowledgement form signed by each worker indicating that Environmental Awareness Training and Education Program has been completed would be kept on record;

ii. A sticker shall be placed on hard hats indicating that the worker has completed the Environmental Awareness Training and Education Program. Construction workers shall not be permitted to operate equipment within the construction areas unless they have attended the Environmental Awareness Training and Education Program and are wearing hard hats with the required sticker;

iii. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the Environmental Awareness Training and Education Program and copies of the signed acknowledgement forms shall be submitted to the Kern County Planning and Community Development Department; and

iv. The construction crews and contractor(s) shall be responsible for unauthorized impacts from construction activities to sensitive biological resources that are outside the areas defined as subject to impacts by project permits.

v. An Operation and Maintenance-phase version of the WEAP will be maintained within the onsite O&M facility for review as may be necessary during the life of the project.

MM 4.4-3: **Avoidance and Protection of Biological Resources.** During construction, operations and maintenance, and decommissioning the project operator shall implement the following general avoidance and protective measures:

a) All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid natural resources where possible. Construction-related activities outside of the impact zone shall be avoided.

b) The project operator shall limit the areas of disturbance to the extent feasible. 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.

c) 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 (SWPPP). All detected erosion shall be remedied within two days of discovery or as described in the SWPPP.

d) To prevent inadvertent entrapment of desert kit foxes, American badgers, or other wildlife during construction, all excavated, steep-walled holes or trenches more than two 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. All holes and trenches, whether covered or not, shall be inspected for trapped wildlife at the start and end of each workday. Before such holes or trenches are filled, they shall be thoroughly inspected by the Lead Biologist or approved biological monitor for trapped wildlife. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If a listed species is found trapped, all work shall cease immediately. If the animal is apparently uninjured, then the Lead Biologist shall directly supervise the provision of escape structures and/or trench modification to allow the trapped animal to escape safely. Work shall not resume in the vicinity of the animal, and it shall be allowed to leave the work area and project site on its own. If the listed animal is injured, then the Lead Biologist or approved biological monitor shall immediately contact the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife to identify an individual with the appropriate permit or authorization to handle listed species, who shall bring the animal to a pre-identified wildlife rehabilitation or veterinary facility for care.

e) Burrowing owls, mammals, and nesting birds may use construction pipes, culverts, or similar structures for refuge or nesting. All towers shall be of the monopole variety and all hollow vertical structures, such as solar mount poles, or fencing poles, shall be capped immediately after installation to prevent bird entrapment. Therefore, all construction pipes, culverts, or similar structures with a diameter of four inches or more

that are stored at a construction site for one or more overnight periods shall be thoroughly inspected 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 the Lead Biologist has been consulted and the animal has either moved from the structure on its own accord (for listed species) or until the animal has been captured and relocated (for non-listed species) by the Lead Biologist. If the animal is a listed species, then work shall immediately halt in the vicinity, and the animal shall be allowed to move from the structure and the work area of its own accord. The Lead Biologist will direct work stoppages near the animal to allow it to freely move out of the pipe and away from the work area. Listed species shall not be handled or captured by anyone without the appropriate permit or authorization.

f) 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.

g) 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.

h) A speed limit of 15 miles per hour shall be enforced within the limits of the proposed project.

i) A long-term trash abatement program shall be established for construction, operations and maintenance, and decommissioning. Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs.

j) Workers shall be prohibited from bringing pets and firearms to the project area and from feeding wildlife.

k) Intentional killing or collection of any plant or wildlife species shall be prohibited.

l) To enable kit foxes and other wildlife (e.g., American badger) to pass through the project site after construction, the security fence, and any permanent interior fencing shall be a wildlife friendly design that meets the goals of allowing wildlife to move freely through the project site during operation, leaving 4- to 7-inch openings or portals in the fence or the fence shall be raised 7 inches above the ground leaving a gap between the fence mesh and the ground. In the latter case the bottom of the fence fabric shall be knuckled (wrapped back to form a smooth edge) to protect wildlife that passes under the fence.

MM 4.4-4: **Preconstruction Clearance Surveys.** The Lead Biologist or approved biological monitor 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.

Preconstruction surveys for special-status species shall be conducted within the project boundaries by the Lead Biologist or approved biological monitor within 14 days of the start of any vegetation clearing or grading activities. Methodology for preconstruction surveys shall be appropriate for each potentially occurring species-status species and shall follow U.S. Fish and Wildlife Service and/or 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 being disturbed. The Lead Biologist may use a variety of approaches (including but not limited to monitoring, track plates, and direct observation) and evidence (including burrow characteristics and presence of sign such as scat and tracks) to determine burrow activity. If any evidence of occupation of the project site special-status species is observed, a buffer shall be established by a qualified biologist that results in sufficient avoidance, as described below.

If desert tortoise are found onsite during subsequent surveys or biological monitoring activities, construction activities shall cease to avoid the potential for take and consultation with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife shall be initiated to obtain the necessary incidental take permit authorizations or provide evidence such a permit is not required.

Preconstruction surveys shall be conducted by a qualified biologist for the presence of American badger or desert kit fox dens within 14 days prior to commencement of construction activities. The surveys shall be conducted in areas of suitable habitat for American badger and desert kit fox, which includes desert scrub habitats. 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 prior to that portion of the project site disturbed. If potential dens are observed and avoidance is feasible, the following buffer distances shall be established prior to construction activities:

- Desert kit fox or American badger potential den: 50 feet.
- Desert kit fox or American badger active den: 100 feet.
- Desert kit fox or American badger natal den: 500 feet.

If avoidance of the potential dens is not possible, the following measures are required to avoid potential adverse effects to the American badger and desert kit fox:

- If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent American badgers or desert kit foxes from re-using them during construction.
- If the qualified biologist determines that potential dens may be active, an onsite passive relocation program shall be implemented. This program shall consist of excluding American badgers or desert kit foxes from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for seven days to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that American badgers or desert kit foxes have stopped using the dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction.

During fencing and grading activities daily monitoring reports shall be prepared by the monitoring biologists. The Lead Biologist shall prepare a summary monitoring report documenting the effectiveness and practicality of the protection measures that are in place and making recommendations for modifying the measures to enhance species protection, as needed. The report shall also provide information on the overall activities conducted related to biological resources, including the Environmental Awareness Training and

Education Program, clearance/pre-activity surveys, monitoring activities, and any observed special-status species, including injuries and fatalities. These monitoring reports shall be submitted to the Kern County Planning and Community Development Department and relevant resource agencies, as applicable, on a monthly basis along with copies of all survey reports.

MM 4.4-5: **Preconstruction Desert Tortoise Surveys.** Within 14 days prior to the commencement of any ground-disturbing activities the project operator shall conduct preconstruction surveys for desert tortoise within the project area. The surveys shall be conducted in accordance with the U.S. Fish and Wildlife Service protocol (2010). If no burrows or tortoises are discovered during preconstruction surveys, no further mitigation is necessary. The desert tortoise is a federally and state threatened species and consequently, impacts that would cause "take" of the species would require the issuance of Incidental Take Permits from both the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to comply with the Federal Endangered Species Act and California Endangered Species Act. If burrows or tortoises are identified on the project site during preconstruction surveys, the project operator shall be required to consult with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife regarding take coverage, and adhere to the following minimum conditions:

a) Develop a plan for desert tortoise translocation and monitoring prior to project construction. The plan shall provide the framework for implementing the following measures:

i. If, upon consultation with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife, it is determined by both resource agencies that a permanent tortoise proof exclusion fence is required, a fence shall be installed around all construction and operation areas prior to the initiation of earth disturbing activities, in coordination with a qualified biologist. The fence shall be designed in such a manner to allow other wildlife to access through the permanent security fence and be constructed of 0.5-inch mesh hardware cloth and extend 18 inches above ground and 12 inches below ground. Where burial of the fence is not possible, the lower 12 inches shall be folded outward against the ground and fastened to the ground so as to prevent desert tortoise entry. The fence shall be supported sufficiently to maintain its integrity, be checked at least monthly during construction and operations, and maintained when necessary by the project operator to ensure its integrity. Provisions shall be made for closing off the fence at the point of vehicle entry. Common raven perching deterrents shall be installed as part of the fence construction.

ii. An Authorized Biologist shall conduct a preconstruction survey for desert tortoise within the construction site, as well as before and after installation of desert tortoise exclusionary fencing (if required to be installed) and project security fencing. An Authorized Biologist has the appropriate education and experience to accomplish biological monitoring and mitigation tasks and is approved by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. Two surveys without finding any desert tortoises or new desert tortoise sign shall occur prior to declaring the site clear of desert tortoises.

iii. All burrows that could provide shelter for a desert tortoise shall be hand-excavated prior to ground-disturbing activities.

iv. An Authorized Biologist shall remain on site until all vegetation necessary for the construction of the project is cleared and, at a minimum, conduct site and fence inspections on a monthly basis throughout construction in order to ensure project compliance with mitigation measures.

v. An Authorized Biologist shall remain on-call throughout fencing and grading activities in the event a desert tortoise wanders onto the project site.

vi. Mitigation for permanent loss of occupied desert tortoise habitat shall be mitigated at a 1:1 ratio to reduce potential effects to less-than-significant levels. Mitigation can be achieved through purchase of credit from an existing mitigation bank, such as the Desert Tortoise Natural Area, private purchase of mitigation lands, or onsite preservation, as approved by the resource agencies.

b) A Raven Management Plan shall be developed for the project site. This plan shall include at a minimum:

i. Identification of all common raven nests within the project area during construction.

ii. Weekly inspections during construction under all nests in the project area for evidence of desert tortoise predation (e.g., scutes, shells, etc.). If evidence of desert tortoise predation is noted, a report shall be submitted to the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and the Kern County Planning and Community Development Department within five calendar days; and

iii. Provisions for the management of trash that could attract common ravens during the construction, operations and maintenance, and decommissioning phases of the proposed project.

MM 4.4-6: **Preconstruction Burrowing Owl Surveys.** A qualified wildlife biologist (i.e., a wildlife biologist with previous burrowing owl survey experience) shall conduct preconstruction surveys of the permanent and temporary impact areas to locate active breeding or wintering burrowing owl burrows no fewer than 14 days prior to ground-disturbing activities (i.e., vegetation clearance, grading, tilling). 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 any potential burrows with fresh burrowing owl sign or presence of burrowing owls. Surveys may be conducted concurrently with desert tortoise preconstruction surveys. As each burrow is investigated, surveying biologists shall also look for signs of American badger and desert kit fox. Copies of the survey results shall be submitted to California Department of Fish and Wildlife and the Kern County Planning and Community Development Department.

If burrowing owls are detected onsite, no ground-disturbing activities shall be permitted within a buffer of no fewer than 100 meters (330 feet) from an active burrow during the breeding season (i.e., February 1 to August 31), unless otherwise authorized by California Department of Fish and Wildlife. During the non-breeding (winter) season (i.e., September 1 to January 31), ground-disturbing work can proceed as long as the work occurs no closer than 50 meters (165 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with California Department of Fish and Wildlife.

If burrow avoidance is infeasible during the non-breeding season or during the breeding season (February 1 through August 31) where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, a qualified biologist shall implement a passive relocation program in accordance with Appendix E1 (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the 2012 California Department of Fish and Wildlife Staff Report on Burrowing Owl Mitigation.

If passive relocation is required, a qualified biologist shall prepare a Burrowing Owl Exclusion and Mitigation Plan and a Mitigation Land Management Plan in, accordance with the 2012 California Department of Fish and Wildlife Staff Report on Burrowing Owl Mitigation, for review by California Department of Fish and Wildlife prior to passive relocation activities. The Mitigation Land Management Plan shall include a requirement for the permanent conservation of offsite Burrowing Owl Passive Relocation Compensatory Mitigation. At a minimum, the following recommendations shall be implemented:

i. Temporarily disturbed habitat shall be restored, if feasible, to pre-project conditions including decompacting soil and revegetating.

ii. Permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat shall be mitigated such that the habitat acreage, number of burrows and burrowing owl impacted are replaced based on a site-specific analysis and shall include permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) 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.

iii. Permanently protect mitigation land through a conservation easement, deed restriction, or similar mechanism 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 operator may purchase available burrowing owl conservation bank credits. Land identified to mitigate for passive relocation of burrowing owl may be combined with other offsite mitigation requirements of the proposed project if the compensatory habitat is deemed suitable to support the species.

MM 4.4-7: **Nesting Birds and Raptors.** If construction is scheduled to commence during the non-nesting season (i.e., September 1 to January 31), no preconstruction surveys or additional measures are required. To avoid impacts to nesting birds in the project area, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within the project site for construction activities that are initiated during the breeding season (i.e., February 1 to August 31). The raptor survey shall focus on potential nest sites (e.g., cliffs, large trees, windrows) within a 0.5-mile buffer around the project site. Surveys shall be conducted no more than 14 days prior to construction activities. Surveys need not be conducted for the entire project site at one time; they may be phased so that surveys occur shortly before a portion of the project site is disturbed. The surveying biologist must

be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (e.g., 200–300 feet for common raptors; 0.5 mile for Swainson's hawk; 30–50 feet for passerine species) shall be established around active nests and no construction within the buffer allowed until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). For non-listed species, encroachment into the avoidance buffer may occur at the discretion of a qualified biologist; however, for State-listed species, consultation with CDFW shall occur prior to encroachment into the aforementioned buffers.

State Lands Commission

MM 4.4-1: **Biological Monitoring.** Prior to the issuance of grading or building permits, the project operator shall retain a Lead Biologist who meets the qualifications of an Authorized Biologist as defined by U.S. Fish and Wildlife Service (USFWS) to oversee compliance with protection measures for all listed and other special-status species. The Lead Biologist shall be on the project site during construction of perimeter fencing and grading activities throughout the construction phase. The Lead Biologist shall have the right to halt all activities that are in violation of the special-status species protection measures. Work shall proceed only after hazards to special-status species are removed and the species is no longer at risk. The Lead Biologist shall have in her/his possession a copy of all the compliance measures while work is being conducted on the project site.

MM 4.4-2: **Construction Worker Environmental Awareness Training and Education Program**. Prior to the issuance of grading or building permits and for the duration of construction activities, within one week of employment all new construction workers at the project site, laydown area and/or transmission routes shall attend an Environmental Awareness Training and Education Program, developed and presented by the Lead Biologist. Any employee responsible for the operations and maintenance or decommissioning of the project facilities shall also attend the Environmental Awareness Training and Education Program.

The program shall include information on the life history of the desert tortoise; burrowing owl; golden eagle, Swainson's hawk, and other raptors; nesting birds; American badger; desert kit fox; as well as other wildlife and plant species that may be encountered 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 operator is implementing to protect the species, reporting requirements, specific measures that each worker shall employ to avoid take of wildlife species, and penalties for violation of the Federal Endangered Species Act or California Endangered Species Act.

i. An acknowledgement form signed by each worker indicating that Environmental Awareness Training and Education Program has been completed would be kept on record;

ii. A sticker shall be placed on hard hats indicating that the worker has completed the Environmental Awareness Training and Education Program. Construction workers shall not be permitted to operate equipment within the construction areas unless

they have attended the Environmental Awareness Training and Education Program and are wearing hard hats with the required sticker;

iii. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the Environmental Awareness Training and Education Program and copies of the signed acknowledgement forms shall be submitted to the Kern County Planning and Community Development Department; and

iv. The construction crews and contractor(s) shall be responsible for unauthorized impacts from construction activities to sensitive biological resources that are outside the areas defined as subject to impacts by project permits.

v. An Operation and Maintenance-phase version of the WEAP will be maintained within the onsite O&M facility for review as may be necessary during the life of the project.

MM 4.4-3: **Avoidance and Protection of Biological Resources.** During construction, operations and maintenance, and decommissioning the project operator shall implement the following general avoidance and protective measures:

a) All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid natural resources where possible. Construction-related activities outside of the impact zone shall be avoided.

b) The project operator shall limit the areas of disturbance to the extent feasible. 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.

c) 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 (SWPPP). All detected erosion shall be remedied within two days of discovery or as described in the SWPPP.

d) To prevent inadvertent entrapment of desert kit foxes, American badgers, or other wildlife during construction, all excavated, steep-walled holes or trenches more than two 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. All holes and trenches, whether covered or not, shall be inspected for trapped wildlife at the start and end of each workday. Before such holes or trenches are filled, they shall be thoroughly inspected by the Lead Biologist or approved biological monitor for trapped wildlife. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If a listed species is found trapped, all work shall cease immediately. If the animal is apparently uninjured, then the Lead Biologist shall directly supervise the provision of escape structures and/or trench modification to allow the trapped animal to escape safely. Work shall not resume in the vicinity of the animal, and it

shall be allowed to leave the work area and project site on its own. If the listed animal is injured, then the Lead Biologist or approved biological monitor shall immediately contact the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife to identify an individual with the appropriate permit or authorization to handle listed species, who shall bring the animal to a pre-identified wildlife rehabilitation or veterinary facility for care.

e) Burrowing owls, mammals, and nesting birds may use construction pipes, culverts, or similar structures for refuge or nesting. All towers shall be of the monopole variety and all hollow vertical structures, such as solar mount poles, or fencing poles, shall be capped immediately after installation to prevent bird entrapment. Therefore, all construction pipes, culverts, or similar structures with a diameter of four inches or more that are stored at a construction site for one or more overnight periods shall be thoroughly inspected 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 the Lead Biologist has been consulted and the animal has either moved from the structure on its own accord (for listed species) or until the animal has been captured and relocated (for non-listed species) by the Lead Biologist. If the animal is a listed species, then work shall immediately halt in the vicinity, and the animal shall be allowed to move from the structure and the work area of its own accord. The Lead Biologist will direct work stoppages near the animal to allow it to freely move out of the pipe and away from the work area. Listed species shall not be handled or captured by anyone without the appropriate permit or authorization.

f) 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.

g) 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.

h) A speed limit of 15 miles per hour shall be enforced within the limits of the proposed project.

i) A long-term trash abatement program shall be established for construction, operations and maintenance, and decommissioning. Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs.

j) Workers shall be prohibited from bringing pets and firearms to the project area and from feeding wildlife.

k) Intentional killing or collection of any plant or wildlife species shall be prohibited.

l) To enable kit foxes and other wildlife (e.g., American badger) to pass through the project site after construction, the security fence, and any permanent interior fencing shall be a wildlife friendly design that meets the goals of allowing wildlife to move freely through the project site during operation, leaving 4- to 7-inch openings or portals in the fence or the fence shall be raised 7 inches above the

ground leaving a gap between the fence mesh and the ground. In the latter case the bottom of the fence fabric shall be knuckled (wrapped back to form a smooth edge) to protect wildlife that passes under the fence.

MM 4.4-4: **Preconstruction Clearance Surveys.** The Lead Biologist or approved biological monitor 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.

Preconstruction surveys for special-status species shall be conducted within the project boundaries by the Lead Biologist or approved biological monitor within 14 days of the start of any vegetation clearing or grading activities. Methodology for preconstruction surveys shall be appropriate for each potentially occurring species-status species and shall follow U.S. Fish and Wildlife Service and/or 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 being disturbed. The Lead Biologist may use a variety of approaches (including but not limited to monitoring, track plates, and direct observation) and evidence (including burrow characteristics and presence of sign such as scat and tracks) to determine burrow activity. If any evidence of occupation of the project site special-status species is observed, a buffer shall be established by a qualified biologist that results in sufficient avoidance, as described below.

If desert tortoise are found onsite during subsequent surveys or biological monitoring activities, construction activities shall cease to avoid the potential for take and consultation with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife shall be initiated to obtain the necessary incidental take permit authorizations or provide evidence such a permit is not required.

Preconstruction surveys shall be conducted by a qualified biologist for the presence of American badger or desert kit fox dens within 14 days prior to commencement of construction activities. The surveys shall be conducted in areas of suitable habitat for American badger and desert kit fox, which includes desert scrub habitats. 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 prior to that portion of the project site disturbed. If potential dens are observed and avoidance is feasible, the following buffer distances shall be established prior to construction activities:

- Desert kit fox or American badger potential den: 50 feet.
- Desert kit fox or American badger active den: 100 feet.
- Desert kit fox or American badger natal den: 500 feet.

If avoidance of the potential dens is not possible, the following measures are required to avoid potential adverse effects to the American badger and desert kit fox:

- If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent American badgers or desert kit foxes from re-using them during construction.

- If the qualified biologist determines that potential dens may be active, an onsite passive relocation program shall be implemented. This program shall consist of excluding American badgers or desert kit foxes from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for seven days to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that American badgers or desert kit foxes have stopped using the dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction.

During fencing and grading activities daily monitoring reports shall be prepared by the monitoring biologists. The Lead Biologist shall prepare a summary monitoring report documenting the effectiveness and practicality of the protection measures that are in place and making recommendations for modifying the measures to enhance species protection, as needed. The report shall also provide information on the overall activities conducted related to biological resources, including the Environmental Awareness Training and Education Program, clearance/pre-activity surveys, monitoring activities, and any observed special-status species, including injuries and fatalities. These monitoring reports shall be submitted to the Kern County Planning and Community Development Department and relevant resource agencies, as applicable, on a monthly basis along with copies of all survey reports.

MM 4.4-5: **Preconstruction Desert Tortoise Surveys.** Within 14 days prior to the commencement of any ground-disturbing activities the project operator shall conduct preconstruction surveys for desert tortoise within the project area. The surveys shall be conducted in accordance with the U.S. Fish and Wildlife Service protocol (2010). If no burrows or tortoises are discovered during preconstruction surveys, no further mitigation is necessary. The desert tortoise is a federally and state threatened species and consequently, impacts that would cause "take" of the species would require the issuance of Incidental Take Permits from both the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to comply with the Federal Endangered Species Act and California Endangered Species Act. If burrows or tortoises are identified on the project site during preconstruction surveys, the project operator shall be required to consult with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife regarding take coverage, and adhere to the following minimum conditions:

a) Develop a plan for desert tortoise translocation and monitoring prior to project construction. The plan shall provide the framework for implementing the following measures:

   i. If, upon consultation with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife, it is determined by both resource agencies that a permanent tortoise proof exclusion fence is required, a fence shall be installed around all construction and operation areas prior to the initiation of earth disturbing activities, in coordination with a qualified biologist. The fence shall be designed in such a manner to allow other wildlife to access through the permanent security fence and be constructed of 0.5-inch mesh hardware cloth and extend 18 inches above ground and 12 inches below ground. Where burial of the fence is not possible, the lower 12 inches shall be folded outward against the ground and fastened to the ground so as to prevent desert tortoise entry. The fence shall be

supported sufficiently to maintain its integrity, be checked at least monthly during construction and operations, and maintained when necessary by the project operator to ensure its integrity. Provisions shall be made for closing off the fence at the point of vehicle entry. Common raven perching deterrents shall be installed as part of the fence construction.

ii. An Authorized Biologist shall conduct a preconstruction survey for desert tortoise within the construction site, as well as before and after installation of desert tortoise exclusionary fencing (if required to be installed) and project security fencing. An Authorized Biologist has the appropriate education and experience to accomplish biological monitoring and mitigation tasks and is approved by the California Department of Fish and Wildlife and the U.S. Fish and Wildlife Service. Two surveys without finding any desert tortoises or new desert tortoise sign shall occur prior to declaring the site clear of desert tortoises.

iii. All burrows that could provide shelter for a desert tortoise shall be hand-excavated prior to ground-disturbing activities.

iv. An Authorized Biologist shall remain on site until all vegetation necessary for the construction of the project is cleared and, at a minimum, conduct site and fence inspections on a monthly basis throughout construction in order to ensure project compliance with mitigation measures.

v. An Authorized Biologist shall remain on-call throughout fencing and grading activities in the event a desert tortoise wanders onto the project site.

vi. Mitigation for permanent loss of occupied desert tortoise habitat shall be mitigated at a 1:1 ratio to reduce potential effects to less-than-significant levels. Mitigation can be achieved through purchase of credit from an existing mitigation bank, such as the Desert Tortoise Natural Area, private purchase of mitigation lands, or onsite preservation, as approved by the resource agencies.

b) A Raven Management Plan shall be developed for the project site. This plan shall include at a minimum:

i. Identification of all common raven nests within the project area during construction.

ii. Weekly inspections during construction under all nests in the project area for evidence of desert tortoise predation (e.g., scutes, shells, etc.). If evidence of desert tortoise predation is noted, a report shall be submitted to the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, and the Kern County Planning and Community Development Department within five calendar days; and

iii. Provisions for the management of trash that could attract common ravens during the construction, operations and maintenance, and decommissioning phases of the proposed project.

MM 4.4-6: **Preconstruction Burrowing Owl Surveys.** A qualified wildlife biologist (i.e., a wildlife biologist with previous burrowing owl survey experience) shall conduct preconstruction surveys of the permanent and temporary impact areas to locate active breeding or wintering burrowing owl burrows no fewer than 14 days prior to ground-disturbing activities (i.e.,

vegetation clearance, grading, tilling). 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 any potential burrows with fresh burrowing owl sign or presence of burrowing owls. Surveys may be conducted concurrently with desert tortoise preconstruction surveys. As each burrow is investigated, surveying biologists shall also look for signs of American badger and desert kit fox. Copies of the survey results shall be submitted to California Department of Fish and Wildlife and the Kern County Planning and Community Development Department.

If burrowing owls are detected onsite, no ground-disturbing activities shall be permitted within a buffer of no fewer than 100 meters (330 feet) from an active burrow during the breeding season (i.e., February 1 to August 31), unless otherwise authorized by California Department of Fish and Wildlife. During the non-breeding (winter) season (i.e., September 1 to January 31), ground-disturbing work can proceed as long as the work occurs no closer than 50 meters (165 feet) from the burrow. Depending on the level of disturbance, a smaller buffer may be established in consultation with California Department of Fish and Wildlife.

If burrow avoidance is infeasible during the non-breeding season or during the breeding season (February 1 through August 31) where resident owls have not yet begun egg laying or incubation, or where the juveniles are foraging independently and capable of independent survival, a qualified biologist shall implement a passive relocation program in accordance with Appendix E1 (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the 2012 California Department of Fish and Wildlife Staff Report on Burrowing Owl Mitigation.

If passive relocation is required, a qualified biologist shall prepare a Burrowing Owl Exclusion and Mitigation Plan and a Mitigation Land Management Plan in, accordance with the 2012 California Department of Fish and Wildlife Staff Report on Burrowing Owl Mitigation, for review by California Department of Fish and Wildlife prior to passive relocation activities. The Mitigation Land Management Plan shall include a requirement for the permanent conservation of offsite Burrowing Owl Passive Relocation Compensatory Mitigation. At a minimum, the following recommendations shall be implemented:

i. Temporarily disturbed habitat shall be restored, if feasible, to pre-project conditions including decompacting soil and revegetating.

ii. Permanent impacts to nesting, occupied and satellite burrows and/or burrowing owl habitat shall be mitigated such that the habitat acreage, number of burrows and burrowing owl impacted are replaced based on a site-specific analysis and shall include permanent conservation of similar vegetation communities (grassland, scrublands, desert, urban, and agriculture) 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.

iii. Permanently protect mitigation land through a conservation easement, deed restriction, or similar mechanism 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 operator may purchase available burrowing owl conservation bank credits. Land identified to mitigate for passive relocation of burrowing owl may be combined with other offsite mitigation requirements of the proposed project if the compensatory habitat is deemed suitable to support the species.

MM 4.4-7: **Nesting Birds and Raptors.** If construction is scheduled to commence during the non-nesting season (i.e., September 1 to January 31), no preconstruction surveys or additional measures are required. To avoid impacts to nesting birds in the project area, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within the project site for construction activities that are initiated during the breeding season (i.e., February 1 to August 31). The raptor survey shall focus on potential nest sites (e.g., cliffs, large trees, windrows) within a 0.5-mile buffer around the project site. Surveys shall be conducted no more than 14 days prior to construction activities. Surveys need not be conducted for the entire project site at one time; they may be phased so that surveys occur shortly before a portion of the project site is disturbed. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (e.g., 200–300 feet for common raptors; 0.5 mile for Swainson's hawk; 30–50 feet for passerine species) shall be established around active nests and no construction within the buffer allowed until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). For non-listed species, encroachment into the avoidance buffer may occur at the discretion of a qualified biologist; however, for State-listed species, consultation with CDFW shall occur prior to encroachment into the aforementioned buffers.

Significant Effect

The proposed project would have a substantial adverse effect on any riparian habitat or other sensitive natural community, or jurisdictional waters, identified in local or regional plans, policies, or regulations or by CDFW or USFWS (Impact 4.4-2).

Description of Significant Impact

There are no sensitive natural communities or riparian habitat on the project site. Therefore, no impacts to sensitive natural communities or riparian habitat would result from the implementation of the proposed project. As stated in the NOP/IS prepared for the project (see Appendix A), in compliance with National Discharge Elimination System (NPDES) General Construction Permit requirements, the applicant would be required to devise and submit a site-specific Storm Water Pollution Prevention Program (SWPPP) to minimize the discharge of wastewater during construction. The SWPPP includes steps for implementation of best management practices (BMPs) aimed at sediment control and erosion control, and could include soil stabilization, silt fencing, straw bale and temporary catch basins. These BMPs would be implemented during construction of the proposed project as a condition of required permits, therefore minimizing soil erosion in jurisdictional waters to the extent feasible.

A total of 65 features were identified and delineated within or adjacent to the project site. These drainages are potentially subject to RWQCB and CDFW jurisdiction. Because they drain to inland areas of California, the USACE is not expected to assert jurisdiction over the features. Approximately 109.72 acres of CDFW jurisdiction and 7.786 acres of RWQCB jurisdiction would be impacted. Construction activities from the proposed project could permanently impact these potentially jurisdictional features as a result of grading and construction of the solar facility, including supporting infrastructure. Impacts to jurisdictional areas would be considered significant but mitigatable through implementation of Mitigation Measures MM 4.4-8 and MM 4.4-9.

Finding

The proposed project has the potential to impact jurisdictional waters. These impacts would be reduced to a less-than-significant level with the implementation of Mitigation Measures MM 4.4-8 and MM 4.4-9, described below.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures MM 4.4-8 and MM 4.4-9., described below, would reduce impacts to less-than-significant levels.

Kern County

MM 4.4-8: Prior to issuance of any grading or building permit, the project proponent/operator shall submit a final Jurisdictional Delineation report. A copy of this report shall also be provided to the Lahontan Regional Water Quality Control Board (RWQCB) and the County. The report shall include information as shown below as a plan if necessary and shall outline compliance to the following:

1. Delineation of all jurisdictional features at the project site. Potential jurisdictional features (ephemeral drainages) within the project boundary identified in the jurisdictional delineation report that are not anticipated to be directly impacted by project related activities shall be avoided. This may be shown in plan form.

2. Any material/spoils generated from project activities shall be located away from jurisdictional areas or special-status habitat 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.

3. Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage from contaminating the ground and generally at least 50 feet from the top of bank.

4. Any spillage of material will be stopped if it can be done safely. The contaminated area will be cleaned and any contaminated materials properly disposed. For all spills, the project foreman or designated environmental representative will be notified.

MM 4.4-9: Prior to ground disturbance activities that would impact aquatic features, the project proponent/operator shall be subject to provisions as identified below:

1. The project proponent/operator shall file a complete Report of Waste Discharge with the RWQCB to obtain Waste Discharge Requirements and shall also consult with California Department of Fish and Wildlife (CDFW) on the need for a streambed alteration agreement. Copies of reports shall be submitted to the County.

2. Based on consultation with RWQCB and CDFW, if permits are required for the project site, appropriate permits shall be obtained prior to disturbance of jurisdictional resources.

3. Compensatory mitigation for impacts to unvegetated streambeds/washes shall be identified prior to disturbance of the features at a minimum 1:1 ratio, as approved by the RWQCB or CDFW either through onsite or offsite mitigation, or purchasing credits from an approved mitigation bank.

4. The project proponent/operator shall comply with the compensatory mitigation required and proof of compliance, along with copies of permits obtained from RWQCB and/or CDFW, which shall be provided to the County.

5. A Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared that outlines the compensatory mitigation in coordination with the RWQCB and CDFW.

    a. If onsite mitigation is proposed, the HMMP 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).

    b. The HMMP shall include remedial measures in the event that performance criteria are not met.

    c. If mitigation is implemented off site, mitigation lands shall be comprised of similar or higher quality and preferably located in Kern County. Offsite land shall be preserved through a deed restriction or conservation easement and the HMMP shall identify an approach for funding assurance for the long-term management of the conserved land. Alternatively, the applicant may purchase credits from an approved mitigation bank.

    d. Copies of any coordination, permits, etc., with RWQCB and CDFW shall be provided to the County.

State Lands Commission

MM 4.4-8: Prior to issuance of any grading or building permit, the project proponent/operator shall submit a final Jurisdictional Delineation report. A copy of this report shall also be provided to the Lahontan Regional Water Quality Control Board (RWQCB) and the County. The

report shall include information as shown below as a plan if necessary and shall outline compliance to the following:

1. Delineation of all jurisdictional features at the project site. Potential jurisdictional features (ephemeral drainages) within the project boundary identified in the jurisdictional delineation report that are not anticipated to be directly impacted by project related activities shall be avoided. This may be shown in plan form.

2. Any material/spoils generated from project activities shall be located away from jurisdictional areas or special-status habitat 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.

3. Materials shall be stored on impervious surfaces or plastic ground covers to prevent any spills or leakage from contaminating the ground and generally at least 50 feet from the top of bank.

4. Any spillage of material will be stopped if it can be done safely. The contaminated area will be cleaned and any contaminated materials properly disposed. For all spills, the project foreman or designated environmental representative will be notified.

MM 4.4-9: Prior to ground disturbance activities that would impact aquatic features, the project proponent/operator shall be subject to provisions as identified below:

1. The project proponent/operator shall file a complete Report of Waste Discharge with the RWQCB to obtain Waste Discharge Requirements and shall also consult with California Department of Fish and Wildlife (CDFW) on the need for a streambed alteration agreement. Copies of reports shall be submitted to the County.

2. Based on consultation with RWQCB and CDFW, if permits are required for the project site, appropriate permits shall be obtained prior to disturbance of jurisdictional resources.

3. Compensatory mitigation for impacts to unvegetated streambeds/washes shall be identified prior to disturbance of the features at a minimum 1:1 ratio, as approved by the RWQCB or CDFW either through onsite or offsite mitigation, or purchasing credits from an approved mitigation bank.

4. The project proponent/operator shall comply with the compensatory mitigation required and proof of compliance, along with copies of permits obtained from RWQCB and/or CDFW, which shall be provided to the County.

5. A Habitat Mitigation and Monitoring Plan (HMMP) shall be prepared that outlines the compensatory mitigation in coordination with the RWQCB and CDFW.

    a. If onsite mitigation is proposed, the HMMP 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).

b. The HMMP shall include remedial measures in the event that performance criteria are not met.

c. If mitigation is implemented off site, mitigation lands shall be comprised of similar or higher quality and preferably located in Kern County. Offsite land shall be preserved through a deed restriction or conservation easement and the HMMP shall identify an approach for funding assurance for the long-term management of the conserved land. Alternatively, the applicant may purchase credits from an approved mitigation bank.

d. Copies of any coordination, permits, etc., with RWQCB and CDFW shall be provided to the County.

Significant Effect

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 (Impact 4.4-4).

Description of Significant Impact

There are no perennial water features on the project site, and therefore no potential corridors for aquatic species. In addition, no wildlife nursery sites have been identified on or in the vicinity of the project site. Similarly, the project site is not located within a known wildlife migratory corridor or a wildlife connectivity area connecting large open space areas in the region or locally, as mapped by the California Essential Habitat Connectivity Project. Although the project would introduce structures to the project site that would physically impede wildlife movement in certain areas and directions, the other renewable energy projects in the area of the project, as well as the areas to the east and south that are mainly native plant communities with scattered unpaved roads and residences, provide for largely unrestricted wildlife movements through natural or semi-natural habitats. Therefore, project features that would restrict wildlife movement represent a very small fraction of area available for wildlife movement in the surrounding area. In addition, post-construction project fencing, as described in MM 4.4-10, would allow wildlife movement into and out of the project site, maintaining habitat connectivity. Consequently, implementation of the project would not restrict local or regional wildlife movement. Lighting from the project site could potentially affect movement of wildlife around the project site. However, all lighting installed as a part of the proposed project would comply with the Kern County Dark Skies Ordinance and would be shielded and directed downward to minimize the potential for glare or spillover onto adjacent properties. This would reduce the temporary impacts to wildlife movement through the area. Therefore, the proposed project is not expected to adversely impact wildlife movement and impacts would be less than significant.

Finding

The project has the potential to interfere with local and regional wildlife movement. However, these impacts would be reduced to a less-than-significant level with the implementation of Mitigation Measures MM 4.4-10.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measure MM 4.4-10, described below, would reduce impacts to a less-than-significant level.

Kern County

Implementation of Mitigation Measure MM 4.4-10 would be required to reduce impacts on local and regional wildlife movement.

MM 4.4-10: The project site shall be fenced to keep terrestrial wildlife species from entering the project site during construction, but will provide openings post-construction to enable wildlife to move freely through the project site during operation (e.g., create 4- to 7-inch portals or openings in the fence raising the fence 7 inches above the ground and knuckling the bottom of the fence [i.e., wrapping the fencing material back to form a smooth edge] to protect wildlife passing underneath). A desert tortoise exclusion fence is not required unless desert tortoise are found on site during the preconstruction surveys. This 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 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 a qualified biologist at a regular interval 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. Outside temporarily fenced exclusion areas, the project 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.

State Lands Commission

MM 4.4-10: The project site shall be fenced to keep terrestrial wildlife species from entering the project site during construction, but will provide openings post-construction to enable wildlife to move freely through the project site during operation (e.g., create 4- to 7-inch portals or openings in the fence raising the fence 7 inches above the ground and knuckling the bottom of the fence [i.e., wrapping the fencing material back to form a smooth edge] to protect wildlife passing underneath). A desert tortoise exclusion fence is not required unless desert tortoise are found on site during the preconstruction surveys. This 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 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 a qualified biologist at a regular interval 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. Outside temporarily fenced exclusion areas, the project 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.

Significant Effect

The proposed project would conflict with any local policies or ordinance protecting biological resources, such as a tree preservation policy or ordinance (Impact 4.4-5).

Description of Significant Impact

One local policy (Willow Springs Specific Plan) falls within the project site. This plan requires avoidance of Joshua trees when possible and to create a Preservation or Transportation Plan. Also, many native desert plans, including the Joshua tree are protected under the California Desert Native Plant Act. Both silver cholla and beavertail cactus are also located on the project site and are protected under this Act. Over 5,700 protected cacti and yucca are located on the project site and would be directly impacted by construction activities. Indirect impacts include dust and soil compaction leading to habitat degradation. Therefore, significant impacts could occur to Joshua trees, silver cholla, and beavertail cactus on the project site. However, these impacts would be mitigated to a level of less than significant through the implementation of Mitigation Measure MM 4.4-1 through MM 4.4-10.

Finding

The project would potentially conflict with local policies protecting biological resources. However, with the implementation of Mitigation Measures 4.4-1 through MM 4.4-10, described above, impacts would be less than significant.

Level of Significance

Impacts would be less than significant for the project with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures 4.4-1 through MM 4.4-10, described above, would reduce impacts to a less-than-significant level.

Significant Effect

The project would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan (Impact 4.4-6).

Description of Significant Impact

The proposed project would conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

The project site is located within the West Mojave Plan (WMP) Habitat Conservation Plan (HCP) area. The WMP is a proposed comprehensive strategy to conserve and protect more than 100 listed or sensitive wildlife species and their habitats, including the Mohave ground squirrel and desert tortoise, both which have the potential to be present onsite. An HCP is a proposed component of the West Mojave Plan that, if and when finalized, would provide a program for complying with the federal Endangered Species Act

(ESA) on private lands with the West Mojave Plan area. Implementation of Mitigation Measures MM 4.4-1, MM 4.4-2, MM 4.4-4, and MM 4.4-5 would ensure that impacts to Mohave ground squirrel and desert tortoise, should they be present, would be mitigated to the extent feasible, consistent with the proposed WMP. Therefore, this project would be consistent with the applicable WMP and no conflict would occur.

Finding

The project has the potential to conflict with the provisions of an adopted Habitat Conservation Plan. However, with the implementation of Mitigation Measures MM 4.4-1, MM 4.4-2, MM 4.4-4, and MM 4.4-5, these impacts would be reduced to a less-than-significant level.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures MM 4.4-1, MM 4.4-2, MM 4.4-4, and MM 4.4-5, described above, would reduce impacts to a less-than-significant level.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The proposed project would not have any environmental effects on biological resources that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

The proposed project would not have any cumulative effects on biological resources that would be less than significant.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

Significant Effect

Cumulative impacts would be significant and unavoidable to transient wildlife species, including burrowing owls, Swainson's hawk, other raptors, desert kit fox, and migratory birds.

Description of Significant Impact

Cumulative impacts for a project would be significant if the incremental effects of the individual project are considerable when combined with the effects of past projects, other current projects, and probable future projects. As described above, the project-specific impacts of the project would be less than significant with implementation of Mitigation Measures MM 4.4-1 through MM 4.4-10.

As large-scale energy projects and urbanization pressures increase within Kern County, impacts to biological resources within the region are expanding on a cumulative level. As described in Table 3-5, *Cumulative Projects List*, in Chapter 3, *Project Description*, of the EIR, other projects with similar species effects have been completed within the Antelope Valley. In general, bioregions are defined through physical

and environmental features, including watershed boundaries and soil and terrain characteristics. Areas to the north and west of the Tehachapi Mountains, and to the south of the San Gabriel Mountains, are within a different bioregion and are separated from the project site by the natural geography that these ranges present. SR 14, at the eastern end of the western Antelope Valley, also acts as a barrier to wildlife movement.

There are a number of special-status species that currently utilize the project site and surrounding vicinity. Implementation of the project in addition to the other projects underway or proposed within Kern County have the potential to impact transient wildlife species, including burrowing owls, Swainson's hawk, loggerhead shrike, yellow-headed blackbird, other raptors, migratory birds, and desert kit fox. The project site contains habitat that support insects, rodents, and small birds that provide a prey base for raptors and terrestrial wildlife. In addition, based on the literature review and database search completed for the project, the region is known to support a diversity of special-status species, most of which are not expected to utilize the project site on a transient basis, if at all.

Given the number of present and reasonably foreseeable future development projects in the Antelope Valley, the proposed project, when combined with other projects, would have an incremental contribution to cumulative loss of foraging and nesting habitat for special-status species. Implementation of Mitigation Measures would reduce impacts to biological resources to less-than-significant levels on the project-level scale. However, the proposed project, when combined with other related development projects proposed throughout the County, the cumulative impact would be significant and unavoidable.

In addition, common raven numbers have grown substantially in the past few decades in the western Mojave Desert. Ravens are predators of the desert tortoise and burrowing owl, and compete with, as well as prey on, many special-status raptors and birds. The common raven population growth is directly attributed to human development and the subsidies it creates that support this adaptable species. When considered within the cumulative context of related projects as described above, the project's contribution to maintaining artificially high common raven populations when combined with other related projects, which threatens other desert wildlife, including special-status species, is potentially significant. However, the contribution of the project with mitigation incorporated, would not be cumulatively considerable because project impacts to specials-status wildlife would be reduced.

The residual effects on migratory birds of the project were determined to be less than significant. This cumulative analysis analyzes the potential for these incremental impacts of the project to combine with other past, present, and reasonably foreseeable projects to cause or contribute to a significant cumulative effect within the Central Valley portion of the Pacific Flyway for the duration of the project. Identified cumulative projects that involve the installation of PV panels have the potential to cause impacts to migratory birds associated with collisions. Little is known about the potential for impacts to migratory birds associated with the "lake effect." However, evidence suggests that significant impacts to migratory birds could occur even after mitigation. Further, as take authorization for migratory bird species is not available, any mortality of migratory birds would be considered significant under CEQA. Therefore, the proposed project, in combination with all identified cumulative projects, would result in a cumulatively significant impact on migratory birds that may remain significant and unavoidable after implementation of mitigation.

Finding

The proposed project, in combination with all identified cumulative projects, would result in a cumulatively significant impact on migratory birds that may remain significant and unavoidable after implementation of

mitigation. Even with implementation of Mitigation Measures MM 4.4-1 through MM 4.4-10, described above, cumulative impacts would be significant and unavoidable.

Level of Significance

Cumulative impacts would be significant and unavoidable, even with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Even with implementation of Mitigation Measures MM 4.4-1 through MM 4.4-10, described above, impacts would be significant and unavoidable for cumulative impacts on migratory birds.

CULTURAL RESOURCES

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

None of the proposed project's environmental effects on cultural resources have been found to result in no impacts or only less-than-significant impacts.

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

Significant Effect

The project would cause a substantial adverse change in the significance of a historical resource, as defined in CEQA *Guidelines* Section 15064.5. (Impact 4.5-1).

Description of Significant Impact

As a result of the cultural resources survey conducted for the project, 67 cultural resources were identified. These resources include 28 archaeological sites (eight prehistoric sites and 20 historic-period sites), three historic built environment resources (4301 140th Street, 5753 W. 105th Street, and General Petroleum Road), and 35 isolates. The 28 archaeological sites were subject to subsurface testing to determine if any of the sites contain subsurface deposits that may have potential to address regional research questions as outlined in ICF's cultural resources technical report (ICF, 2019a). All but seven of the sites were found to not contain a significant subsurface component and, therefore, the sites were determined to have no data potential. However, in regards to the remaining seven sites, all prehistoric archaeological sites, the Lead Agency, through the Native American Tribal Consultation process as required by Assembly Bill 52, has determined that not enough testing has occurred to definitively reach a conclusion that the sites are less than significant for cultural resources and are ineligible for listing or consideration as a tribal cultural resource (ICF, 2019b). The specific sites in question include P-15-019560 through P-15-019566. However, the configuration of the proposed project would result in complete avoidance of any construction or operational activities in these areas. Further, Mitigation Measure 4.5-2 requires the project proponent to prepare a Cultural Resources Treatment Plan showing how these sites would be avoided during construction and operational activities prior to issuance of any grading or building permits.

The three identified built environment resources were also evaluated for inclusion in the CRHR under Criteria 1-4 and were recommended ineligible. Therefore, they do not qualify as historical resources.

The 35 identified isolates lack archaeological context and therefore generally do not provide sufficient information to be considered significant resources. As such, the isolates documented as part of the survey are recommended not eligible for listing in the CRHR, and do not qualify as historical resources pursuant to CEQA.

In addition to known resources, the project has the potential for buried resources that could be discovered during ground-disturbing activities. The project site is covered by Holocene alluvial deposits, and this alluvium has been deposited over the course of known human occupation in the region, possibly burying prehistoric archaeological sites that once existed on the surface. Therefore, there is a possibility that buried archaeological deposits may be encountered during project-related excavation. Should buried archaeological deposits be uncovered during project implementation, and should such resources be considered historical resources under CEQA, they could be subject to significant impacts. To reduce potential impacts to less than significant, Mitigation Measures MM 4.5-1 through MM 4.5-4 require cultural resources sensitivity training for construction workers, archaeological and Native American monitoring during construction, and appropriate treatment of unearthed archaeological resources during construction.

Finding

The proposed project would have the potential to cause a substantial adverse change in the significance of an historical resource. However, these impacts would be reduced to a less-than-significant level with the implementation of Mitigation Measures MM 4.5-1 through MM 4.5-4.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures MM 4.5-1 through MM 4.5-4, described below, would reduce impacts to less-than-significant levels.

Kern County

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 unique 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 conduct 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 to 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. A copy of the proposed training materials shall be provided to the Planning and Natural Resources Department prior to the issuance of any grading or building permit.

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 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 Lead Archaeologist to ensure all employees receive appropriate training before the work on-site.

MM 4.5-2 Prior to this issuance of any grading or building permit, the project operator shall submit to the Kern County Planning and Natural Resources Department a Cultural Resources Treatment Plan. The plan shall:

a) Provide an overview of best management practices to be utilized during construction activities to ensure protection of cultural resources.

b) Outline the process for evaluation of any unanticipated cultural discoveries during project construction activities.

c) Include provisions showing how sites P-15-019560 through p-15-019566 will be avoided during construction and operational activities.

MM 4.5-3: During implementation of the project, the services of Native American Tribal Monitors, 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, on a full-time basis, ground-disturbing activities associated with project-related construction activities, as follows:

a) All initial excavation and initial ground-disturbing activities within the project site, shall be monitored by archaeological and Native American monitors.

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 daily 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 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 4.5-4: 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. The Lead Archaeologist in consultation with the Native American monitor, 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 (CEQA) 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 CEQA 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. Diagnostic archaeological materials with research potential recovered during any investigation shall be curated at an accredited curation facility. The Lead Archaeologist, in consultation with a designated Native American monitor, shall 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. The final disposition of archaeological, historical, and paleontological resources recovered on State lands under the jurisdiction of the California State Lands Commission must be approved by the Commission. (RTC 5/1/20)

State Lands Commission

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 unique 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 conduct 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 to 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. A copy of the proposed training materials shall be provided to the Planning and Natural Resources Department prior to the issuance of any grading or building permit.

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 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 Lead Archaeologist to ensure all employees receive appropriate training before the work on-site.

MM 4.5-2 Prior to this issuance of any grading or building permit, the project operator shall submit to the Kern County Planning and Natural Resources Department a Cultural Resources Treatment Plan. The plan shall:

a) Provide an overview of best management practices to be utilized during construction activities to ensure protection of cultural resources.

b) Outline the process for evaluation of any unanticipated cultural discoveries during project construction activities.

c) Include provisions showing how sites P-15-019560 through p-15-019566 will be avoided during construction and operational activities.

MM 4.5-3: During implementation of the project, the services of Native American Tribal Monitors, 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, on a full-time basis, ground-disturbing activities associated with project-related construction activities, as follows:

a) All initial excavation and initial ground-disturbing activities within the project site, shall be monitored by archaeological and Native American monitors.

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 daily 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 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 4.5-4: 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. The Lead Archaeologist in consultation with the Native American monitor, 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 (CEQA) 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 CEQA 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. Diagnostic archaeological materials with research potential recovered during any investigation shall be curated at an accredited curation facility. The Lead Archaeologist, in consultation with a designated Native American monitor, shall 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. The final disposition of archaeological, historical, and paleontological resources recovered on State lands under the jurisdiction of the California State Lands Commission must be approved by the Commission. (RTC 5/1/20)

Significant Effect

The project would cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5 (Impact 4.5-2).

Description of Significant Impact

As discussed above under Impact 4.5-1, 28 archaeological sites and 35 isolates were identified within the project site. The isolates lack archaeological context and, therefore, generally do not provide sufficient information to be considered significant resources. Of the 28 archaeological sites, it was determined that all but seven lack significant subsurface deposits, and therefore lack the data to qualify as unique archaeological resources. For the remaining seven sites, the Lead Agency, through the Native American

Tribal Consultation process as required by Assembly Bill 52 has determined that not enough testing has occurred to definitively reach a conclusion that the sites are less then significant cultural resources and are ineligible for listing or consideration as a tribal cultural resource (ICF, 2019b). The specific sites in question included P-15-019560 through P-15-019566, all prehistoric archaeological sites. However, the configuration of the proposed project would result in complete avoidance of any construction or operational activities in these areas. Mitigation Measure MM 4.5-2 requires the project proponent to prepare a Cultural Resources Treatment Plan showing how these sites would be avoided during construction and operational activities prior to issuance of any grading or building permits.

As discussed previously under Impact 4.5-1, there also is a potential for the project to impact previously unknown, buried archaeological deposits. The project site is covered by Holocene-age alluvium. Given that the Holocene alluvium was deposited during the course of human occupation of the region, there is a possibility that the sediments may have buried archaeological sites. As such, buried archaeological sites may be encountered during project-related excavation. In the event that unknown archaeological resources are discovered during project construction, significant impacts could occur. However, with implementation of Mitigation Measures MM 4.5-1 through MM 4.5-4, which require cultural resources sensitivity training for construction workers, archaeological and Native American monitoring during construction, and appropriate treatment of unearthed archaeological resources during construction, potential impacts would be reduced to less than significant.

Finding

The proposed project would have the potential to impact a unique archaeological resource. However, these impacts would be reduced to a less-than-significant level with the implementation of Mitigation Measures MM 4.5-1 through MM 4.5-4.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures MM 4.5-1 through MM 4.5-4, described above, would reduce impacts to less-than-significant levels.

Significant Effect

The project would disturb any human remains, including those interred outside of formal cemeteries (Impact 4.5-3).

Description of Significant Impact

There is no indication, either from the archival research results or the archaeological survey, that any particular location within the project area has been used for human burial purposes in the recent or distant past. However, in the event that human remains are inadvertently discovered during project construction activities, the human remains could be damaged or disturbed, which would be a significant impact. Implementation of Mitigation Measure MM 4.5-5 would ensure that any human remains encountered during Project implementation are properly treated, thus reducing impacts to a less than significant level.

Finding

The proposed project would have the potential to disturb human remains. However, these impacts would be reduced to a less-than-significant level with the implementation of Mitigation Measure MM 4.5-5, described below.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures Mitigation Measure 4.5-5, described below, would reduce impacts to less-than-significant levels.

Kern County

MM 4.5-5: If human remains are uncovered during project construction, the project contractor shall immediately halt work within 100 ft. 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.

State Lands Commission

MM 4.5-5: If human remains are uncovered during project construction, the project contractor shall immediately halt work within 100 ft. 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.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The proposed project would not have any environmental effects on cultural resources that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

Significant Effect

The proposed project would have a cumulative environmental impact on cultural resources.

Description of Significant Impact

An analysis of cumulative impacts takes into consideration the entirety of impacts that the projects, zone changes, and general plan amendments discussed in Chapter 3, *Project Description* of the EIR, would have on cultural resources. The geographic area of analysis of cumulative impacts for cultural resources includes the western portion of the Antelope Valley. The western Antelope Valley includes a portion of the southeast corner of Kern County and a portion of northern Los Angeles County. This geographic scope of analysis is appropriate because the prehistoric and historical resources within this area are expected to be similar to those that occur on the project site because of their proximity, and because the similar environments, landforms, and hydrology would result in similar land use—and thus, site types. Similar geology within this vicinity would likely yield fossils of similar sensitivity and quantity. This is a large enough area to encompass any effects of the project on cultural resources that may combine with similar effects caused by other past, current, and reasonably foreseeable future projects, and provides a reasonable context wherein cumulative actions could affect cultural resources. Multiple projects, including solar energy production facilities, are proposed throughout the western Antelope Valley. Cumulative impacts to cultural resources in the western Antelope Valley could occur if other related projects, in conjunction with the proposed project, had or would have impacts on cultural resources that, when considered together, would be significant.

Development of the proposed project, in combination with other projects in the area, has the potential to contribute to a cumulatively significant cultural resources impact due to the potential loss of historical and archaeological resources unique to the region. However, no significant historic or prehistoric resources were identified within the project site, and mitigation measures are included in the EIR to reduce potentially significant impacts to unknown archaeological resources that could be encountered during construction of the proposed project. Implementation of Mitigation Measure MM 4.5-1 requires cultural resources sensitivity training for construction workers and Mitigation Measure MM 4.5-3 requires archaeological and Native American monitoring to ensure that any currently unknown archeological resources that qualify as historical resources or unique archaeological resources are identified during construction. Mitigation Measure MM 4.5-4 requires appropriate treatment of uncovered archaeological resources, including those that qualify as historical resources. Implementation of these mitigation measures would reduce potential impacts to historical and unique archaeological resources to a less than significant level, and ensure that

project impacts to cultural resources are not cumulatively considerable. Although project construction has the potential to disturb human remains, as do other projects in the cumulative study area, the implementation of Mitigation Measure MM 4.5-5 would ensure that appropriate protocols are followed with regard to identifying and handling remains, and ensure that cumulative impacts are not significant.

With implementation of Mitigation Measures MM 4.5-1 through MM 4.5-5 as described above, the project would not result in significant impacts to cultural resources. Given this minimal impact, as well as similar mitigation requirements for other projects in the western Antelope Valley, cumulative impacts to cultural resources would be less than significant.

Finding

The project would have the potential to result in cumulative impacts regarding cultural resources. The implementation of Mitigation Measures MM 4.5-1 through MM 4.5-5, described above, would reduce this impact to less-than-significant levels.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures MM 4.5-1 through MM 4.5-5 would reduce impacts to less-than-significant levels.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

The proposed project would not have a significant and unavoidable cumulative environmental impact on cultural resources.

ENERGY

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

The project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency (Impact 4.6-2).

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

Significant Effect

The project would result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation (Impact 4.6-1).

Description of Significant Impact

Construction and decommissioning of the new solar energy generation facility is expected to require the use of non-renewable resources in the form of gasoline and diesel to power off-road construction equipment and on-road vehicles as well as electricity consumed from water use during construction of the project. As shown in Table 4.6-2, *Project Construction Energy Usage*, in the EIR, construction activities are expected to consume approximately 135,032 gallons of gasoline, 809,350 gallons of diesel and 170,150 kWh of electricity. This is 0.03 percent of Kern County's annual gasoline fuel use in 2018, 0.26 percent of Kern County's annual diesel fuel use in 2018, and 0.0002 percent of the total electricity consumption in the SCE service area in 2018, respectively.

Energy consumption associated with decommissioning activities are anticipated to be similar to construction activities. The consumption of fuels during construction and decommissioning would be irreversible. Although construction and decommissioning activities would be temporary, the project could result in a wasteful, inefficient, or unnecessary consumption of energy resources if available control measures are not implemented. The project does not propose any energy control measures during construction. As a result, this impact would be potentially significant. Implementation of Mitigation Measure MM 4.3-1, as provided in Section 4.3, *Air Quality*, of the EIR, would require the use of energy-efficient and alternatively-fueled equipment during project construction. Implementation of Mitigation Measure MM 4.3-1 would also ensure compliance with Title 13, California Code of Regulations, Section 2449 et seq., which imposes construction equipment idling restrictions. Compliance with Title 13 would also help to reduce unnecessary fuel consumption during project construction. With implementation of this mitigation, the project would not result in the wasteful, inefficient, or unnecessary consumption of transportation fuels and impacts would be reduced to less than significant.

Finding

The project would have the potential to be impacted by liquefaction. The implementation of Mitigation Measure MM 4.3-1, described above in Findings for Air Quality impacts, would reduce impacts to a less-than-significant level.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures MM 4.3-1, described above, would reduce impacts to less-than-significant levels.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The proposed project would not have any environmental effects related to energy consumption that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

Significant Effect

The project would result in a cumulative environmental impact on energy.

Description of Significant Impact

Cumulative impacts occur when the incremental effects of a project are significant when combined with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. As presented in Chapter 3, *Project Description*, of the EIR, there are 56 related projects located within the vicinity of the project site (13 within a 1-mile radius of the project site and 43 within a 6-mile radius). The geographic context for the analysis of cumulative impacts on electricity is SCE's service area because the project and related projects are located within the service boundaries of SCE.

Cumulative projects in the project area listed in Table 3-5, *Cumulative Projects List*, largely consist of utility-scale solar power generation facilities. The nature of these projects is such that, like the project, they would be consistent with the strategies of the Climate Change Scoping Plan. In order to meet the AB 32 GHG emissions reduction mandate, the Climate Change Scoping Plan relies on achievement of the RPS target of 33 percent of California's energy coming from renewable sources by 2020. In order to meet the SB 32 GHG emissions reduction mandate, the 2017 Scoping Plan relies on achievement of the RPS target of 60 percent of California's energy coming from renewable sources by 2030 and 100 percent renewable sources by 2045. The project and other similar projects are essential to achieving the RPS.

The main contribution of energy consumption from the project would be from construction equipment usage, haul truck trips, and employee trips during the construction phase and panel washing activities, maintenance trips, and employee trips during project operation of the project as well as electricity used for the Operations and Maintenance Building. The project's emissions would, therefore, contribute to the increase in emissions in the transportation sector as well as electricity generation sector. Construction emissions would be finite and temporary and would cease at the end of construction activities.

Although the project would result in a contribution to cumulative energy consumption in California, construction of the project would implement Mitigation Measure 4.3-1, as provided in Section 4.3, *Air Quality*, of the EIR, would require the use of energy-efficient and alternatively-fueled equipment during project construction. In addition, operation of the project could offset emissions from the electricity generation sector estimated at over 393,000 MWh of renewable electricity annually. As stated above, a majority of the related projects are solar or wind farms that would have similar energy use that would be offset by renewable energy generation and would have minimal operational trips to and from the sites. Overall, the project clearly would not contribute to cumulative energy consumption in California because operation of the project would provide electric power with negligible operational energy consumption over the long term when compared to traditional fossil-fueled generation technologies. Thus, the project would not have a cumulatively considerable impact on energy consumption, would not conflict with any renewable energy plans, and cumulative impacts would be less than significant.

Finding

The project would have the potential to result in cumulative environmental impacts regarding energy. The implementation of Mitigation Measure MM 4.3-1, described above in Findings for Air Quality impacts, would reduce cumulative impacts to less-than-significant levels.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures MM 4.3-1, described above, would reduce cumulative impacts to less-than-significant levels.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

The proposed project would not have a significant and unavoidable cumulative environmental impact related to energy.

GEOLOGY AND SOILS

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

The project would not directly or indirectly cause potential 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 (Impact 4.7-1).

The project would not directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: seismic-related ground failure including liquefaction (Impact 4.7-2).

The project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse (Impact 4.7-3).

The project would not be located on expansive soils creating substantial direct or indirect risks to life or property (Impact 4.7-4).

The project would have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater (Impact 4.7-5).

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

Significant Effect

The project would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (Impact 4.7-6).

Description of Significant Impacts

Most of the surficial deposits within the project site consist of younger Quaternary alluvium. Younger Quaternary alluvium is typically not paleontologically sensitive; however, it may be underlain by older Quaternary alluvium, which has moderate potential to contain paleontological resources. If significant vertebrate fossils are encountered during project implementation, disturbance of such resources would result in a potentially significant impact to paleontological resources. Therefore, although surface grading

and very shallow excavation within the younger Quaternary alluvium is unlikely to impact sensitive paleontological resources, excavations deeper than 12 feet could extend into the older Quaternary alluvium and impact significant vertebrate fossil resources. This would result in a potentially significant impact to paleontological resources. However, with implementation of Mitigation Measures MM 4.7-1 through MM 4.7-3, which would require Paleontological Resources Awareness Training for construction workers, use of a qualified paleontological monitor during construction activities, and appropriate treatment of accidentally uncovered paleontological resources, impacts to paleontological resources would be reduced to less than significant.

Finding

The project would have the potential to be impacted by ground shaking. The implementation of Mitigation Measures MM 4.7-1 through MM 4.7-3, described below, would reduce impacts to a less-than-significant level.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures MM 4.7-1 through MM 4.7-3, described below, would reduce impacts to less-than-significant levels.

Kern County

MM 4.7-1: The project proponent shall retain a qualified paleontologist, defined as a paleontologist meeting the Society for Vertebrate Paleontology's Professional Standards (SVP, 2010), to carry out all mitigation measures related to paleontological resources.

1. Prior to the start of any ground disturbing activities, the qualified paleontologist shall conduct a Paleontological Resources Awareness Training program for all construction 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.
2. Paleontological Resources Awareness Training may be conducted in conjunction with other awareness training requirements.
3. 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.
4. The Paleontological Resources Awareness Training Guides shall be kept onsite and available for all personnel to review and be familiar with as necessary.

MM 4.7-2: 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 12 feet or deeper below ground surface in areas mapped as younger Quaternary alluvium and for all ground disturbance within the mapped older Quaternary Alluvium within the western portion of Gen-Tie Option 3, should that alternative be selected.

1. 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.
    a. 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.
2. Paleontological monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The qualified paleontologist shall have authority to temporarily divert excavation operations away from exposed fossils to collect associated data and recover the fossil specimens if deemed necessary.
3. Following the completion of construction, the paleontologist shall prepare a report 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 4.7-3: 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. The final disposition of archaeological, historical, and paleontological resources recovered on State lands under the jurisdiction of the California State Lands Commission must be approved by the Commission. (RTC 5/1/20)

State Lands Commission

MM 4.7-1: The project proponent shall retain a qualified paleontologist, defined as a paleontologist meeting the Society for Vertebrate Paleontology's Professional Standards (SVP, 2010), to carry out all mitigation measures related to paleontological resources.

1. Prior to the start of any ground disturbing activities, the qualified paleontologist shall conduct a Paleontological Resources Awareness Training program for all construction 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.
2. Paleontological Resources Awareness Training may be conducted in conjunction with other awareness training requirements.
3. 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.
4. The Paleontological Resources Awareness Training Guides shall be kept onsite and available for all personnel to review and be familiar with as necessary.

MM 4.7-2: 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 12 feet or deeper below ground surface in areas mapped as younger Quaternary alluvium and for all ground disturbance within the mapped older Quaternary Alluvium within the western portion of Gen-Tie Option 3, should that alternative be selected.

1. 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.
    a. 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.
2. Paleontological monitoring shall include inspection of exposed rock units during active excavations within sensitive geologic sediments. The qualified paleontologist shall have authority to temporarily divert excavation operations away from exposed fossils to collect associated data and recover the fossil specimens if deemed necessary.
3. Following the completion of construction, the paleontologist shall prepare a report 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 4.7-3: 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. The final disposition of archaeological, historical, and paleontological resources recovered on State lands under the jurisdiction of the California State Lands Commission must be approved by the Commission. (RTC 5/1/20)

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The proposed project would not have any environmental effects related to geology and soils that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

Significant Effect

The proposed project would result in a cumulative environmental impact on geology and soils.

Description of Significant Impact

Impacts of the project would be cumulatively considerable if they would have the potential to combine with similar impacts of other past, present, or reasonably foreseeable projects. Cumulative projects listed in Table 3-5, *Cumulative Projects List*, would also be subject to similar seismic hazards. However, the effects of these projects are not of a nature to cause cumulatively significant effects from geologic impacts or on soils because such impacts are site specific and would only have the potential to combine with impacts of the project if they occurred in the same location as the project.

Development of the project, with implementation of the regulatory requirements discussed above, would result in less-than-significant impacts related to exposing persons or structures to geologic, soils, or seismic hazards. Although the entire region is a seismically active area, geologic and soil conditions vary widely within a short distance, making the cumulative context for potential impacts resulting from exposing people and structures to related risks one that is more localized or even site-specific. Similar to the project, other projects in the area would be required to adhere to the same CBC and Kern County Building Code, which would reduce the risk to people and property to less-than-significant levels. While future seismic events cannot be predicted, adherence to all federal, state, and local programs, requirements and policies pertaining to building safety and construction would limit the potential for injury or damage to a less-than-significant level. Therefore, the project, combined with past, present, and other foreseeable development in the area, would not

result in a cumulatively significant impact by exposing people or structures to risk related to geologic hazards, soils, and/or seismic conditions. However, surficial deposits, namely erosion and sediment deposition, can be cumulative in nature, depending on the type and amount of development proposed in a given geographical area. The cumulative setting for soil erosion consists of existing, planned, proposed, and reasonably foreseeable land use conditions in the region. Construction constraints are primarily based on specific sites within a proposed development and on the soil characteristics and topography of each site. Individual projects are required to comply with applicable codes, standards, and permitting requirements (e.g., preparation of a SWPPP) to mitigate erosion impacts. Development of the project site has the potential to contribute to soil erosion and loss of topsoil during construction however these potential impacts would be mitigated through the implementation of the required SWPPP and BMPs. Impacts associated with erosion are mitigated on a project-by project basis and other cumulative scenario projects would be required to adhere to similar requirements, thereby minimizing cumulative scenario erosion impacts.

Specifically, all planned projects in the vicinity of the project are subject to environmental review and would be required to conform to the Kern County General Plan and Building Code, and would implement additional mitigation of seismic hazards to ensure soil stability. With implementation of regulatory requirements, the project would not contribute to any cumulative impacts for geologic, seismic hazards or related events. Moreover, implementation of Mitigation Measures MM 4.7-1 through MM 4.7-3 would ensure that the project does not have any significant impacts related to paleontological resources. As a result, with implementation of mitigation, cumulative impacts related to geology and soils are less than significant.

The geographic scope for cumulative effects to paleontological resources includes the north-central portion of the Antelope Valley that surrounds the area of the proposed project. Given similarities in geologic formations, this area is expected to contain similar types of paleontological resources. There is no temporal scope because direct impacts to paleontological resources are permanent. Cumulative impacts to paleontological resources in the Antelope Valley could occur if other related projects, in conjunction with the proposed project, had or would have impacts on paleontological resources that, when considered together, would be significant. Development of the proposed project, in combination with other projects in the area, has the potential to contribute to a cumulatively significant paleontological resources impact due to the potential loss of paleontological resources unique to the region. However, mitigation measures are included in the EIR to reduce potentially significant project impacts to paleontological resources during construction of the proposed project. Implementation of Mitigation Measure MM 4.7-1 requires paleontology sensitivity training for construction workers and Mitigation Measure MM 4.7-2 requires appropriate monitoring of construction activities for potential paleontological resources that may be encountered. Implementation of these mitigation measures would reduce potential impacts to paleontological resources to a less-than-significant level. Furthermore, the implementation of Mitigation Measure MM 4.7-3 would ensure the appropriate protocol is followed with regard to identifying and handling remains, should paleontological resources be disturbed.

With implementation of Mitigation Measures MM 4.7-1 through MM 4.7-3, as described above, the project would not result in significant impacts to paleontological resources. Given this minimal impact and the requirement for similar mitigation for other projects in the Antelope Valley, cumulative impacts to paleontological resources would be less than significant.

Finding

The project would have to potential to result in cumulative environmental impacts regarding geology and soils. However, implementation of Mitigation Measures MM 4.7-1 through MM 4.7-3, described above, would reduce impacts to a less-than-significant level.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures MM 4.7-1 through MM 4.7-3, described above, would reduce impacts to a less-than-significant level.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

The proposed project would not have a significant and unavoidable cumulative environmental impact on geology and soils.

GREENHOUSE GAS EMISSIONS

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

The project would not generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment (Impact 4.8-1).

The project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gas (Impact 4.8-2).

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

The proposed project would not have any environmental effects related to greenhouse gas emissions that are potentially significant and no mitigation is required.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The proposed project would not have any environmental effects on greenhouse gas emissions that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

Significant Effect

The proposed project would have a cumulative environmental impact on greenhouse gas emissions.

Description of Significant Impact

Emissions of GHGs and their contribution to global climate change are considered a cumulative impact by definition. Therefore, the geographic extent of the project's cumulative area of impact would be worldwide.

The adopted *CEQA Guidelines* provide regulatory guidance on the analysis and mitigation of GHG emissions in CEQA documents, while giving lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and global climate change impacts. Quantitative significance thresholds for this impact area have not been adopted by the State of California. In addition, Kern County has not adopted quantitative thresholds for determining significance of GHG emissions at the time of this writing. However, EKAPCD has recently adopted an addendum to its *CEQA Guidelines* titled: "Addressing GHG Emission Impacts for Stationary Source Projects When Serving as the Lead CEQA Agency.*"* This addendum is the policy that EKAPCD will use when it is the lead agency for CEQA to determine the project-specific and cumulative significance of GHG emissions from new and modified stationary source (industrial) projects. Under this policy, a project is considered to have a cumulatively considerable impact if it generates 25,000 metric tons or more of CO_2e per year.

Total annual GHG emissions of 453 $MTCO_2e$ for the project are shown in Table 4.8-2, *Estimated Project Greenhouse Gas Emissions*. In addition to these project GHG emissions, other cumulative projects in the vicinity of the project site, identified in Table 3-5, *Cumulative Projects List*, in Chapter 3, *Project Description*, largely consist of utility-scale alternative power generation (i.e., solar and wind) facilities as well as communication facilities. The nature of these projects is such that, like the project, they would be consistent with the strategies of the Climate Change Scoping Plan. In order to meet the AB 32 GHG emissions reduction mandate, the Climate Change Scoping Plan relies on achievement of the RPS target of 33 percent of California's energy coming from renewable sources by 2020. In order to meet the SB 32 GHG emissions reduction mandate, the 2017 Scoping Plan relies on achievement of the RPS target of 50 percent of California's energy coming from renewable sources by 2030. As previously discussed, the RPS target was updated in September 2018 under SB 100 to 60 percent renewable by 2030 and 100% carbon-free by 2045. The project and other similar projects are essential to achieving the RPS.

The majority contribution of GHG emissions from the project would be from construction equipment usage during the construction phase including the use of the construction concrete batch plant, motor vehicles trips by employees, haul trucks and maintenance vehicles during project operations. Transportation sources account for 40 percent of California's total GHG emissions (CARB, 2019a). The project's emissions would, therefore, contribute to the increase in emissions in the transportation sector. Construction emissions would be finite and temporary and would cease at the end of construction activities.

Although the project would result in a short-term contribution to cumulative GHG emissions in California, operation of the project would offset emissions from the electricity generation sector. It is estimated that the project would displace approximately 19,700 $MTCO_2e$ annually over the project's maximum 35-year lifespan (refer to Table 4.8-3, *Displaced GHG Emissions Over 35-Year Operational Lifetime*). Therefore, the total GHG construction emissions that would be associated with the project would likely be offset by less than one month of operations. Overall, the project would not contribute to cumulative GHG emissions in California because operation of the project would provide electric power with negligible operational GHG emissions over the long term when compared to traditional fossil-fueled generation technologies. Thus, the project would not have a cumulatively considerable impact on global climate change, and cumulative impacts would therefore be less than significant.

Finding

The project would result in less-than-significant cumulative environmental impacts on greenhouse gas emissions. No mitigation is required.

Level of Significance

Impacts would be less than significant.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. *CEQA Guidelines* Section 15130 notes that sometimes the only feasible mitigation for cumulative impacts may be to adopt ordinances or regulations rather than impose conditions on a project-by-project basis. Global climate change is this type of issue. GHG impacts are considered to be exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective (CAPCOA, 2008). Causes and effects are not just regional or Statewide, they are worldwide. Because the project's construction and operational GHG emissions would be offset by renewable power generation and no mitigation is required, any other feasible reductions would be accomplished through CARB regulations adopted pursuant to AB 32 and SB 32. Cumulative impacts of the project on global climate change would be less than significant.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

The proposed project would not have a significant and unavoidable cumulative environmental impact on greenhouse gas emissions.

HAZARDOUS AND HAZARDOUS MATERIALS

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

The project would not emit hazardous emissions or involve handling hazardous or acutely hazardous materials, substances, or waste within 0.25 miles of an existing or proposed school (Impact 4.9-3)

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

Significant Effect

The project would create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (Impact 4.9-1)

Description of Significant Impact

Construction of the project, including the solar facilities and associated improvements (e.g., energy storage, access roads), would not involve the routine transport, use, or disposal of significant (i.e., bulk) quantities of hazardous materials. Construction would however, require the use of limited quantities of hazardous materials such as fuels, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliative, pesticides, herbicides, and welding materials/supplies. Most of the hazardous waste generated

by the project would occur during the temporary construction period and would consist of liquid waste, including cleaning fluids, dust palliative, herbicides, and solvents. Some solid hazardous waste, such as welding materials and dried paint, may also be generated during construction. Any hazardous materials that would be transported to the project site during construction, and any hazardous materials that are produced as a result of the construction of the project would be collected and transported away from the site in accordance with best management practices (BMPs) (see further discussion of BMP requirements in Section 4.10, *Hydrology and Water Quality*, of the EIR). During construction of the project, material safety data sheets for all applicable hazardous materials present at the site would be made readily available to on-site personnel. During construction of the facilities, non-hazardous construction debris would be generated and disposed of in local landfills. Sanitary waste would be managed using portable toilets located at a reasonably accessible on-site location.

Fuels and lubricants used on field equipment would be subject to the Material Disposal and Solid Waste Management Plan, and SPCC plan and other measures to limit releases of hazardous materials and wastes. Recyclable materials including wood, shipping materials, and metals would be separated when possible for recycling. Liquids and oils in the transformer and other equipment would be used in accordance with applicable regulations. The disposal of all oils, lubricants, and spent filters would be performed in accordance with all applicable regulations including the requirements of licensed receiving facilities. Overall, the relatively limited use of hazardous materials during construction would be controlled through compliance with applicable regulations and would result in a less-than-significant impact.

O&M activities associated with a PV solar facility are relatively minor when compared to other land uses such as conventional power plants, and would require limited use of hazardous materials. Any hazardous materials that would be used would be stored on-site and in designated areas. The site would be fenced to prevent public access to hazardous materials and the PV panels.

Operational activities are limited to monitoring plant performance, conducting scheduled maintenance for on-site electrical equipment, and responding to utility needs for plant adjustment. No heavy equipment would be used during normal project operation. O&M vehicles would include trucks (pickup, flatbed), forklifts, and loaders for routine and unscheduled maintenance, and water trucks for solar panel washing. Large heavy-haul transport equipment and cranes may be brought to the project site infrequently for equipment repair or replacement. Long-term maintenance and equipment replacement would be scheduled in accordance with manufacturer recommendations. Solar panels are warranted for 25 years or longer and are expected to have a life of 30 or more years. Moving parts, such as motors and tracking module drive equipment, motorized circuit breakers and disconnects, and inverter ventilation equipment, would be serviced on a regular basis, and unscheduled maintenance would be conducted as necessary. Mitigation Measure MM 4.9-1 would ensure that all handling, storage, and disposal of hazardous materials would be conducted in accordance with proven practices to minimize exposure to workers or the public.

The PV modules that would be installed on the project site use CdTe thin-film technology. CdTe is generally bound to a glass sheet by a vapor transport deposition during the manufacturing process, followed by sealing the CdTe layer with a laminate material and then encapsulating it in a second glass sheet. The modules meet rigorous performance testing standards demonstrating durability in a variety of environmental conditions. The PV modules conform to the International Electrotechnical Commission (IEC) test standards IEC 61646 and IEC61730 PV as tested by a third-party testing laboratory certified by the IEC. In addition, the PV modules also conform to Underwriters Laboratory (UL) 1703 a standard established by the independent product safety certification organization. In accordance with UL 1703, the PV modules undergo rigorous accelerated life testing under a variety of conditions to demonstrate safe construction and monitor

performance. Studies indicate that unless the PV module is purposefully ground to a fine dust, use of CdTe in PV modules do not generate any emissions of CdTe (Fthenakis 2003). The project includes operational and maintenance protocols that would be used to identify and remove damaged or defective PV modules during annual inspections. The PV module manufacturer created the first global and comprehensive module collection and recycling program in the PV industry in 2005.

Dust palliatives and herbicides, if used during operations to control vegetation, may be transported to the project site. These materials would be stored in appropriate containers in accordance with the hazardous materials business plan required by Mitigation Measure MM 4.9-1.

Project operations could require the use of hazardous materials at the energy storage facility which would contain battery acids, as well as lead acid, sodium sulfur, and sodium or nickel hydride. All transformers would be equipped with spill containment areas and battery storage would be in accordance with OSHA requirements such as inclusion of ventilation, acid resistant materials, and spill response supplies. All components would have a comprehensive SPCC plan, in accordance with all applicable federal, state, and local regulations. Dust palliatives and herbicides, if used during operations to control vegetation, may be transported to the project site. These materials would be stored in appropriate containers to prevent accidental release. There are no designated routes for the transport of hazardous materials located on or immediately adjacent to the project site; the closest route is SR-14. In addition, implementation of Mitigation Measure MM 4.9-1, which requires the preparation of a hazardous materials business plan that would describe proper handling, storage, transport, and disposal techniques and methods to be used to avoid spills and minimize impacts in the event of a spill, would further reduce impacts related to hazards to a less-than-significant level.

Further, implementation of the project would not result in the significant risk of EMFs associated with overhead power lines, as the project would ultimately connect into the existing infrastructure (i.e, the Whirlwind substation). In addition, the project would not construct sensitive uses under the existing lines. As the state has not adopted any specific limits or regulations regarding EMF levels from electric power facilities, impacts in this regard would be less than significant.

During the decommissioning and disposal process, it is anticipated that all project structures would be fully removed from the ground. Above-ground equipment that would be removed would include electrical wiring, equipment on the inverter pads, transformer pads, telecommunications equipment and other associated equipment. Equipment would be de-energized prior to removal, salvaged (where possible), placed in appropriate shipping containers, and secured in a truck transport trailer for shipment off-site. Removal of the solar modules would include removal of the racks on which the solar panels are attached, and their placement in secure transport crates and a trailer for storage, for ultimate transportation to another facility.

Once the solar modules have been removed, the racks would be disassembled, and the structures supporting the racks would be removed. All other associated site infrastructure would be removed, including fences, concrete pads that may support the inverters, transformers and related equipment, and underground conduit/electrical wiring. The fence and gate would be removed, and all materials would be recycled to the extent feasible. The area would be thoroughly cleaned and all debris removed. As discussed above, most panel materials would be recycled, with minimal disposal to occur in landfills in compliance with all applicable laws. The PV module manufacturer would likely provide CdTe module collection and recycling services. In any case, current CdTe PV modules pass federal leaching criteria for non-hazardous waste, due in part to the low solubility of CdTe, which means they would not pose a significant risk for cadmium leaching if they reached a landfill.

Several peer-reviewed studies have evaluated the environmental, health, and safety aspects of CdTe PV modules. These studies have consistently concluded that during normal operations, CdTe PV modules do not present an environmental risk. CdTe releases are also unlikely to occur during accidental breakage or fire due to the high chemical and thermal stability of CdTe.

As described in Section 4.17, *Utilities and Service Systems*, Mitigation Measure MM 4.17-1 requires that an on-site recycling coordinator be designated by the project proponent to facilitate recycling of all waste through coordination with the on-site contractors, local waste haulers, and/or other facilities that recycle construction/demolition wastes. The on-site recycling coordinator shall also be responsible for ensuring that wastes requiring special disposal are handled according to state and county regulations that are in effect at the time of disposal. The name and phone number of the coordinator shall be provided to the Kern County Planning and Natural Resources Department prior to issuance of building permits.

Finding

The proposed project would have the potential create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. Implementation of Mitigation Measure MM 4.9-1, described below, and MM 4.17-1, described in Findings for Utilities and Service Systems, would reduce these impacts to a less-than-significant level.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measure MM 4.9-1, described below, and MM 4.17-1, described in Findings for Utilities and Service Systems, would reduce these impacts to a less-than-significant level.

Kern County

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:

a. Delineate hazardous material and hazardous waste storage areas.

b. Describe proper handling, storage, transport, and disposal techniques.

c. Describe methods to be used to avoid spills and minimize impacts in the event of a spill.

d. Describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction.

e. Establish public and agency notification procedures for spills and other emergencies, including fires.

f. Describe federal, state, or local agency coordination, as applicable, and clean-up efforts that would occur in the event of an accidental release.

g. Include procedures to avoid or minimize dust from existing residual pesticide and herbicide use 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 California Environmental Reporting System shall be submitted to the Kern County Planning and Natural Resources Department for inclusion in the project's permanent record.

Implement Mitigation Measure MM 4.17-1.

State Lands Commission

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:

a. Delineate hazardous material and hazardous waste storage areas.

b. Describe proper handling, storage, transport, and disposal techniques.

c. Describe methods to be used to avoid spills and minimize impacts in the event of a spill.

d. Describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction.

e. Establish public and agency notification procedures for spills and other emergencies, including fires.

f. Include procedures to avoid or minimize dust from existing residual pesticide and herbicide use 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 California Environmental Reporting System shall be submitted to the Kern County Planning and Natural Resources Department for inclusion in the project's permanent record.

Implement Mitigation Measure MM 4.17-1.

Significant Effect

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 (Impact 4.9-2).

Description of Significant Impact

According to the California Department of Conservation – Division of Oil, Gas and Geothermal Resources, which as of January 1, 2020 will be known as the Geologic Energy Management Division (CalGEM), the project site is not located within a known oil production field, nor does the project site have a known active or abandoned oil wells. As a result, construction and development of the project is unlikely to expose employees or construction workers to the dangers associated with operating a facility near an oil well.

Potential impacts that may result from construction of the project includes the accidental release of materials, such as fuels, oils, lubricants, solvents, detergents, degreasers, paints, ethylene glycol, dust palliative, herbicides, and welding materials/supplies. Implementation of Mitigation Measure MM 4.9-1, which would provide methods to be used to avoid spills and minimize impacts in the event of a spill by providing procedures for handling and disposing hazardous materials as well as public and agency notification procedures for spills and other emergencies including fires, would reduce this impact to a less-than-significant level.

Despite the surrounding solar and wind project and the relatively open spaces in the site vicinity, construction workers and nearby sensitive receptors could be exposed to pollutant emissions during construction of the project, resulting in a potentially significant impact. An adverse risk related to exposure to hazardous materials could result from the installation and use of transformers, grading of the site, the application of herbicides, or other construction processes if hazardous materials are not used appropriately during construction. Implementation of Mitigation Measure MM 4.9-2, which regulates the use of hazardous materials, as provided below would reduce impacts related to upset and accident conditions to a less-than-significant level.

Operation of the PV modules and inverters would produce no hazardous waste. Each enclosed transformer would include mineral oil, but the mineral oil contained in each transformer does not normally require replacement, and mineral oil disposal would be in accordance with all applicable federal, state, and local laws and regulations.

As stated in the environmental setting above, it has been demonstrated that standard operation of polycrystalline silicon PV systems does not result in pollution emissions to air, water, or soil. Polycrystalline silicon panels removed from the site would be recycled or otherwise disposed at an appropriate waste disposal facility. Hazardous materials are unlikely to occur during accidental breakage of the polycrystalline silicon PV panels. Similarly, fire damage would not result in the release of hazardous materials. The polycrystalline silicon PV panel does not pose a threat to residences in the vicinity of the site for these reasons.

CdTe releases are unlikely to occur from accidental breakage of or fires involving the PV modules. CdTe is a highly stable semiconductor compound due to strong chemical bonding that translates to extremely low solubility in water, low vapor pressure, and a melting point greater than 1,000 ˚C. Potential impacts to soil, air, and groundwater quality from broken CdTe PV modules are highly unlikely to pose a potential health risk as they are below both human health screening levels and background levels (Sinha et al. 2011)

Potential CdTe emissions from fire are unlikely to occur at the project site because of the lack of fuel to support a sustained wildfire. Grass fires are the most likely fire exposure scenario for ground-mounted PV systems, and these fires tend to be short-lived due to the thinness of grass fuels (additionally, the project site does not contain grasslands as it is sparsely covered by desert vegetation). As a result, these fires are unlikely to expose PV modules to prolonged fire conditions or to temperatures high enough to volatilize CdTe, which has a melting point of 1,041 ˚C. Moreover, even if a desert wildfire could reach that temperature, the actual CdTe emissions from a PV module would be insignificant (~0.04 percent) due to encapsulation in the molten glass matrix (Fthenakis et al. 2003).

Potential CdTe emissions from broken PV modules exposed to precipitation are also unlikely. Based on warranty return data, the breakage rate of CdTe PV modules is low, 1 percent over 25 years, which translates to an average of 0.04 percent per year. This breakage rate is an overestimate because over one-third of PV module breakage occurs during shipping and installation. Modules that break during shipping and installation are removed from the construction site and returned to a manufacturing facility for recycling. Even if the CdTe semiconductor layer becomes exposed to the environment, it strongly resists being released from the PV module into the environment, and CdTe has an extremely low solubility in water.

The CdTe PV modules do not pose a threat to nearby residences. The use of CdTe PV modules at the project site would not result in human or aquatic exposure of cadmium. A recent research article, Fate and Transport Evaluation of Potential Leaching Risks from Cadmium Telluride Photovoltaics (Sinha et al. 2012), further substantiates that during operation, CdTe PV modules do not pose a threat to human health or the environment due to its construction. The study evaluates the worst-case scenario to estimate potential exposures to CdTe compounds in soil, air or groundwater. The results show that exposure point concentrations in soil, air, and groundwater are one to six orders of magnitude below human health screening levels and below background levels, indicating that it is highly unlikely that exposures would pose potential health risks to on-site workers or off-site residents.

In addition, the hazardous materials that would be present in the energy storage facility would be contained within specifications that follow applicable federal state and local requirements. OSHA requirements call for the inclusion of appropriate ventilation, acid resistant materials, and presence of spill protection supplies.

Removal and/or maintenance of vegetation may require pesticide and herbicide use during both construction and operation but would be limited because of the slow growth of desert vegetation and its low density. If not handled properly, use of these products could create a hazard to the public (construction workers, maintenance employees, and nearby residences), resulting in a potentially significant impact. Mitigation Measure MM 4.9-2 would reduce impacts related to use of pesticides and herbicides to a less-than-significant level.

The project would not involve the routine transport, use, or disposal of hazardous materials or wastes. The closest designated route for the transport of hazardous materials is SR 138, which is located approximately 8 miles south of the project site. Adherence to regulations and standard protocols during the storage, transportation, and usage of any incidental hazardous materials used during O&M activities would minimize and avoid the potential for significant impacts.

Overall, adherence to regulations and standard protocols during the storage, transportation, and usage of any hazardous materials, and implementation of Mitigation Measure MM 4.9-2 would minimize or reduce potential impacts to a less-than-significant level.

The decommissioning and disposal process is described under Impact 4.9-1, above. Most panel materials would be recycled to the extent feasible, with minimal disposal to occur in landfills in compliance with all applicable laws. The PV module manufacturer provides CdTe module collection and recycling services. In any case, current CdTe PV modules pass federal leaching criteria for non-hazardous waste, due in part to the low solubility of CdTe, which means they would not pose a significant risk for cadmium leaching if they reached a landfill. Batteries within the energy storage facility would also be recycled to the extent feasible, with minimal landfill disposal.

Mitigation Measure MM 4.17-1 requires that an on-site recycling coordinator be designated by the project proponent to facilitate recycling of all waste through coordination with the on-site contractors, local waste haulers, and/or other facilities that recycle construction/demolition wastes. The on-site recycling coordinator shall also be responsible for ensuring that wastes requiring special disposal are handled according to state and county regulations that are in effect at the time of disposal. The name and phone number of the coordinator shall be provided to the Kern County Planning and Natural Resources Department prior to issuance of building permits.

Finding

The project would have the potential to 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. Implementation of Mitigation Measures MM 4.9-1, described above; MM 4.9-2, described below; and MM 4.17-1, described in Findings for Utilities and Service Systems, would reduce impacts to less-than-significant levels.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures MM 4.9-1, described above; MM 4.9-2, described below; and MM 4.17-1, described in Findings for Utilities and Service Systems, would reduce these impacts to less-than-significant levels.

Kern County

Implement Mitigation Measures MM 4.9-1, MM 4.17-1 and:

MM 4.9-2: The project proponent shall continuously comply with the following:

a) The construction contractor or project personnel shall use herbicides that are approved for use in California, and are appropriate for application adjacent to natural vegetation areas (i.e., non-agricultural use). 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.

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.

State Lands Commission

Implement Mitigation Measures MM 4.9-1, MM 4.17-1 and:

MM 4.9-2: The project proponent shall continuously comply with the following:

a) The construction contractor or project personnel shall use herbicides that are approved for use in California, and are appropriate for application adjacent to natural vegetation areas (i.e., non-agricultural use). 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.

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.

Significant Effect

The project would expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires (Impact 4.9-4).

Description of Significant Impact

The project site is not within an area of high or very high fire hazard, as determined by the Kern County General Plan or CAL FIRE (CAL FIRE 2007). There is sparse desert vegetation on-site and site preparation would involve the removal/reduction of much of the on-site vegetation. Natural vegetation may be maintained in areas where it does not interfere with project construction or the health and safety of on-site personnel, but across the site there would be a reduction in the available fuel load, which is already limited. The project would also include a battery storage component which have a very low likelihood of producing

a fire (generally a result of thermal runaway event from an internal short with cascading events) and a very low likelihood of catching fire (due to the non-flammable material that are used for the structure and absence of flammable vegetation or other materials nearby). However, battery systems still have the possibility of catching fire under the right circumstances (which are rare) or being damaged by fire and may generate fumes and gases that are extremely corrosive in those instances. Dry chemicals, carbon dioxide (CO2), and foam are the preferred methods for extinguishing a fire involving batteries as water is generally not useful in extinguishing battery fires. As also discussed further in Section 4.14, *Public Services*, of the EIR, the project proponent would implement Mitigation Measure MM 4.14-1, which would require the preparation and submittal of a Fire Safety Plan to the County and the County Fire Protection District for approval. The purpose of the Fire Safety Plan would be to eliminate causes of fire, prevent loss of life and property by fire, to comply with County and County Fire Protection District standards for solar facilities, and to comply with OSHA's standard of fire prevention, 29 CFR 1910.39. The Fire Safety Plan would address fire hazards of the different components of the project, including the energy storage facility, and would include BMPs to reduce the potential for fire and extinguishment techniques if a fire were to occur.

The project site is not adjacent to urbanized areas; however, there are isolated residences in proximity to the project site. While the project is not anticipated to significantly increase the risk of wildfire, Mitigation Measure MM 4.14-1 would be implemented which includes the development and implementation of a fire safety plan for construction and operation of the project. With mitigation, potential impacts from wildfire would be reduced to a less-than-significant level.

See also Section 4.18, *Wildfire*, of the EIR for additional discussion of wildfire issues.

Finding

The project site is not adjacent to urbanized areas; however, there are isolated residences in proximity to the project site. While the project is not anticipated to significantly increase the risk of wildfire, Mitigation Measure MM 4.14-1, described in Findings for Public Services impacts, would be implemented which includes the development and implementation of a fire safety plan for construction and operation of the project. With mitigation, potential impacts from wildfire would be reduced to a less-than-significant level.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. The implementation of Mitigation Measure MM 4.14-1, described in Findings for Public Services impacts, would reduce these impacts to a less-than-significant level.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The project would not have any environmental effects related to hazards and hazardous materials that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

Significant Effect

The proposed project would have a cumulative environmental impact on hazards and hazardous materials.

Description of Significant Impact

As described in Chapter 3, *Project Description*, multiple projects, including several utility-scale solar and wind energy production facilities, are proposed throughout Kern County and northern Los Angeles County. Many are located, like the project site, in the Antelope Valley and Mojave Desert. As shown in Table 3-5, *Cumulative Project List*, approximately 8 solar energy projects are proposed within Kern County. The geographic scope of impacts associated with hazardous materials generally encompasses the project site and a 0.25-mile-radius area around the project sites. A 0.25-mile-radius area allows for a conservative cumulative analysis that ensures that all potential cumulative impacts will be assessed. Hazards and exposure risks related to hazards and hazardous materials are typically localized in nature since they tend to be related to isolated events and on-site existing hazardous conditions and/or hazards caused by the project's construction or operation. A geographic scope of a 0.25-mile-radius area also coincides with the distance used to determine whether hazardous emissions or materials would have a significant impact upon an existing or proposed school, as discussed above.

Impacts regarding the handling, use, and/or storage of hazardous materials would be considered project specific and would not cumulatively contribute with other cumulative projects because of the relatively low quantities involved in the proposed project and the majority of other cumulative projects as well as the inherent variance in timing of handling of hazardous materials and wastes. An accident involving a hazardous material release during project construction or operation through upset or accident conditions including site grading and the use and transport of petroleum-based lubricants, solvents, fuels, batteries, herbicides, and pesticides to and from the project site would be location specific. In general, accidental releases and upset conditions tend to be localized events that do not combine with other projects especially considering how spread out the cumulative projects are. Therefore, the project would not contribute to cumulative impacts from accidental releases or discovery of hazardous materials and/or wastes. Conformance with existing state and county regulations, as well as project safety design features and the implementation of Mitigation Measures MM 4.9-1 and MM 4.9-2 identified above would further reduce cumulative impacts. In addition, implementation of appropriate safety measures during construction of the project, as well as other cumulative projects, would reduce the impact to a level that would not contribute to cumulative effects. Given the minimal risks of hazards at the project site, cumulative impacts are unlikely to occur. Therefore, impacts would not be cumulatively significant.

Hazardous materials to be used during decommissioning and removal activities are of low toxicity and would consist of fuels, oils, and lubricants. Because these materials are required for operation of construction vehicles and equipment, BMPs would be implemented to reduce the potential for or exposure to accidental spills or fires involving the use of hazardous materials. Impacts from minor spills or drips would be avoided by thoroughly cleaning up minor spills as soon as they occur. While foreseeable projects have the potential to cause similar impacts, it is assumed these projects would also implement similar BMPs. Conformance with existing state and county regulations, as well as implementation of Mitigation Measures MM 4.9-1 and MM 4.9-2, MM 4.14-1, of Section 4.14, *Public Services* (Fire Safety Plan) and MM 4.17-1, of Section 4.17, *Utilities and Service Systems* (recycling of debris and waste) would further reduce the potential for cumulative impacts. In addition, implementation of appropriate safety measures during construction of the project, as well as any other cumulative project, would reduce the impact to a

level that would not contribute to cumulative effects. Therefore, impacts related to hazardous materials would not be cumulatively significant.

The project site is not located within any airport land use plans or within close proximity to any private airstrips, and therefore would not have the potential to combine with impacts from other projects to pose a hazard to air navigation. The project would be in compliance with county zoning requirements as required.

Finding

The proposed project has the potential to result in cumulatively considerable impacts related to hazards and hazardous materials. However, implementation of Mitigation Measures, Mitigation Measures MM 4.9-1 and MM 4.9-2, described above; MM 4.14-1, described in Findings for Public Services impacts; and MM 4.17-1 described in Findings for Utilities and Service Systems, would reduce these impacts to a less-than-significant level.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures, Mitigation Measures MM 4.9-1 and MM 4.9-2, described above; MM 4.14-1, described in Findings for Public Services impacts; and MM 4.17-1 described in Findings for Utilities and Service Systems, would reduce these impacts to a less-than-significant level.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

The proposed project would not have a significant and unavoidable cumulative environmental impact on hazards and hazardous materials.

HYDROLOGY AND WATER QUALITY

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

The project would not substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin (Impact 4.10-2).

The project would have a less than significant potential to contribute to inundation by a flood hazard, tsunami, or seiche zones, that would result in risk of release of pollutants (Impact 4.10-6).

The project would conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan (Impact 4.10-7).

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

Significant Effect

The project would violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality (Impact 4.10-1).

Description of Significant Impact

The project site is relatively flat open space where runoff occurs as overland sheetflow. Project construction would include the following construction activities: grading for access roads; stationary ground-mounted photovoltaic (PV) module foundations; a temporary concrete batch plant; inverters and transformers; an on-site collector substation, underground and overhead fiber optics, a battery storage facility; an O&M Facility; and underground electrical collection systems. Construction would also require areas for material laydown and equipment staging. Conventional grading would be performed selectively throughout the project site. However, because the project area is relatively flat, it is anticipated that grading would be limited in most areas. Grading and excavation would also be required for the proposed foundations. These activities would affect current drainage patterns and erosion on the project site; however, designing the site grading and access roads in compliance with County standards would prevent substantial alterations to drainage patterns and erosion within the project site. The amount of impervious surfaces from construction of access roads, PV module foundations, substations, and other improvements would be relatively limited compared to the overall perviousness of the project site and spread out across the approximately 2,285-acre project area.

Potential impacts on water quality from erosion and sedimentation are expected to be localized and temporary during construction. The Kern County Public Works Department requires the completion of an NPDES applicability form for projects with construction activities that would disturb 1 or more acre within Kern County. Because stormwater runoff does not discharge to waters of the United States (i.e., the project area drains to a terminal basin that is not hydrologically connected to a navigable waterway), obtaining coverage under the General Construction NPDES permit for stormwater is not required. However, because the project would disturb more than 1 acre of land area and stormwater would not be contained on site or discharge into a terminal drainage facility, the County would require the project proponent to prepare and implement a SWPPP for the project. The SWPPP would include BMPs to be implemented to prevent soil erosion and discharge of other construction-related pollutants that could contaminate nearby drainages, and would be applicable to all areas of the project, including the solar fields and the gen-tie line. Specific BMPs for the construction phase would be identified during completion and County review of the SWPPP. However, typical BMPs to be implemented would include the following:

a. Stockpiling and disposing of demolition debris, concrete, and soil properly;
b. Installation of a stabilized construction entrance/exit and stabilization of disturbed areas;
c. Implementing erosion controls;
d. Properly managing construction materials;
e. Proper protections for fueling and maintenance of equipment and vehicles; and
f. Managing waste, aggressively controlling litter, and implementing sediment controls.

In addition, prior to the commencement of construction activities, the project proponent would be required to adhere to the requirements of the Kern County Grading Ordinance, which requires implementation of erosion control measures to protect water quality.

During project construction, any activity that results in the accidental release of hazardous or potentially hazardous materials could result in water quality degradation. Materials that could contribute to this impact

include diesel fuel, gasoline, lubricant oils, hydraulic fluid, antifreeze, transmission fluid, lubricant grease, cement slurry, and other fluids used by construction and maintenance vehicles and equipment. Motorized equipment could leak hazardous materials, such as motor oil, transmission fluid, or antifreeze, due to inadequate or improper maintenance, unnoticed or unrepaired damage, improper refueling, or operator error. As noted in Section 4.9, *Hazards and Hazardous Materials,* of the EIR, Mitigation Measure MM 4.9-1 would require the project proponent to provide a Hazardous Materials Business Plan (HMBP) that would 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; describe procedures for handling and disposing of unanticipated hazardous materials encountered during construction; and establish public and agency notification procedures for spills and other emergencies, including fires. The project proponent would provide the HMBP to all contractors working on the project and would ensure that one copy is available at the project site at all times. Implementation of the HMBP would ensure that all hazardous materials are handled, stored, and disposed of in a manner that is protective of water quality in stormwater runoff such that potential impacts during construction would be less than significant.

The solar facilities would require limited use of certain hazardous materials for routine daily operations and maintenance. Accidental release of such materials could include fuels, paints, coatings, lubricants, and transformer oil, which would result in water quality degradation if the materials were to become entrained in stormwater. This would result in a potentially significant impact on water quality. However, implementation of Mitigation Measure MM 4.9-1 would require the project proponent to prepare and implement a Hazardous Materials Business Plan, which would minimize this impact by ensuring safe handling of hazardous materials on site, and providing for cleanup in the event of an accidental release.

In addition to accidental releases of potential hazardous materials, during project operations, water quality could also be degraded as a result of increases in pollutants washed from impervious surfaces on the project site. Briefly, during dry periods, impervious surfaces (i.e., hardscape surfaces such as proposed collector substation, inverters and other hardscape like the gravel roads which because of compaction are effectively impervious) can collect greases, oils, and other vehicle-related pollutants. During storm events, these pollutants can become entrained in surface waters, resulting in water quality degradation. However, when the project is operational, the project would be required to adhere to the Kern County Development Standards and Kern County Code of Building Regulations which require site drainage plans that include development standards designed to protect water quality. Specifically, the project proponent would be required to prepare and submit a drainage plan to the Kern County Public Works Department, for approval of post-construction structural and nonstructural BMPs that could include low impact development (LID) features such as drainage swales for collection of runoff prior to off-site discharge. Routine structural BMPs are intended to address water quality impacts related to drainage that are inherent in development. Examples of routine structural BMPs include filtration, drainage swales, runoff-minimizing landscape for common areas, and retention basins. Adherence to these requirements would minimize potential for the operation period to cause any significant water quality degradation. Apart from infrequent cleaning of panels with water, which is unlikely to result in runoff, no other discharges would occur when the project is operational. Therefore, with the implementation of Mitigation Measure MM 4.9-1, the project would not violate water quality standards or waste discharge requirements, or otherwise degrade water quality in surface water or groundwater.

Finding

The proposed project would have the potential to violate water quality standards or waste discharge requirements, or otherwise substantially degrade surface or groundwater quality. However, implementation of Mitigation Measure 4.9-1, described in Findings for Hazards and Hazardous Materials impacts, would reduce these impacts to less-than-significant levels.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measure 4.9-1, described in Findings for Hazards and Hazardous Materials impacts, would reduce these impacts to less-than-significant levels.

Significant Effect

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 which would result in substantial erosion and/or sedimentation on-site or off-site (Impact 4.10-3).

Description of Significant Impact

The current drainage patterns at the project site are characterized as overland sheet flow that occurs from northwest to southeast. Under existing conditions, during small events, rainfall is generally quickly absorbed into sandy and silty soils on site, and does not run off. During larger events, runoff occurs primarily within poorly defined drainages on site.

The project would include limited grading such that off-site flow that enters the site would continue to flow south through the site much as it does currently. However, installation of the proposed facilities discussed in Chapter 3, *Project Description,* of the EIR would alter existing on-site drainage patterns and flowpaths to some degree, and could alter the way that stormwater from upgradient flows across the project site during major events. Given the unconsolidated and erosive nature of soils within the project area and its vicinity, these changes could result in increased erosion on site. Additionally, if the project controls stormwater run-on to the site through berms or other engineered channels, increased concentration of flows could cause head cutting, scour, and other erosional processes. Increases in erosion could result in sedimentation downstream. Finally, the new impervious surfaces created by development of the project would generate additional stormwater runoff on site. This could exacerbate potential erosion and sedimentation on site or downstream.

According to the hydrology report completed for the site, the project is likely to require retention basins to comply with the Kern County Development Standards (Watearth 2019a). The implementation of retention basins and other design features would be sized to offset increased storm flows in accordance with County standards without which adverse erosion and/or sedimentation effects could occur. Therefore, implementation of Mitigation Measure MM 4.10-1 would be required. Mitigation Measure MM 4.10-1 would require preparation of a final drainage plan designed to evaluate and minimize potential increases in runoff and ensure that the retention basins and other stormwater management features are implemented consistent with existing regulatory requirements and minimize erosion or sedimentation to less than significant levels.

Finding

The proposed project would have the potential to substantially alter the existing drainage patterns of the site and area, which could potentially exacerbate erosion and sedimentation on site or downstream. However, implementation of Mitigation Measures 4.10-1, described below, would reduce impacts to a less-than-significant level.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures 4.10-1, described below, would reduce impacts to a less-than-significant level.

Kern County

MM 4.10-1: Prior to the issuance of a grading permit, the project proponent shall complete a final drainage plan designed to evaluate and minimize potential increases in runoff from the project site. The study and plan shall include the following:

1. A numerical stormwater model for the project site that evaluates existing and proposed (with project) drainage conditions during storm events ranging up to the 100-year event.
2. An assessment of the potential for erosion and sedimentation in light of modeled changes in stormwater flow across the project area that would result from project implementation.
3. Engineering recommendations to be incorporated into the project 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 on-site or off-site.
4. A specification that the final design of the solar arrays shall include 1 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 1 foot or as required by Kern County's Floodplain Ordinance.

The 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.

State Lands Commission

MM 4.10-1: Prior to the issuance of a grading permit, the project proponent shall complete a final drainage plan designed to evaluate and minimize potential increases in runoff from the project site. The study and plan shall include the following:

1. A numerical stormwater model for the project site that evaluates existing and proposed (with project) drainage conditions during storm events ranging up to the 100-year event.
2. An assessment of the potential for erosion and sedimentation in light of modeled changes in stormwater flow across the project area that would result from project implementation.
3. Engineering recommendations to be incorporated into the project 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 on-site or off-site.
4. A specification that the final design of the solar arrays shall include 1 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 1 foot or as required by Kern County's Floodplain Ordinance.

The 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.

Significant Effect

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 which would substantially increase the rate or amount of surface runoff which would result in flooding on- or off site (Impact 4.10-4).

Description of Significant Impact

As discussed above in Impact 4.10-3, installation of the project facilities would alter existing on-site drainage patterns and flowpaths compared to existing conditions and include the introduction of new impervious surfaces. These changes could cause localized flooding during major events along the margins of the project area, or within the project area, depending upon how stormwater is managed under final project design. Changes in drainage patterns on site that relate to the installation of new facilities, especially changes that result in flow concentration, could increase the occurrence of localized flooding on site or downstream. Finally, proposed new impervious surfaces would generate additional stormwater runoff on site. This could exacerbate potential increases in localized flooding on site or downstream.

The entire project site is located within Zone A, an area that is subject to inundation from a 100-year flood event. However, the amount of new impervious surfaces would be less than one percent of the entire project area and not anticipated to substantively increase the rate or amount of surface runoff (Watearth 2019a). In addition, as described above, a final drainage plan would be completed for the project site, which would include calculations, in accordance with Kern County requirements, of estimated runoff volumes associated with the 10-year, 24-hour storm event. As described in Mitigation Measure MM 4.10-1, the final drainage plan will be required to ensure appropriate drainage of the project site. This final drainage plan will ensure that design of the solar arrays shall include 1 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 1 foot or as required by Kern County's Floodplain Ordinance. With implementation of Mitigation Measure MM 4.10-1, final design of proposed stormwater management facilities including the retention basins would be required. The final design would determine the appropriate sizing and location of the retention basins to ensure that flooding on- or off site is reduced to less than significant levels.

Finding

The proposed project has the potential to substantially increase the rate or amount of surface runoff which would result in flooding on- or off site. However, implementation of Mitigation Measure MM 4.10-1, described above, would reduce impacts to a less-than-significant level.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures Mitigation Measure MM 4.10-1, described above, would reduce impacts to a less-than-significant level.

Significant Effect

The project would create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff (Impact 4.10-5).

Description of Significant Impact

The project site is located in a remote, rural region with no existing or planned stormwater infrastructure. As described above, the project would be required to adhere to Kern County Public Works Department storm water requirements, which include measures to address stormwater controls on both management of runoff volume and water quality, including controlling erosion and protection of water quality of stormwater runoff. During operation, most of the project site would remain as pervious surfaces, allowing infiltration of the runoff produced by the new minor impervious surfaces. The project would not exceed the capacity of any existing or planned infrastructure and the implementation of Mitigation Measure MM 4.10-1 would minimize potential increases in stormwater flow and other project-induced changes to drainage patterns to less than significant levels.

Finding

The project would not exceed the capacity of any existing or planned infrastructure and impacts would be less than significant. However, implementation of Mitigation Measure MM 4.10-1, described above, would further reduce impacts to less-than-significant levels.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures Mitigation Measure MM 4.10-1, described above, would further reduce impacts to less-than-significant levels.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The proposed project would not have any environmental impacts on hydrology and water quality that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

Significant Effect

The proposed project would have a cumulative environmental impact related to hydrology and water quality.

Description of Significant Impact

The geographic scope considered for the cumulative analysis is the Antelope Valley HU for surface water and the Antelope Valley Groundwater Basin for groundwater. As described in Chapter 3, *Project Description,* of the EIR, multiple projects, including several utility-scale solar and wind energy production facilities, are proposed throughout the Western Antelope Valley in both Kern and Los Angeles Counties. The Antelope Valley HU is a closed basin with no outlets to the ocean. The Antelope Valley is a recognized groundwater basin, and use of the basin as the geographic scope allows for analysis of impacts to the local groundwater supply. The related projects listed in Table 3-5, *Cumulative Projects List*, all reside in a somewhat smaller geographic scope than the Antelope Valley HU, but this smaller area is likely experiencing development, particularly development of renewable energy, of a type and density that is representative of the hydrological unit as a whole. As shown in Table 3-5, in the project vicinity eight solar energy projects are proposed in Kern County.

With regard to water supply, the cumulative scenario projects, including solar energy projects, would require water for construction and operation. The Santa Clara Superior Court has established a safe threshold for water extraction from the Antelope Valley Groundwater Basin to be 110,000 acre-feet per year. As noted above for the proposed project, related projects in the Antelope Valley Groundwater Basin would also be required to adhere to the adjudication judgement. Water suppliers that are providing water supply to the related projects are parties subject to the requirements of the adjudication basin management overseen by the Watermaster. Therefore, the incremental water use of the project, along with the other similar cumulative projects that are being managed by the Watermaster, during construction and operations

would not result in a significant cumulative impact to the basin. Hence, cumulative impacts related to water supplies are less than significant.

As discussed above, the solar projects would be required to implement a SWPPP and associated BMPs to minimize the potential for the release of pollutants and sediment into surface water. Other cumulative scenario projects would be required to implement similar measures as a part of the CEQA and permitting review process. Therefore, cumulative scenario impacts associated with water quality degradation would not be cumulatively considerable, and the project would not contribute to a cumulative impact on water quality.

With respect to erosion, drainage, and flooding, the project would implement Mitigation Measure MM 4.10-1, which would minimize direct impacts on erosion, drainage, and flooding. Other cumulative scenario projects would be required to implement similar measures, in order to minimize erosion, drainage, and flooding related impacts. Additionally, drainage related impacts from cumulative scenario projects would be primarily localized. Therefore, cumulative scenario impacts on erosion, drainage, and flooding are not anticipated to be cumulatively considerable, and the project would not contribute to a cumulative impact on flooding, erosion, or drainage.

Finding

The proposed project has the potential to result in cumulatively considerable impacts related to hydrology and water quality. However, implementation of Mitigation Measure MM 4.10-1, described above, would reduce impacts to less-than-significant-levels.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measure MM 4.10-1, described above, would reduce impacts to less-than-significant-levels.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

The proposed project would not have a significant and unavoidable cumulative environmental impact related to hydrology and water quality.

LAND USE AND PLANNING

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

The project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect (Impact 4.11-1).

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

The proposed project would not have any environmental effects related to land use and planning that are potentially significant and no mitigation is required.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The proposed project would not have any environmental effects on land use and planning that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

Significant Effect

The proposed project would have a cumulative environmental impact on land use and planning.

Description of Significant Impact

The geographic scope of analysis for this chapter is Antelope Valley. This scope was selected to analyze the cumulative impact to regional land use patterns of project development in the area, and because there is some uniformity to existing land use patterns in this region. As described in more detail in Table 3-5, *Cumulative Projects List*, in Chapter 3, *Project Description*, of the EIR, 56 projects are proposed within the geographic scope, including 8 solar projects. While the surrounding area is still relatively rural in nature, the project, along with other proposed projects, has the potential to contribute to a cumulative influence on proposed land uses in and around the project site.

The anticipated impacts of the project in conjunction with cumulative development in the area of the project would increase the urbanization and result in the loss of open space. However, potential land use impacts require evaluation on a case-by-case basis because of the interactive effects of a specific development and its immediate environment. As described in Table 4.11-2, the proposed project would be consistent with the goals and policies of the Kern County General Plan. In addition, with approval of the CUPs, development of solar facilities for the proposed project would be an allowable use that would not conflict with the land use or zoning classification for the project site. Therefore, as proposed the project would be consistent with the goals and policies of the Kern County General Plan and the Kern County Zoning Ordinance and would therefore not contribute to a cumulatively considerable impact regarding land use.

Furthermore, all related projects would be required to separate undergo environmental review on a case-by-case basis in accordance with the requirements of CEQA. Each related project would also be required to demonstrate consistency with all applicable planning documents governing the project site, including the Kern County General Plan the Kern County Zoning Ordinance, and any applicable Specific Plans. Should potential impacts be identified, appropriate mitigation would be prescribed that would likely reduce potential impacts to less-than-significant levels.

With regard to cumulative effects of utility-sized solar power generation facilities, there is a potential that outside factors, such as the development of newer technology, change in State or national policy that encourages the construction of such facilities, or other economic factors, could result in the abandonment of such facilities. Unlike other facilities that, once constructed, can be retrofitted and utilized for another specific use, solar power generation facilities have little opportunity for other uses should the project not be in operation. The potential for the cumulative effects caused by the abandonment of multiple solar facilities in Kern County could result in impacts on surrounding land uses should it be determined that these

facilities are no longer viable commercial operations. Therefore, Mitigation Measure MM 4.11-1, which would require the implementation of a decommissioning plan to be carried out by the project proponent once the life of the project has ended, has been included to establish safeguards to ensure the maintenance of the health, safety, and welfare of the citizens of the County. While it is the intent of Kern County to promote the use of an alternative to fossil-fuel-generated electrical power in areas of the County that are identified to have suitable characteristics for production of commercial quantities of solar PV-generated electrical power, it is necessary to protect surrounding landowners from potential impacts associated with the abandonment of such facilities. Mitigation Measure MM 4.11-2 is also being included to ensure that the proposed solar facility does not interfere with the telemetry operations associated with the nearby military installations. With the implementation of Mitigation Measure MM 4.11-1 and MM 4.11-2, cumulative land use impacts would be considered less than significant.

Finding

The project has the potential to result in cumulatively considerable impacts related to land use consistency, specifically in regards to abandonment. Implementation of Mitigation Measures MM 4.11-1 and 4.11-2, described below, would reduce impacts to a less-than-significant level.

Level of Significance

Cumulative impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures MM 4.11-1 and 4.11-2, described below, would reduce impacts to a less-than-significant level.

Kern County

MM 4.11-1: Prior to issuance of any building permit, the project operator shall provide a Decommissioning 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 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 twelve 12 months that portion of the site shall be deemed abandoned and shall be removed within sixty (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 sixty (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 twelve (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 forty-eight (48) months from the date, the solar facility was first deemed abandoned. (RTC 5/1/20)

MM 4.11-2: Prior to the operation of the solar facility, the operator shall consult with contact 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. (RTC 5/1/20)

State Lands Commission

MM 4.11-1: Prior to issuance of any building permit, the project operator shall provide a Decommissioning 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 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 twelve 12 months that portion of the site shall be deemed abandoned and shall be removed within sixty (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 sixty (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 twelve (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 forty-eight (48) months from the date, the solar facility was first deemed abandoned. (RTC 5/1/20)

MM 4.11-2: Prior to the operation of the solar facility, the operator shall consult with contact 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. (RTC 5/1/20)

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

The proposed project would not have a significant and unavoidable cumulative environmental impact on land use and planning.

NOISE

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

The project would not generate excessive groundborne vibration or groundborne noise levels (Impact 4.12-2).

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

Significant Effect

The project would result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (Impact 4.12-1).

Description of Significant Impact

Estimated operational noise levels at studied sensitive receptors have been determined based on their respective nearest distance to each of the project's applicable noise sources. Table 4.12-7, *Distance from Project Stationary Equipment to Noise Level Standards,* shows the project noise source and the distance at which the project would comply with applicable daytime and nighttime thresholds (45 dBA L_{eq}/L_{50} nighttime and 55 dBA L_{eq}/L_{50} daytime within the WSSP and 65 dBA L_{dn} within the County).

As all of the identified operational noise sources, with the exception of the periodic on-site maintenance activities, would be operating on a daily basis, the composite noise level generated from the concurrent operation of these noise sources (e.g., tracker system, BESS, substation) at the nearby sensitive receptors were estimated. On-site maintenance activities, such as panel washing, would be transient (up to twice per year) and, thus, would not occur for an extended duration at any one location and would only occur during daytime hours. As such, they have not been included in the composite noise analysis. As shown in Table 4.12-7 of the EIR, the noise contour distance to the applicable WSSP daytime noise standard (55 dBA L_{50}) for onsite maintenance activities is 224 feet. Of the nearby analyzed sensitive receptors surrounding the project site that are within the WSSP area, only one sensitive receptor is located within this distance. This sensitive receptor, which is estimated to be located as close as approximately 250 feet from the nearest proposed solar panels, is expected to experience noise levels of approximately 54 dBA L_{eq}/L_{50} when operation of a power washer for panel washing is occurring at this distance, which would not exceed the daytime noise standard of 55 dBA L_{50} of the WSSP.

As discussed previously, the project's BESS could be incorporated through one of three different methods, with each method resulting in the placement of BESS containers in different areas within the project site. Under BESS incorporation method 1, the combined operational stationary equipment noise levels from the project would expose studied receptors within the WSSP Area to noise levels ranging from 26 to 34 dBA L_{eq} during nighttime hours and 31 to 43 dBA L_{eq} during daytime hours. As shown in Table 4.12-8, *Estimated Stationary Equipment Noise Levels at Analyzed Sensitive Receptors,* these levels would not exceed WSSP nighttime or daytime standards of 55 dBA L_{eq}/L_{50} and 45 dBA L_{eq}/L_{50}, respectively. However, one studied receptor located outside of the WSSP Area would be exposed to 24-hour average noise levels of up to 67 dBA L_{dn}, which exceeds the County's exterior noise standard of 65 dBA L_{dn} for noise sensitive land uses. The exceedance of the County noise level standard is due to the location of the consolidated BESS containers in direct proximity to this affected receptor. Therefore, under BESS incorporation method 1, the project's on-site stationary noise source levels would result in a potentially significant impact.

Under the BESS incorporation method 2, the combined operational stationary equipment noise levels from the project would expose studied receptors within the WSSP Area to noise levels ranging from 18 to 54 dBA L_{eq} during nighttime hours and 19 to 54 dBA L_{eq} during daytime hours, as shown in Table 4.12-8. These levels would not exceed the WSSP daytime standard. However, the WSSP nighttime standard of 45 dBA L_{eq}/L_{50} would be exceeded. The exceedance of the nighttime noise level standards at studied receptors is due to the location of proposed individual BESS containers throughout the project's solar array. Studied receptors located outside of the WSSP Area would be exposed to average daily noise levels of 27 to 38 dBA L_{dn}, which would not exceed the County's exterior noise standard of 65 dBA L_{dn}. However, because the WSSP nighttime standard would be exceeded, the project's on-site stationary noise source levels that accounts for BESS incorporation method 2 would result in a potentially significant impact.

Under BESS incorporation method 3, the combined operational stationary equipment noise levels from the project would expose studied receptors within the WSSP Area to noise levels ranging from 30 to 59 dBA L_{eq} during both nighttime and daytime hours. As shown in Table 4.12-8 of the EIR, these levels would exceed WSSP nighttime and daytime standards. The exceedance of the WSSP's noise standards is due to the location of the BESS containers near the studied receptors. Studied receptors located outside of the WSSP Area would be exposed to 24-hour average daily noise levels of 36 to 47 dBA L_{dn}, which would not exceed the County's standard of 65 dBA L_{dn}. However, because the WSSP nighttime and daytime noise standards would be exceeded, the project's on-site stationary noise source levels that accounts for BESS incorporation method 3 would result in a potentially significant impact.

To reduce the potential operational noise impacts associated with associated with BESS incorporation methods 1, 2, and 3 at affected receptors, Mitigation Measure MM 4.12-4 would be implemented, requiring the final BESS incorporation method that is selected to be designed, such that noise levels generated would comply with the applicable noise standards at all offsite sensitive receptor locations nearest to the project site.

Finding

Operational impacts associated with the proposed project have the potential to generate a substantial permanent increase in ambient noise levels in the vicinity of the project in excess of applicable standards. Implementation Mitigation Measures 4.12-4, described below, would reduce these impacts to a less-than-significant level.

Construction and decommissioning impacts on ambient noise levels would result in significant and unavoidable impacts and are discussed separately, in *Section C. Environmental Effects of the Project that Cannot Be Mitigated to A Less Than Significant Level*, below.

Level of Significance

Impacts during operation would be less than significant with mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation Mitigation Measures 4.12-4, described below, would reduce these impacts to a less-than-significant level.

Kern County

MM 4.12-4: The project shall be designed to ensure that operational noise levels at nearby sensitive receptors, depending on their location within or outside of the WSSP area, would not exceed the applicable WSSP or County noise standards. Techniques that can be incorporated into the BESS design to achieve compliance with the applicable noise standards may include, but are not limited to, the following:

- Place HVAC units on the far side of the BESS containers relative to the nearest off-site sensitive receptors to allow the containers to act as a barrier to provide noise attenuation.
- Erect permanent noise barriers of sufficient height to attenuate noise levels from the BESS containers.
- Provide a sufficient buffer distance between the BESS containers and the nearest off-site receptor.
- The adequacy of the selected noise control technique(s) shall be demonstrated in an acoustical study submitted to and approved by the County prior to the issuance of building permits.

State Lands Commission

MM 4.12-4: The project shall be designed to ensure that operational noise levels at nearby sensitive receptors, depending on their location within or outside of the WSSP area, would not exceed the applicable WSSP or County noise standards. Techniques that can be incorporated into the BESS design to achieve compliance with the applicable noise standards may include, but are not limited to, the following:

- Place HVAC units on the far side of the BESS containers relative to the nearest off-site sensitive receptors to allow the containers to act as a barrier to provide noise attenuation.
- Erect permanent noise barriers of sufficient height to attenuate noise levels from the BESS containers.
- Provide a sufficient buffer distance between the BESS containers and the nearest off-site receptor.

- The adequacy of the selected noise control technique(s) shall be demonstrated in an acoustical study submitted to and approved by the County prior to the issuance of building permits.

Significant Effect

The project would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project (Impact 4.12-3).

Description of Significant Impact

As discussed under Impact 4.12-1, project operational noise levels associated with BESS incorporation methods 1, 2, and 3 would result in a potentially significant impact. Average daytime ambient noise levels at studied receptors range from 29.7 dBA L_{eq} to 34.2 dBA L_{eq}, while noise levels associated with BESS incorporation would reach 59 dBA L_{eq}, potentially resulting in increases in ambient noise levels above the applicable daytime and nighttime thresholds (45 dBA L_{eq}/L_{50} nighttime and 55 dBA L_{eq}/L_{50} daytime within the WSSP and 65 dBA L_{dn} within the County). The proposed gen-tie line would result in electrical discharge (corona discharge) noise that would not be perceptible above background noise levels at the nearest sensitive receptor. Operational traffic noise levels from operation of the project would be minimal and therefore, the noise level increase would be substantially below the perceptible level of a 3 dBA increase. Therefore, there would be a potentially significant impact associated with BESS incorporation methods 1,2, and 3.

With implementation of Mitigation Measure MM 4.12-4, the final BESS incorporation method that is selected would be designed such that noise levels generated would comply with the applicable daytime and nighttime noise standards at all offsite sensitive receptor locations nearest to the project site. Therefore, in with implementation of Mitigation Measure MM 4.12-4, impacts would be reduced to less-than-significant levels.

Finding

Project operational noise levels are considered potentially significant. However, implementation of Mitigation Measure 4.12-4, described above, would reduce impacts to a less-than-significant level.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measure MM 4.12-4, described above, would reduce impacts to a less-than-significant level.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

Significant Effect

The project would result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies (Impact 4.12-1).

Description of Significant Impact

Multiple pieces of equipment would operate at substantial distances from one another as construction activities occur throughout the project site. As shown in Table 4.12-4, *Maximum Noise Levels of Project Construction Equipment*, maximum noise levels generated by project construction equipment would range from approximately 74 to 88 dBA L_{max} at a reference distance of 50 feet. As shown in Table 4.12-5, *Noise Levels of Project Construction Phases*, average noise levels generated by project construction phases would range from approximately 79 to 95 dBA L_{eq} at a reference distance of 50 feet.

Sensitive land uses in the project site vicinity that would be exposed to project construction noise levels include the sparsely distributed residential dwellings that are in the vicinity of the project site. Potential construction-related noise impacts resulting from the proposed project were assessed at nine representative sensitive receptors nearest to and surrounding the project site (three of which are immediately adjacent to the project site boundary), including two locations that are located in proximity to both the project site and the proposed gen-tie routes located off site. These nine receptors would be representative of the worst-case impacted receptors and impacts at sensitive uses located at greater distances to the project site would be lower.

The construction noise levels estimated at each analyzed receptor use a source-to-receptor distance that represents the acoustical average distance between the construction area and each receptor in order to reflect the distribution of equipment across the construction area. The shortest distance that is used in determining the acoustical average distance is from the analyzed sensitive receptor to the nearest project site boundary. However, in most cases this represents a conservative assumption, as it is anticipated that buffer distances of approximately 100 feet would be implemented along most of the project's external boundaries during construction. The highest estimated construction-related noise levels that could result at nearby sensitive receptors over the course of the project's construction period would range from 59 dBA L_{eq} to 79 dBA L_{eq}. During quieter phases of construction or when construction activity moves farther away from the receptor, the noise levels would decrease. As such, the highest construction noise levels experienced at each analyzed receptor would only occur over a temporary period within the project's overall construction schedule.

Chapter 8.36 of the Kern County Municipal Code includes established hours of construction and limitations on construction related noise impacts on adjacent sensitive receptors. Noise producing construction activities are prohibited between the hours of 9:00 p.m. and 6:00 a.m. on weekdays and 9:00 p.m. and 8:00 a.m. on weekends, when they are audible to a person with average hearing ability at a distance of 150 feet from the construction site, or if the construction site is within 1,000 feet of an occupied residential dwelling. Given the fact that construction activities could generate noise greater than the standard 65dB(a) for the Kern County General Plan and 55 dB(A) for short period of times, temporary construction impacts are considered significant and unavoidable. Implementation of Mitigation Measures MM 4.12-1 through MM 4.12-3 are designed to reduce impacts to the extent feasible during construction activities.

Activities associated with a potential decommissioning of the project would result in similar or lower noise levels than those that would be experienced under the loudest phases of construction. As temporary increases in ambient noise levels at nearby sensitive receptors would likely occur similar to the project's construction activities, decommissioning activities could generate noise greater than the standard 65dB(A) for the Kern County General Plan and 55 dB(A) for short period of times. Thus, similar to construction, impacts during decommissioning of the project are considered significant and unavoidable. Mitigation Measures MM 4.12-1 through MM 4.12-3 would similarly be implemented during decommissioning activities.

Finding

Construction and decommissioning of the proposed project would generate a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of applicable standards. Even with Implementation Mitigation Measures MM 4.12-1 through MM 4.12-3, described below, impacts on temporary ambient noise levels would be significant and unavoidable.

Operational impacts on ambient noise levels would be mitigated to less-than-significant levels, and are discussed separately, in *Section B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels,* above.

Level of Significance

Impacts would be significant and unavoidable.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Even with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-3, described below, impacts on temporary ambient noise levels during construction and decommissioning would be significant and unavoidable.

Kern County

MM 4.12-1: The following measures are to be implemented to further reduce short-term noise levels associated with project construction and decommissioning:

a) 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 9:00 p.m. to 6:00 a.m. on weekdays, and between 9:00 p.m. to 8:00 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.

b) Equipment staging and laydown areas shall be located at the furthest practical distance from nearby residential land uses. To the extent possible, staging and laydown areas should be located at least 500 feet of existing residential dwellings.

c) 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.

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 4.12-2: Prior to the issuance of grading permits, a "noise disturbance coordinator" shall be established. The project operator shall submit evidence of methods of implementation and shall continuously comply with the following during construction: The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting to early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved.

MM 4.12-3: Prior to the issuance of grading permits, the project operator shall submit evidence of the following: Construction contracts shall specify that notices shall be sent out to all residences within 1,000 feet of the construction areas at least 15 days prior to commencement of construction. The notices shall include the construction's schedule and a telephone number where complaints can be registered with the noise disturbance coordinator. A sign legible at a distance of 50 feet shall also be posted at the construction site throughout construction, which includes the same details as the notices.

State Lands Commission

MM 4.12-1: The following measures are to be implemented to further reduce short-term noise levels associated with project construction and decommissioning:

a) 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 9:00 p.m. to 6:00 a.m. on weekdays, and between 9:00 p.m. to 8:00 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.

b) Equipment staging and laydown areas shall be located at the furthest practical distance from nearby residential land uses. To the extent possible, staging and laydown areas should be located at least 500 feet of existing residential dwellings.

c) 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.

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 4.12-2: Prior to the issuance of grading permits, a "noise disturbance coordinator" shall be established. The project operator shall submit evidence of methods of implementation and shall continuously comply with the following during construction: The disturbance coordinator shall be responsible for responding to any local complaints about construction noise. The disturbance coordinator shall determine the cause of the noise complaint (e.g., starting to early, bad muffler, etc.) and shall be required to implement reasonable measures such that the complaint is resolved.

MM 4.12-3: Prior to the issuance of grading permits, the project operator shall submit evidence of the following: Construction contracts shall specify that notices shall be sent out to all residences within 1,000 feet of the construction areas at least 15 days prior to commencement of construction. The notices shall include the construction's schedule and a telephone number where complaints can be registered with the noise disturbance coordinator. A sign legible at a distance of 50 feet shall also be posted at the construction site throughout construction, which includes the same details as the notices.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

Significant Effect

Operation of the proposed project would not have a cumulative environmental impact on noise.

Description of Significant Impact

The closest cumulative projects in the vicinity of the noise- and vibration-sensitive receivers considered in this analysis are also solar projects that would likely include either the same or similar operational stationary noise sources (e.g., solar panel axis trackers, substation transformers, PCS). However, none of these cumulative solar projects would have a BESS component, which is the predominant stationary noise source associated with the proposed project's operations. Aside from the BESS, the noise levels generated by other stationary noise sources that are generally associated with solar projects that operate throughout both daytime and nighttime hours (e.g., transformers, PCS, corona discharge) are all relatively low and would typically attenuate to levels below the applicable County noise standards at the solar project property line. Additionally, the proposed project and the other cumulative solar projects would generate negligible traffic in the project area. As such, the proposed project would not result in a cumulatively considerable contribution to operational noise impacts in the vicinity of the project.

Noise and vibration impacts are highly localized. Therefore, the project would not have any measurable noise effect cumulatively with other solar development activity in Kern County. Overall, when considered with other past, present, and reasonably foreseeable future projects, the project would not result in a cumulatively considerable contribution to operational noise impacts.

Finding

Operation of the proposed project has the potential to result in cumulatively considerable impacts related to noise. With implementation of Mitigation Measure MM 4.12-4, described above cumulative impacts related to groundborne vibration and operational noise would be less than significant.

Level of Significance

Cumulative impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measure MM 4.12-4, described above, would reduce cumulative impacts related to groundborne vibration and operational noise to less-than-significant levels.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

Significant Effect

Construction and decommissioning of the proposed project would have a cumulative environmental impact on noise.

Description of Significant Impact

As described in Chapter 3, *Project Description*, there are a total of 56 projects in the vicinity to the project site, 13 of which are located within the 1-mile cumulative radius of the project site, as shown on Figure 3-10, *Cumulative Projects Map – Eastern Kern County*. As listed in Table 3-5, *Cumulative Projects List*, the cumulative projects located within a 6-mile radius of the project site include other solar projects, such as, RE Rosamond One and Two, Rosamond Solar Array, Apollo Solar, Camino Solar, AVEP Solar, Catalina Solar, Valentine Solar, and IP Solar. Due to the localized nature of noise impacts, cumulative impacts would be largely limited to areas within the general vicinity (i.e., within approximately 1,000 feet) of the project site. Construction activities associated with other projects in proximity to the project site could occur at the same time as the proposed project, but would have limited cumulative contributions because of their distance from the project site.

As discussed previously, construction noise is currently regulated in Chapter 8.36 (Noise Control) of the Kern County Code of Ordinances through the establishment of acceptable hours of construction and limitations on construction-related noise impacts on adjacent sensitive uses. Specifically, noise created from construction activities that are audible to a person with average hearing ability at a distance of 150 feet from the construction site, or if the construction site is within 1,000 feet of an occupied residential dwelling, are prohibited from 9:00 p.m. to 6:00 a.m. on weekdays, and 9:00 p.m. to 8:00 a.m. on weekends. The cumulative projects nearest to the project site are all either adjacent or close to the proposed project. Therefore, should construction of the proposed project and any of the cumulative projects occur currently, cumulative construction noise impacts would occur. As construction of the proposed project would result in significant and unavoidable impacts, the construction of the proposed project concurrently with the construction of adjacent and nearby cumulative projects, if it were to occur, would result in a cumulatively considerable contribution to construction noise impacts in the vicinity of the project. Therefore, the cumulative impact would be significant and unavoidable.

Because vibration impacts are assessed based on instantaneous peak levels (PPV), worst-case groundborne vibration levels from construction are generally determined by whichever individual piece of equipment generates the highest vibration levels. As a result, the vibration from multiple construction sites, even if the sites are near each other, does not generally combine to raise the maximum PPV, and the cumulative effect is no more severe than the effect from the largest individual contribution. This fact, coupled with the very low PPV predicted for the proposed project (ranging from below barely perceptible to barely perceptible at the closest receivers), means that the project would not contribute to any cumulatively considerable groundborne vibration impacts and the cumulative impact would be less than significant.

As decommissioning activities would result in similar noise and vibration levels identified for the construction of the proposed project, cumulative impacts during decommissioning activities would be significant and unavoidable for cumulative noise impacts and less than significant for vibration impact.

Finding

Construction and decommissioning of the proposed project would result in cumulatively considerable impacts related to noise. Even with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-3, described above, cumulative impacts related to noise would be significant and unavoidable.

Level of Significance

Cumulative impacts would be significant and unavoidable with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Even with implementation of Mitigation Measures MM 4.12-1 through MM 4.12-3, described above, cumulative impacts related to noise would be significant and unavoidable.

POPULATION AND HOUSING

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

The project would not induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure) (Impact 4.13-1).

The project would displace substantial numbers of existing people or housing, necessitating that construction of replacement housing elsewhere (Impact 4.13-2).

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

The proposed project would not have any environmental effects related to population and housing that are potentially significant and no mitigation is required.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The proposed project would not have any environmental effects related to population and housing that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

Significant Effect

The proposed project would have the potential to result in a cumulative environmental impact on population and housing.

Description of Significant Impact

Cumulative impacts are two or more individual impacts that, when considered together, are considerable or that compound or substantially increase other environmental impacts. Cumulative impacts for a project are considered significant if the incremental effects of the individual projects are considerable when viewed in connection with the effects of past projects, and the effects of other projects located in the vicinity of the project site.

As discussed above, as no new residences would be constructed, the proposed project would not increase population. It is anticipated that a substantial amount of the required labor force in the surrounding areas would be used for project construction. The proposed project would not directly increase population or the housing stock. Because the proposed project would not directly increase population and there is a high unemployment rate, the proposed project is not anticipated to result in a direct or indirect impact on population and housing, nor is the proposed project anticipated to be growth inducing. Therefore, the proposed project, in conjunction with the current and reasonably foreseeable projects discussed in Chapter 3, *Project Description*, would not lead to population growth. The employment opportunities provided by the proposed project and other reasonably foreseeable projects would help to provide a balance with the current and projected labor force associated with future conditions. Therefore, cumulative impacts would be less than significant.

Finding

The project would result in less-than-significant cumulatively considerable impacts related to population and housing. Since these impacts would be less than significant and no mitigation measures are required.

Level of Significance

Cumulative impacts would be less than significant.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. However, impacts would be less than significant and no mitigation measures are required.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

The proposed project would not have a significant and unavoidable cumulative environmental impact on population and housing.

PUBLIC SERVICES

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

None of the proposed project's environmental effects on public services have been found to result in no impacts or only less-than-significant impacts.

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

Significant Effect

The project would result in the 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 law enforcement protection services (Impact 4.14-1).

Description of Significant Impact

Fire Protection

The average and peak number of construction workers to be onsite would be approximately 220 and 495, respectively. The presence of construction workers at the project site would be temporary during the construction period spanning a 10 to 14-month period. The project would include development of a combined 128 megawatts (MW) (alternating current or "AC") of renewable electrical energy and up to 60 MW of a Battery Storage System (BESS) on approximately 2,285 acres (2,125 acres of privately-owned and publicly owned land and160 acres owned by the California State Lands Commission) in unincorporated portions of Kern County, California. As determined by the County, and as shown in Figure 4.18-1, *Fire Hazard Severity Zones for Local Responsibility Areas*, and Figure 4.18-2, *Fire Hazard Severity Zones for State Responsibility Areas*, in Section 4.18, *Wildfires*, of the EIR, the project site is not within an area of high or very high fire hazard (CAL FIRE, 2007a/2007b).

Fire protection requirements are based on the number of residents and workers in the KCFD primary service areas. Service demand is primarily tied to population, not building size, because emergency medical calls typically make up the majority of responses provided by the fire department. As the number of residents and workers increases, so does the number of emergency medical calls. There are no residential uses proposed as a part of the project. Therefore, no residents would occupy the project site and an increase in service demands as a result of an increase in residential uses would not occur.

Service demands as a result of personnel onsite could occur during construction of the proposed project. Typically, service demands per employee are less than service demands per resident. Nevertheless, the addition of construction personnel on the project site would result in an increase in demand for fire protection services. While this would be an increase above existing levels, the presence of construction workers on the site would be temporary, as the construction period for the proposed project would last approximately 10 to 14 months.

While construction of the proposed project would increase the number of people on the project site, the increase would be temporary and would therefore not substantially increase the service demand for fire protection services in Kern County. In addition, the project site is not located within an area of high or very high fire hazard, as determined by the County (KCFD, 2009) or CAL FIRE (CAL FIRE, 2007a/2007b) and

would be required to implement a fire safety plan, as stated in Mitigation Measures MM 4.14-1, below. As required by Mitigation Measure MM 4.14-1, the project proponent would prepare and implement a fire safety plan that contains notification procedures and emergency fire precautions consistent with the 2016 California Fire Code and Kern County Fire Code. The plan would be for use during the 10 to 14-month construction period as well as operations and would include emergency fire precautions for vehicles and equipment as well as implement fire rules and trainings so temporary employees are equipped to handle fire threats. Given the temporary nature of the project's construction phase and implementation of MM 4.14-1, impacts to fire protection services and facilities during project construction would be less than significant.

Once constructed, the proposed project would provide for up to 8 to 12 part-time and/or full time staff at the O&M facility for maintenance and panel washing. Although unlikely, maintenance activities could introduce fire risks to the project site from maintenance vehicles. However, all maintenance activities would be required to comply with the fire safety plan implemented per Mitigation Measure MM 4.14-1, which would help reduce fire risks onsite. In addition, all project facilities would have been designed and constructed in accordance with the 2016 California Fire Code and Kern County Fire Code such that fire hazards are reduced and/or avoided.

The proposed project would also be required to implement Mitigation Measure MM 4.14-2, which would require the project operator to pay Kern County mitigation fees to compensate for any permanent impacts to fire protection services and facilities resulting from the operation of the proposed project. Given the minimal personnel at the O&M facility and implementation of Mitigation Measures MM 4.14-1 and MM 4.14-2, any potential operational impacts on fire protection services would be reduced. Therefore, the proposed project would not result in the need for new or physically altered KCFD facilities and impacts would be less than significant.

Law Enforcement Protection

Project operation could attract vandals or present other security risks. As described above, the project site is located in a relatively remote location in a rural community, and is thus unlikely to attract attention that would make project facilities susceptible to crime. Once operational, 8 to 12 employees are expected to be on-site to manage the facility. Security fencing around the perimeter of each site and other areas requiring controlled access, motion-sensitive security cameras, and controlled access gates, would minimize the need for sheriff surveillance and response during project operation. Furthermore, all facility personnel, contractors, agency personnel, and visitors would be logged in and out of the facility at the main office located at the proposed O&M building during normal business hours. Therefore, new or physically altered KCSO facilities would not be required to accommodate the proposed project. The additional volume of vehicles associated with workers commuting to the project site during routine maintenance would be minor and is not expected to adversely affect traffic (see Section 4.15, *Traffic and Transportation*, for more details). Therefore, impacts to the CHP patrol are not anticipated. In addition, as part of Mitigation Measure MM 4.14-2, the project operator would be required to pay mitigation impact fees to offset potential impacts on sheriff protection services. Impacts would be less than significant.

Schools/Parks/Other Facilities

During construction, construction workers would be temporarily present on the project site. There would be a peak workforce of 495 workers; however, the average daily workforce is expected to be 220 construction, supervisory, support, and construction management personnel onsite during the 10 to 14-month construction period. These construction workers would likely come from an existing local and/or

regional construction labor force and would not likely relocate their households as a consequence of working on the project. Therefore, the short-term increased employment of construction workers on the project site would not result in a notable increase in the residential population of the area surrounding the project site. Accordingly, there would not be a corresponding demand or use of the local schools, parks, or public facilities. Therefore, project construction workers would not increase demand for local schools, parks, or public facilities such that substantial physical deterioration of such facilities would occur, nor would project construction require the construction or expansion of recreational facilities which might have an adverse effect on the environment, nor result in substantial adverse physical impacts associated with the construction of new or physically altered facilities in order to maintain acceptable service ratios.

During operation, the proposed project could require up to 8 to 12 part-time and/or full time staff at the O&M facility. This staff would likely come from an existing local and/or regional labor force and would not likely relocate their households as a consequence of working on the project. Therefore, the increase of onsite staff at the project site would not result in a notable increase in the residential population of the area surrounding the project site. Accordingly, there would not be a corresponding demand or use of the local schools, parks, or public facilities, and there would be no impact.

Finding

Construction and operation of the project would have potentially significant impacts on fire protection services and facilities, and operation of the project would have potentially significant impacts on law enforcement protection services and facilities. However, impacts would be reduced to less-than-significant levels with the implementation of Mitigation Measures MM 4.14-1 and MM 4.14-2, described below. There would be no impact on schools or other public facilities.

Level of Significance

Impacts during construction and operation would be less than significant with mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Mitigation Measures Mitigation Measures MM 4.14-1 and MM 4.14-2, described below, reduce impacts to a less-than-significant level.

Kern County

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:

1. All internal combustion engines, both stationary and mobile, shall be equipped with spark arresters. Spark arresters shall be in good working order.

2. 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.
3. Fire rules shall be posted on the project bulletin board at the contractor's field office and areas visible to employees.
4. Equipment parking areas and small stationary engine sites shall be cleared of all extraneous flammable materials.
5. 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.
6. 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.

MM 4.14-2: The project proponent/operator shall implement the following mitigation steps at the project site:

1. 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 operations that continues past 20 years will 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. 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.
2. 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.
3. 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. 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.

4. Prior to the issuance of any building permits on the property, the project operator shall submit a letter detailing the hiring efforts prior to commencement of construction, which encourages all contractors of the project site to hire at least 50 percent of their workers from local Kern County communities. The project operator shall provide the contractors a list of training programs that provide skilled workers and shall require the contractor to advertise locally for available jobs, notifying the training programs of job availability, all in conjunction with normal hiring practices of the contractor.

State Lands Commission

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:

1. All internal combustion engines, both stationary and mobile, shall be equipped with spark arresters. Spark arresters shall be in good working order.
2. 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.
3. Fire rules shall be posted on the project bulletin board at the contractor's field office and areas visible to employees.
4. Equipment parking areas and small stationary engine sites shall be cleared of all extraneous flammable materials.
5. 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.
6. 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.

MM 4.14-2: The project proponent/operator shall implement the following mitigation steps at the project site:

1. 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 operations that continues past 20 years will 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. 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.

2. 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.

3. 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. 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.

4. Prior to the issuance of any building permits on the property, the project operator shall submit a letter detailing the hiring efforts prior to commencement of construction, which encourages all contractors of the project site to hire at least 50 percent of their workers from local Kern County communities. The project operator shall provide the contractors a list of training programs that provide skilled workers and shall require the contractor to advertise locally for available jobs, notifying the training programs of job availability, all in conjunction with normal hiring practices of the contractor. Level of Significance after Mitigation

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The proposed project would not have any environmental effects on public services that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

Significant Effect

The proposed project would not have a cumulative environmental impact on public services.

Description of Significant Impact

The cumulative study area is based on the service area for each of the fire, sheriff and other governmental offices/facilities serving the project site. As discussed above, fire and sheriff service impacts related to the proposed project would be less than significant with mitigation. Mitigation Measure MM 4.14-1 requires implementation of a fire safety plan during project construction and operation that would include notification procedures and emergency fire precautions to help reduce fire risks and the consequential need for fire protection services onsite. Mitigation Measure MM 4.14-2 requires the project proponent to pay applicable fees and taxes to reduce significant impacts to fire or law enforcement protection services resulting from the project. With payment of the required mitigation fee as assessed by the Kern County Planning and Natural Resources Department, any slight contribution the project would have on the need for additional fire or law enforcement protection services, facilities or personnel required would be appropriately funded. Similar to the proposed project, all other past, present, and reasonably foreseeable future projects located within these fire and sheriff service areas were or would be required to pay this mitigation fee, if deemed appropriate by the Kern County Planning and Natural Resources Department.

In addition, as discussed above, given that the proposed project would not increase demand for local schools, parks, or public facilities, there would be no impact. Thus, the project would not cumulatively combine with related projects to have an impact on these facilities. Furthermore, cumulative projects would also be required to undergo environmental review, in compliance with the requirements of CEQA. Should potential impacts to public services be identified, appropriate mitigation would be prescribed that would reduce impacts to less-than-significant levels.

Because the project would not create a significant impact on public services, and the other related projects would also be expected to avoid or mitigate impacts on public services, this project would comply with the goals, policies, and implementation measures of both the Kern County General Plan and the Willow Springs Specific Plan; thus, cumulatively significant impacts are anticipated to be less than significant. Therefore, the project would not create a cumulatively considerable impact related to public services and would have a less than significant cumulative impact.

Finding

The proposed project would have the potential to create cumulatively considerable impacts, particularly in regards to fire services and policies protection services. However, implementation of Mitigation Measures MM 4.14-1 and MM 4.14-2, described above, would reduce impacts to a less-than-significant level.

Level of Significance

Impacts would be less than significant with mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measures MM 4.14-1 and MM 4.14-2, described above, would reduce impacts to a less-than-significant level.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

The proposed project would not have a significant and unavoidable cumulative environmental impact on public services.

TRANSPORTATION AND TRAFFIC

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

The project would not 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" (Impact 4.15-1).

The project would not 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 (Impact 4.15-2).

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

Significant Effect

The project would substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (Impact 4.15-3).

Description of Significant Impact

During construction, the proposed project would require the delivery of heavy construction equipment and PV solar components using area roadways, some of which may require transport by oversize vehicles. Heavy equipment associated with these components would not be hauled to/from the site daily, but rather would be hauled in and out on an as-needed basis. Nevertheless, the use of oversize vehicles during construction can create a hazard to the public by limiting motorist views on roadways and by the obstruction of space, which is considered a potentially significant impact.

The proposed project would not include a design feature or utilize vehicles with incompatible uses that would create a hazard on the roadways surrounding the project site. The need for and number of escorts, California Highway Patrol escorts, as well as the timing of transport, would be at the discretion of Caltrans and Kern County, and would be detailed in respective oversize load permits. Thus, potential impacts would be reduced to a less-than-significant level. While impacts would be less than significant, Mitigation Measure MM 4.15-1 would require that all oversize vehicles used on public roadways during construction obtain required permits and obtain approval of a Construction Traffic Control Plan, as well as identify anticipated construction delivery times and vehicle travel routes in advance to minimize construction traffic during AM and PM peak hours. This would ensure that construction-related oversize vehicle loads are in compliance with applicable California Vehicle Code sections and California Street and Highway Codes applicable to licensing, size, weight, load, and roadway encroachment of construction vehicles.

Finding

The use of oversize vehicles during construction can create a hazard to the public by limiting motorist views on roadways and by the obstruction of space, which is considered a potentially significant impact. Impacts are considered less than significant, however, implementation of Mitigation Measure 4.15-1, described below, would further reduce impacts to less-than-significant levels.

Level of Significance

Impacts would be less than significant with mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Although mitigation is not required, implementation of Mitigation Measure 4.15-1, described below, would further reduce impacts to less-than-significant levels.

Kern County

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 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.

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 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 DVD format. The County, in consultation with the project proponent/operator's engineer, shall determine the extent of remediation required, if any.

State Lands Commission

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 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.

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 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 DVD format. The County, in consultation with the project proponent/operator's engineer, shall determine the extent of remediation required, if any.

Significant Effect

The project would result in inadequate emergency access (Impact 4.15-4).

Description of Significant Impact

The project site is located in a rural area with the primary access roads (130th Street W, 140th Street W, Hamilton Road) allowing adequate egress/ingress to the site in the event of an emergency. Additionally, as part of the project, additional onsite access roadways (internal to the site) would be constructed. Therefore, the development of the proposed project would not physically interfere with emergency vehicle access or personnel evacuation from the site.

As described above, increased project-related traffic would not cause a significant increase in congestion and or significantly worsen the existing service levels at intersections on area roads; therefore, project-related traffic would not affect emergency access to the project site or any other surrounding location. The proposed project would not require closures of public roads, which could inhibit access by emergency vehicles. For these reasons construction and operation would have a less-than-significant impact on emergency access.

While impacts would be less than significant, Mitigation Measure MM 4.15-1 would provide further assurances for emergency access. Mitigation Measure MM 4.15-1 requires the preparation of a Construction Traffic Control Plan that considers access for emergency vehicles to the project site. During project operation, Mitigation Measure MM 4.15-1 requires the project operator obtain Kern County approval of all proposed access road designs prior to construction, further ensuring onsite emergency access is adequate.

Finding

Project impacts on emergency access are considered less than significant. However, implementation of Mitigation Measure MM 4.15-1 would provide further assurances for emergency access.

Level of Significance

Impacts would be less than significant.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measure MM 4.15-1, described above, would further reduce impacts to a less-than-significant level.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The proposed project would not have any environmental effects on transportation and traffic that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

Significant Effect

The proposed project would not have a cumulative environmental impact on transportation and traffic.

Description of Significant Impact

Cumulative impacts from the project, when considered with nearby, reasonably foreseeable planned projects, would occur only during project construction because project operation traffic would be very minimal. As stated above in the evaluation of operational impacts, there would be minimal trip generation once construction activities have concluded. Therefore, operation of the project would result in less-than-significant cumulative impacts.

The potential for cumulative construction impacts exists where there are multiple projects proposed in an area that have overlapping construction schedules that could affect similar resources. As stated above in the discussion of Impact 4.15-1, the analysis of 2021 traffic conditions (project build-out) includes project construction traffic in combination with traffic that would be generated by cumulative projects within a six-mile radius of the project site. As shown in Table 4.15-5 and Table 4.15-6, all study intersections and roadway segments would operate at an acceptable level of service according to the County's LOS standards during both the AM and PM peak hours for all traffic study scenarios with the addition of project construction traffic and cumulative traffic through the build year. Therefore, cumulative construction traffic impacts would be less than significant.

On the project-level (including the development of the gen-tie line), the project would not include a design feature or utilize vehicles with incompatible uses that would create a hazard on the surrounding roadways with implementation of mitigation measures. And, implementation of mitigation measures would ensure the project's contribution to emergency access and design hazards are reduced to a less than cumulatively considerable level.

Finding

The project has the potential to contribute to cumulative impacts on transportation and traffic. Implementation of Mitigation Measure MM 4.15-1, described above, would further reduce the cumulative impact of the proposed project to a less-than-significant level.

Level of Significance

Cumulative impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce cumulative impacts. Implementation of Mitigation Measures MM 4.15-1, described above, would further reduce the cumulative impact of the proposed project to a less-than-significant level.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

The proposed project would not have a significant and unavoidable cumulative environmental impact on transportation.

TRIBAL CULTURAL RESOURCES

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

None of the proposed project's environmental effects on tribal cultural resources have been found to result in no impacts or only less-than-significant impacts.

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

Significant Effect

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) (Impact 4.16-1a)

Description of Significant Impact

The SLF search conducted by the NAHC did not indicate the presence of tribal cultural resources within or immediately adjacent to the project site. However, the County's government-to-government consultation efforts with interested Native American groups, and specifically the Tejon Indian Tribe and San Manuel Band of Mission Indians, did identify seven (7) archaeological sites that could be considered significant archaeological sites or tribal cultural resources. While no significant subsurface archaeological deposits were found during testing conducted for the project, and all resources were recommended as not eligible by ICF (ICF, 2019a), the Lead Agency, through the Native American Tribal Consultation process as required by Assembly Bill 52, has determined that not enough testing has occurred on seven (7) of the sites to definitively reach a conclusion that the sites are less then significant cultural resources and are ineligible for listing or consideration as a tribal cultural resource (ICF, 2019b). These include P-15-019560 through P-15-019566, all of which are prehistoric archaeological sites. However, the configuration of the proposed

project would result in complete avoidance of any construction or operational activities in these areas. Mitigation Measure MM 4.5-2, included in Section 4.5*, Cultural Resources*, of the EIR requires the project proponent to prepare a Cultural Resources Treatment Plan showing how these sites would be avoided during construction and operational activities prior to issuance of any grading or building permits. As such, no further testing was required as part of the CEQA evaluation, and with the proposed mitigation the resources would not be impacted by the project and impacts would be less than significant.

Finding

The proposed project would have the potential to cause a substantial adverse change in the significance of a tribal cultural resource. Implementation of Mitigation Measure MM 4.5-2, described above in Findings for Cultural Resources impacts, would reduce impacts to less-than-significant levels.

Level of Significance

Impacts would be less than significant with mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measure MM 4.5-2, described above in Findings for Cultural Resources impacts, would reduce impacts to less-than-significant levels.

Significant Effect

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 resource to a California Native American tribe. (Impact 4.16-1b).

Description of Significant Impact

As noted above, no tribal cultural resources were identified through the SLF search conducted by the NAHC, but seven (7) prehistoric archaeological sites (P-15-019560 through P-15-019566) would require additional archaeological test excavation to definitively reach a conclusion that the sites are less then significant cultural resources and are ineligible for listing or consideration as a tribal cultural resource (ICF, 2019b). However, the configuration of the proposed project would result in complete avoidance of any construction or operational activities in these areas. As noted above, Mitigation Measure MM 4.5-2, included in Section 4.5*, Cultural Resources*, of the EIR requires the project proponent to prepare a Cultural Resources Treatment Plan showing how these sites would be avoided during construction and operational activities prior to issuance of any grading or building permits. As such, no further testing was required as part of the CEQA evaluation, and with the proposed mitigation the resources would not be impacted by the project and impacts would be less than significant.

Finding

The proposed project would have the potential to cause a substantial adverse change in the significance of a tribal cultural resource. Implementation of Mitigation Measure MM 4.5-2, described above in Findings for Cultural Resources impacts, would reduce impacts to less-than-significant levels.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measure MM 4.5-2, described above in Findings for Cultural Resources impacts, would reduce impacts to less-than-significant levels.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The proposed project would not have any environmental effects on tribal cultural resources that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

Significant Effect

The proposed project would have a cumulative environmental impact on tribal cultural resources.

Description of Significant Impact

An analysis of cumulative impacts takes into consideration the entirety of impacts that the project discussed in Chapter 3, *Project Description,* of the EIR, would have on tribal cultural resources. The geographic area of analysis for tribal cultural resources includes the western portion of the Antelope Valley. This geographic scope of analysis is appropriate because the resources within this area are expected to be similar to those that occur on the project area because of their proximity, their similarities in environments and landforms, and their location within the same Native American tribal territories. This is a large enough area to encompass any effects of the project on tribal cultural resources that may combine with similar effects caused by other projects, and provides a reasonable context wherein cumulative actions could affect tribal cultural resources.

Multiple projects, including solar energy production facilities, are proposed throughout the western Antelope Valley. Cumulative impacts to tribal cultural resources could occur if other related projects, in conjunction with the proposed project, had or would have impacts on cultural resources that, when considered together, would be significant.

Potential impacts of the project to tribal cultural resources, in combination with other projects in the area, could contribute to a cumulatively significant impact due to the overall loss of resources unique to the region. However, as discussed above, no specific tribal cultural resources have been identified in the project area, and the seven archaeological sites that might qualify as tribal cultural resources will be avoided by project design and implementation of Mitigation Measure MM 4.5-2. As such, the project would not have an impact on tribal cultural resources. Therefore, the project would not have a cumulatively considerable contribution to impacts to tribal cultural resources and impacts would be less than significant.

Finding

The project has the potential to contribute to cumulative impacts on tribal cultural resources. Implementation of Mitigation Measure MM 4.5-2, described above in Findings for Cultural Resources impacts, would reduce impacts to less-than-significant levels.

Level of Significance

Cumulative impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce cumulative impacts. Implementation of Mitigation Measures MM 4.5-2, described above in Findings for Cultural Resources impacts, would reduce impacts to less-than-significant levels.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

The proposed project would not have a significant and unavoidable cumulative environmental impact on tribal cultural resources.

UTILITIES AND SERVICE SYSTEMS

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

The project would not result in a determination by the waste water treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments (Impact 4.17-2).

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

Significant Effect

The project would require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects (Impact 4.17-1)

Description of Significant Impact

The design of the proposed project is such that storm water would remain onsite and infiltration and runoff would occur similar to existing conditions. Under existing conditions, water moves through the project site via sheet flow at a low flow rate (Watearth, Inc., 2019b). To the maximum extent possible, at-grade crossings for unpaved access roads would be used to minimize impacts on existing drainage courses. At-grade crossings would allow the road surface to be essentially flush with the existing and surrounding ground, thereby not changing the existing drainage or affecting flow within the project site (Watearth, Inc., 2019b). Site development elements would be required to meet grading and site development requirements (Kern County Grading Code, Chapter 17.28), such as minimizing cuts and fill slopes to reduce risk for erosion, grading of buildings sites and pads to direct flows to stormwater facilities such as a retention basin,

and permanent erosion control measures, as appropriate (Watearth, Inc., 2019b).The project applicant anticipates developing one or more retention basins on the project site to meet Kern County drainage requirements due to new impervious surfaces in areas with compacted soil such as roads, solar array areas, and O&M buildings (Watearth, Inc., 2019b). The amount of new impervious surface would be less than 1 percent of the project area and would not substantially increase the rate or amount of surface runoff (Watearth, Inc., 2019b). However, with implementation of Mitigation Measure MM 4.10-1, in Section 4.10, *Hydrology and Water Quality*, a drainage plan would be developed that would include measures to offset increases in stormwater runoff caused by the project. As noted above, there are no existing storm water drainage systems in the vicinity of the project; thus the proposed project would not exceed the capacity of an existing storm water drainage system. Therefore, relocation or construction of new or expanded stormwater drainage facilities off-site would not be required during operation. Impacts would be less than significant with implementation of Mitigation Measure MM 4.10-1.

Finding

Operational impacts on stormwater drainage would be potentially significant. However, implementation of Mitigation Measure MM 4.10-1, described above in Findings for Hydrology and Water Quality Impacts, would reduce these impacts to less-than-significant levels.

Level of Significance

Impacts would be less than significant with mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measure MM 4.10-1, described above in Findings for Hydrology and Water Quality Impacts, would reduce these impacts to less-than-significant levels.

Significant Effect

The project would not comply with Federal, State, and Local management and reduction statutes and regulations related to solid waste (Impact 4.17-3).

Description of Significant Impact

The project would generate solid waste during construction and operation. Common construction waste may include metals, masonry, plastic pipe, rocks, dirt, cardboard, or green waste related to land development. AB 341 requires Kern County to attain a waste diversion goals of 75 percent by 2020 through reduction, recycling, or composting. In addition, as part of compliance with CALGreen requirements, Kern County implements the following construction waste diversion requirements:

- Submittal of a Construction Waste Management Plan;
- Recycle and/or reuse a minimum 65 percent C&D waste; and
- Recycle or reuse 100 percent of tree stumps, rocks, and associated vegetation and soils resulting from land clearing (Kern County, 2018).

Furthermore, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the project design. Implementation of Mitigation Measure MM 4.17-1 would ensure compliance with waste diversion

and recycling requirements by requiring recycling during construction, operation, and decommissioning of the project. The proposed project would be required to comply with all federal, State, and local statutes and regulations related to the handling and disposal of solid waste. Therefore, implementation of the project would result in less-than-significant impacts regarding compliance with management and reduction statutes and regulations related to solid waste.

Finding

The project would generate solid waste during construction and operation. Impacts would have the potential to conflict with federal, State, and local statutes and regulations related to the handling and disposal of solid waste. However, implementation of Mitigation Measure MM 4.17-1, described below, would result in less-than-significant impacts.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measure MM 4.17-1, described below, would reduce impacts to a less-than-significant level.

Kern County

MM 4.17-1: During construction and operation, debris and waste generated shall be recycled to the extent feasible.

1. 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.

2. 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.

3. 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.

4. Contact information of the coordinator shall be provided to the Kern County Planning and Natural Resources Department prior to issuance of building permits.

5. 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.

State Lands Commission

MM 4.17-1: During construction and operation, debris and waste generated shall be recycled to the extent feasible.

1. 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.
2. 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.
3. 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.
4. Contact information of the coordinator shall be provided to the Kern County Planning and Natural Resources Department prior to issuance of building permits.
5. 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.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The proposed project would not have any environmental effects on utilities and service systems that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

Significant Effect

The proposed project would not have a cumulative environmental impact on transportation and traffic.

Description of Significant Impact

The geographic scope for cumulative analysis of impacts on water supply and wastewater are the related projects that would impact the Antelope Valley Groundwater Basin. The geographic scope of analysis for stormwater drainage, solid waste disposal, electricity, natural gas, and telecommunications includes the projects that would be relying on the same facilities and infrastructure. Impacts of the proposed project would be cumulatively considerable if the incremental effects of the proposed project when combined with other past, present, or reasonably foreseeable projects (listed in Table 3-5, *Cumulative Projects List*, in Chapter 3, *Project Description*) would result in a significant cumulative effect. Physical impacts to public services, utilities, and service systems are usually associated with population in-migration and growth in an area, which increase the demand for a particular service, leading to the need for expanded or new facilities.

There is little to no growth associated with the proposed project and nearby other solar and wind energy projects, thereby limiting the potential to contribute to demand for a particular service.

As described above, the proposed project would place few demands on water, wastewater, stormwater drainage, solid waste disposal (during construction and operation), electricity, natural gas, and telecommunications.

Water

Several utility-scale renewable energy projects are proposed in the Antelope Valley that would impact the existing water supply, which is derived almost entirely from the Antelope Valley Groundwater Basin. The water-intensive use period for renewable energy projects is typically the construction phase. Given the limited water supply in the area, other projects are expected to either rely on new or existing wells or truck in their water supply (similar to the project). In response to the recent adjudication of the Antelope Valley Groundwater Basin, all projects relying on water from Basin would be required to obtain water from water purveyors that have existing water rights within the Basin, or would be required to apply for new water rights from the Antelope Valley Watermaster. New water rights may or may not be granted. Any projects that cannot secure a water supply would not move forward to construction or operation. Therefore, cumulative impacts related to water supply and facilities would be less than significant.

Wastewater

The project is located in an area with no wastewater treatment provider or infrastructure and is not expected to generate a significant amount of wastewater. Wastewater produced during construction would be collected in portable toilet facilities and disposed of at an approved facility. A septic system would be built at the O&M facility to supply non-potable water for the 12 full-time staff that would be at the facility. Other planned renewable energy projects may or may not propose an O&M building that would require the installation of a septic system. Therefore, the proposed project would not have the potential, when combined with impacts from past, present, or reasonably foreseeable projects, to result in a cumulative impact to a regional wastewater treatment facility or the capacity of said facilities.

Stormwater Drainage

As described above, there are no constructed stormwater drainage systems present onsite and stormwater on the project site either percolates onsite or drains offsite via sheetflow. The existing pattern and concentration of runoff could potentially be altered by project activities, such as the grading of access roads. To the maximum extent possible, at-grade crossings for unpaved access roads would be used to minimize impacts on existing drainage courses. At-grade crossings would allow the road surface to be essentially flush with the existing and surrounding ground, thereby not changing the existing drainage or affecting flow within the project site (Watearth, Inc., 2019b). In compliance with National Discharge Elimination System (NPDES) General Construction Permit requirements, the proposed project would design and submit a site-specific SWPPP to minimize the discharge of wastewater during construction. In accordance with Mitigation Measure MM 4.10-1, the proposed project would implement a drainage plan that would incorporate measures to offset increases in stormwater flows caused by the project. Other projects in the vicinity would be required to offset substantial increases in stormwater as well per County requirements and would also be required to implement best management practices (BMPs), as well as comply with the NPDES General Construction Permit and their respective SWPPP as applicable.

Cumulative projects would also be required to prepare a drainage plan that would help avoid substantial increases of stormwater generated onsite by their respective ground disturbance. Depending on the findings of their respective drainage plans, these projects may need to construct stormwater control structures onsite to reduce the potential for increased stormwater runoff. Therefore, the project would not substantially contribute to a cumulatively impact on stormwater drainage facilities.

Solid Waste

The proposed project would generate a minimal amount of waste and is not expected to significantly impact Kern County landfills. Although the Tehachapi Landfill is expected to cease operation in 2020, the Mojave-Rosamond Landfill is expected to operate until 2123. However, generation of waste from cumulative projects, including other solar and wind projects, could result in a cumulative impact. To ensure that the proposed project reduces the amount of waste sent to landfills, implementation of Mitigation Measure MM 4.17-1 requires that debris and waste generated shall be recycled to the extent feasible, and an onsite recycling coordinator be designated by the project proponent to facilitate recycling efforts. With implementation of MM 4.17-1, the project's incremental contribution would be less than cumulatively considerable. Furthermore, other cumulative projects would also be required to comply with State and local waste reduction policies.

Electricity

There are no existing electrical facilities on site. The proposed project would include construction of a collector line that would tie into existing facilities and provide 128 MW of renewable electrical energy to the state-wide utility grid. Electricity demand of the project would be minimal and would be provided by the onsite PV system. This project in combination with other cumulative solar projects in East Kern County would help to reduce or offset electricity on the state-wide utility grid and therefore provide a beneficial cumulative impact on electrical demand and facilities.

Natural Gas

There are no existing natural gas facilities on the project site nor would natural gas be required for construction and operation of the project. Therefore, the project would not contribute to a cumulatively considerable impact related to natural gas demand and facilities.

Telecommunications

The proposed project in combination with cumulative projects would increase demand on telecommunication facilities. However, demand associated with energy projects and other cumulative development would be minimal and is expected to be within the planning forecasts of the affected telecommunications provider. Therefore, cumulative impacts related to telecommunications facilities would be less than significant.

Finding

Cumulative impacts on utilities and service systems are considered to be less than significant. Implementation of Mitigation Measure 4.10-1, described above in Findings for Hydrology and Water Quality impacts, and Mitigation Measure MM 4.17-1, described above, would further reduce the cumulative impact of the proposed project to a less-than-significant level.

Level of Significance

Cumulative impacts would be less than significant.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce cumulative impacts. Although mitigation is not required, implementation of Mitigation Measure 4.10-1, described above in Findings for Hydrology and Water Quality impacts, and Mitigation Measure 4.17-1, described above, would further reduce the cumulative impact of the proposed project to a less-than-significant level.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

The proposed project would not have a significant and unavoidable cumulative environmental impact on utilities and service systems.

WILDFIRE

A. Environmental Effects of the Project Found to Have No Impact on the Environment, or Have a Less Than Significant Impact on the Environment.

The project would not substantially impair an adopted emergency response plan or emergency evacuation plan (Impact 4.18-1).

The project would not, 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 (Impact 4.18-2).

B. Environmental Effects of the Project that Are Potentially Significant, but that Can Be Mitigated to Less Than Significant Levels.

Significant Effect

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 (Impact 4.18-3).

Description of Significant Impact

The proposed project includes several options for gen-tie routes as described in Chapter 3, *Project Description*, of the EIR, although only one route would be constructed. The selected gen-tie would be constructed within its 150-foot-wide corridor and would consist of the utility poles, cabling, trenches, and a corresponding dirt maintenance road. A buried 34.5 kV collector system would connect to the inverters of each array. Power generated on the project site would be collected at an onsite substation and converted from 34.5 kV to 220 kV of power for transmission in an overhead or underground line into the SCE transmission system and interconnection location. The combined energy of the solar field would ultimately transfer to the SCE Whirlwind Substation, and join via a ring bus assembly with other projects for ultimate delivery of electrical power and communications. All utility poles, cabling, trenches, and corresponding dirt maintenance road associated with the gen-tie line would be erected inside the limits of the 150-foot-

wide corridor, which would be maintained during operations and therefore, would not exacerbate fire risk that could result in temporary or ongoing impacts to the environment.

Additionally, new project site access roads would be installed between the southern array area and the northern array area of the project, as well as a 20-foot-wide internal maintenance roads and a minimum 20-foot-wide perimeter road around the solar arrays, which would be cleared and compacted for equipment and emergency vehicle travel and access to the solar blocks. These project site access roads would remain in place for ongoing operations and maintenance activities after construction is completed. Further, the proposed project could also require improved unpaved roads to serve as access roads from the existing road network to the project. All new roads would comply with development requirements for emergency access, and therefore, would not exacerbate fire risk that could result in temporary or ongoing impacts to the environment.

Most fires in the desert are caused by lightning or vehicles. The installation of the gen-tie and electrical collector system and internal/perimeter dirt maintenance roads would not be placed within a high fire hazard zone, and the vegetation would be cleared; therefore, the proposed project would not result in increased fire risks that could result in temporary or ongoing impacts to the environment. Additionally, as discussed in Section 4.14, *Public Services,* the project proponent/operator shall develop and implement a Fire Safety Plan that contains notification procedures and emergency fire precautions consistent with the 2016 California Fire Code and Kern County Fire Code for use during construction, operation and decommissioning, per implementation of Mitigation Measure MM 4.14-1. Implementation of this plan would ensure that potential impacts related to installation or maintenance of associated infrastructure is reduced and, thus, impacts would be less than significant.

Finding

Project impacts on fire hazards related to installation or maintenance of infrastructure are considered potentially significant. Implementation of Mitigation Measure MM 4.14-1, described above in Findings for Public Services impacts, would reduce these impacts to less than significant levels.

Level of Significance

Impacts would be less than significant with mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measure MM 4.14-1, described above in Findings for Public Services impacts, would reduce these impacts to less than significant levels.

Significant Effect

The project would not 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 (Impact 4.18-4).

Description of Significant Impact

Development of the proposed project would alter existing on-site drainage patterns and flowpaths compared to existing conditions and include the introduction of new impervious surfaces. The project would require implementation of a Stormwater Pollution Prevention Plan (SWPPP), which would include erosion and sediment control BMPs during construction, thereby reducing the potential of erosion and siltation during construction and would control potential flooding events that could occur during construction. Additionally,

the proposed new impervious surfaces would generate additional stormwater runoff onsite, albeit in minor quantities compared to existing conditions. However, this could exacerbate potential erosion and sedimentation onsite or downstream. As discussed in Section 4.10, *Hydrology and Water Quality*, Kern County requires development of a drainage plan with the site development grading permit, which will manage stormwater and reduce the risk for offsite impacts due to erosion and impacts on water quality, as implemented by Mitigation Measure MM 4.10-1. Design measures are intended to minimize or manage flow concentration and changes in flow depth or velocity so as to minimize erosion, sedimentation, and flooding on or off site. One element of the drainage plan is a retention basin to manage facility stormwater. The majority of the project development would be on mowed lands; however, in some limited areas gravel pads and compacted dirt roadways would be used and may act similar to impervious surfaces and encourage sheet flow. The amount of new impervious surface would be less than 1 percent of the project area and would not substantially increase the rate or amount of surface runoff. The project proponent anticipates constructing one or more retention basins to manage stormwater due to new impervious surface in areas with compacted soil such as roads, solar array areas, battery storage containers, the substation and the O&M building. Implementation of Mitigation Measure MM 4.10-1 would minimize potential increases in runoff and ensure that the retention basins and other stormwater management features are implemented to minimize erosion and sedimentation to less than significant.

A majority of the offsite flow that enters the project site would continue to sheet flow from the northwest to the southeast with no impacts from development of the project. Furthermore, the soil types onsite have high infiltration rates and low runoff potential when thoroughly wet.

The project site is located on a gentle south-facing slope below the Tehachapi Mountains on an alluvial fan. Based on the fire history immediately surrounding the site, moderate zone designation, soil types, and surface hydrology, there is a low potential for the project site to be at risk of post-fire instability or drainage changes.

While the project would introduce new structures to the project site, the structures would not be placed in a highly flammable landscape. Furthermore, with the implementation of Mitigation Measure 4.10-1, any potential impacts from runoff and erosion would be minimized. Therefore, the project would not expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant.

Finding

Project impacts associated with exposing people or structures to risks related to stormwater runoff and erosion are considered potentially significant. However, implementation of Mitigation Measure MM 4.10-1, described above in Findings for Hydrology and Water Quality Impacts, would reduce impacts to less-than-significant levels.

Level of Significance

Impacts would be less than significant with implementation of mitigation.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce impacts. Implementation of Mitigation Measure MM 4.10-1, described above in Findings for Hydrology and Water Quality Impacts, would reduce impacts to less-than-significant levels.

C. Environmental Effects of the Project that Cannot Be Mitigated to a Less Than Significant Level.

The proposed project would not have any environmental effects on wildfire that cannot be mitigated to a less-than-significant level.

D. Cumulative Environmental Effects of the Proposed Project that Would Have a Less Than Significant Impact on the Environment.

The proposed project would not have any cumulative effects on wildfire that would have a less than significant impact on the environment.

E. Cumulative Environmental Effects of the Proposed Project that Would Have a Significant and Unavoidable Impact on the Environment.

Significant Effect

The proposed project would have a cumulative environmental impact on wildfire.

Description of Significant Impact

The geographic scope for wildfire impacts is considered the Antelope Valley. This geographic scope was selected because the land within the region possesses relatively similar uses, including sparse desert vegetation, rural access roads, scattered rural residences, producing and non-producing water wells, cattle ranching and maintenance facilities, mining, wind and solar energy uses. As shown in Chapter 3, *Project Description*, Table 3-5, *Cumulative Projects List*, there are approximately 56 solar and non-solar projects proposed or approved throughout the Antelope Valley in Kern County and in the desert portion of Kern County outside the Antelope Valley. Of the approximately 56 total projects in Kern County, 43 would be located within 6 miles of the project site and 13 would be located within 1 mile of the project site.

With regard to impairment of an adopted emergency response plan or emergency evacuation plan, all of the related projects would be required to provide adequate emergency access in accordance with County Fire Code and Building Code requirements and prior to the issuance of a building permit. As previously mentioned, the project site is not classified as being within a high fire hazard severity zone, is located in rural, sparsely developed areas with limited population, is not located along an identified emergency evacuation route or within an adopted emergency evacuation plan, and would be in compliance with Fire Code and Building Code requirements including fire prevention and emergency response training for site personnel. As concluded in the discussion of project impacts above, the project would have a less than significant impact related to impairment of an adopted emergency response or evacuation plan. Similar to the project, related projects would be required to determine whether they are classified as being within a high fire hazard severity zone, identified within an emergency evacuation route or within an adopted emergency evacuation plan, and whether they meet the requirements of applicable Fire Code and Building Code. Nevertheless, given the location in a rural area and limited infrastructure, the project and related projects have the potential to result in a cumulative impact to an adopted emergency response plan or emergency evacuation plan and, thus, would result in a significant and unavoidable cumulative impact.

With regard to cumulative impacts related to exposure of project occupants to pollutant concentrations from a wildfire, while the proposed project is not within SRAs and/or High Fire Hazard Severity Zones, some related projects in the area may be. Similar to the proposed project, all related projects would be required to implement building and landscape design features in accordance with the Fire Code and Building Code

to reduce wildfire risk and exposure of occupants to pollutant concentrations from a wildfire. Adherence to the Fire Code and Building Code requirements would minimize potential impacts related to exposure to and the uncontrolled spread of a wildfire. As concluded in the discussion of project impacts above, the project would have a less-than-significant impact related to exposure of project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. Nevertheless, given the location in a rural area and limited infrastructure, the project and related projects have the potential to result in a cumulative impact related to exposure of project occupants to pollutant concentrations from a wildfire and, thus, would result in a significant and unavoidable cumulative impact.

Related projects may require associated infrastructure such as roads, fuel breaks, and power lines that could exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. These projects would be reviewed by Kern County for land use and zoning consistency and compliance with applicable requirements, and potentially analyzed for environmental impacts. The placement of infrastructure would adhere to all fire codes to minimize the potential fire risk such as siting and design. The proposed project would involve the installation and maintenance of a gen-tie line and access roads to support project construction and ongoing maintenance and operation. While the potential for fire is considered moderate, Mitigation Measure 4.14-1 would be implemented to ensure that a Fire Safety Plan is prepared that contains notification procedures and emergency fire precautions consistent with the 2016 California Fire Code and Kern County Fire Code for use during construction, operation and decommissioning. Nevertheless, given the location in a rural area and limited infrastructure, the project and related projects have the potential to result in a cumulative impact related to the installation or maintenance of associated infrastructure and, thus, would result in a significant and unavoidable cumulative impact.

Some related projects could be proposed in areas that could expose people or structures to risks from downslope or downstream flooding or landslides as a result of post-fire instability. Based on the recent fire events in California, all projects would be required to adhere to Kern County's zoning and land use designations and codes, State and local fire codes, and regulations associated with drainage and site stability. These regulations, policies, and codes would reduce the potential for exposing people or structures to risks from downslope or downstream flooding or landslides as a result of post-fire instability. Each project would require site-specific hydrology and drainage studies for effective drainage design. As concluded in the discussion of project impacts above, with the implementation of Mitigation Measure MM 4.10-1, the project would not expose people or structures to significant risks due to post-fire slope instability or drainage changes and would have a less-than-significant impact. Nevertheless, given the location in a rural area and limited infrastructure, the project and related projects have the potential to result in a cumulative impact related to exposing people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes and, thus, would result in a significant and unavoidable cumulative impact.

Finding

The project would contribute to cumulative impacts on wildfire. Even with implementation of Mitigation Measure 4.10-1, described above in Findings for Hydrology and Water Quality impacts, and Mitigation Measure 4.14-1, described above in Findings for Public Services impacts, cumulative impact on wildfire would remain significant and unavoidable.

Level of Significance

Cumulative impacts would be significant and unavoidable.

Brief Explanation of the Rationale for the Finding

CEQA requires that all feasible and reasonable mitigation be applied to the project to reduce cumulative impacts. Mitigation Measure 4.10-1, described above in Findings for Hydrology and Water Quality impacts, and Mitigation Measure MM 4.14-1, described above in Findings for Public Services impacts, would be implemented, however cumulative impacts would remain significant and unavoidable.

SECTION III. FINDINGS REGARDING CONSIDERATIONS, WHICH MAKE CERTAIN ALTERNATIVES, ANALYZED IN THE FINAL ENVIRONMENTAL IMPACT REPORT INFEASIBLE.

The following findings and brief explanation of the rationale for the findings regarding project alternatives identified in the FEIR are set forth to comply with the requirements of Section 15091(s)(3) of the *CEQA Guidelines*.

The consideration of alternatives is an integral component of the CEQA process. The selection and evaluation of a reasonable range of alternatives provides the public and decision-makers with information on ways to avoid or lessen environmental impacts created by a proposed project. When selecting alternatives for evaluation, CEQA requires alternatives that meet most of the basic objectives of the project, while avoiding or substantially lessening the project's significant effects. Thus, objectives for the proposed project were considered in evaluating the alternatives. These objectives are as follows:

- Utilize property within Kern County for the placement of a large scale solar PV facility that includes battery storage;
- 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;
- 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 20045;
- Develop an economically feasible and commercially financeable project;
- Provide solar-generated electricity to the California Independent System Operator (CAISO) grid;
- Assist Kern County in promoting its role as the State's leading producer of renewable energy;
- Provide green jobs to Kern County and the state of California; and
- Site and design the project is an environmentally responsible manner consistent with current Kern County guidelines.

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) 128 MW PV solar facility or up to 60MW of battery energy storage and associated facilities on the 2,285-acre

site would not occur. No gen-tie lines would be constructed. The No Project Alternative would not require a Conditional Use Permit (CUP) for construction and operation of a 128 MW solar 60 MW battery energy storage project, associated facilities and use of a temporary concrete batch plant. An amendment to the General Plan and Specific Plan circulation element along with public easement vacations would not be required. The No Project Alternative would maintain the current zoning, land use classifications, and existing land uses, which consist mostly of undeveloped desert vegetation. No physical changes would be made to the project site.

Finding

The No Project Alternative would avoid the significant and unavoidable impacts associated with the proposed project and reduce impacts associated with all resource areas. As the project site would remain undeveloped, there would be no impact with regard to all resources areas.

ALTERNATIVE 2: GENERAL PLAN/SPECIFIC PLAN AND ZONING BUILD-OUT ALTERNATIVE

Alternative 2, the General Plan and Zoning Build-Out Alternative, would develop the project site to the maximum intensity allowed under the existing Kern County General Plan land use and zoning classifications. The project site is currently designated as 8.3 (Extensive Ag, 20-acre min), 8.5 (Resource Management, Minimum 20 Acre Size), 8.3/2.5 (Extensive Ag/Flood Hazard), 8.5/2.1 (Resource Management/Seismic Hazard), and 8.5/2.5 (Resource Management/Flood Hazard). 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 southern portion of the project is within the boundaries of the Willow Springs Specific Plan. The Willow Springs Specific Plan designates portions of the site as 5.7 (Minimum 5 Gross Acres/Unit), 5.75 (Minimum 10 Gross Acres/Unit), 5.8 (Minimum 20 Gross Acres/Unit), and 5.8/2.1 (Residential – Minimum 20 Gross Acres/Unit/Seismic Hazard).

The project site has various zone classifications which include; A (Exclusive Agriculture), A FP (Exclusive Agriculture – Floodplain Combining), A FPS (Exclusive Agriculture – Floodplain Secondary Combining), A GH (Exclusive Agriculture – Geologic Hazard Combining), A GH FPS (Exclusive Agriculture – Geologic Hazard Combining – Floodplain Secondary Combining), E-2.5 RS FPS (Estate Residential – 2.5 acres Minimum – Residential Suburban Combining – Floodplain Secondary Combining), E-5 RS FPS (Estate Residential – 5 acres Minimum – Residential Suburban Combining – Floodplain Secondary Combining), E-10 RS FPS (Estate Residential – 10 acres Minimum – Residential Suburban Combining – Floodplain Secondary Combining), E-10 RS GH FPS (Estate Residential – 10 acres Minimum – Residential Suburban Combining – Geologic Hazard Combining – Floodplain Secondary Combining), E-10 RS MH FPS (Estate Residential – 10 acres Minimum – Mobile Home Combining –Floodplain Secondary Combining), E-20 RS FPS (Estate Residential – 20 acres Minimum – Residential Suburban Combining – Floodplain Secondary Combining), E-20 RS GH FPS (Estate Residential – 20 acres Minimum – Residential Suburban Combining – Geologic Hazard Combining – Floodplain Secondary Combining), and PL RS FPS (Platted Lands – Residential Suburban Combining – Floodplain Secondary Combining).

Implementation of Alternative 2 would consist of developing the project site under the current land use classification of 4.1 (Willow Springs Specific Plan), 8.3 (Extensive Ag – 20-acre min), 8.5 (Resource Management – Minimum 20 Acre Size), 8.3/2.5 (Extensive Ag/Flood Hazard), 8.5/2.1 (Resource Management/Seismic Hazard), and 8.5/2.5 (Resource Management/Flood Hazard). The 8.3 (Extensive Agriculture, 20-acre minimum) land use designation applies to agricultural uses involving large amounts

of land with relatively low value per acre yields. Typical uses include livestock grazing, farming and woodlands. The minimum allowable parcel size in the 8.3 (Extensive Agriculture, 20-acre minimum) land use designation is 20 acres gross, except lands subject to a Williamson Act Contract/Farmland Security Zone Contract, in which case the minimum parcel size is 80 acres gross. The 8.5 (Resource Management, 20-acre minimum) land use designation applies primarily to open space lands containing important resources, such as wildlife habitat, scenic values, or watershed recharge areas. Typical uses include livestock grazing, farming and ranching, nature preserves, water storage and groundwater recharge areas, irrigated croplands, and open space and recreation. The minimum allowable parcel size in the 8.5 (Resource Management, 20-acre minimum) land use designation is 20 acres gross.

Given that the zoning designation for the project site is A (Exclusive Agriculture), A FP (Exclusive Agriculture – Floodplain Combining), A FPS (Exclusive Agriculture – Floodplain Secondary Combining), A GH (Exclusive Agriculture – Geologic Hazard Combining), A GH FPS (Exclusive Agriculture – Geologic Hazard Combining – Floodplain Secondary Combining), E-2.5 RS FPS (Estate Residential – 2.5 acres Minimum – Residential Suburban Combining – Floodplain Secondary Combining), E-5 RS FPS (Estate Residential – 5 acres Minimum – Residential Suburban Combining – Floodplain Secondary Combining), E-10 RS FPS (Estate Residential – 10 acres Minimum – Residential Suburban Combining – Floodplain Secondary Combining), E-10 RS GH FPS (Estate Residential – 10 acres Minimum – Residential Suburban Combining – Geologic Hazard Combining – Floodplain Secondary Combining), E-10 RS MH FPS (Estate Residential – 10 acres Minimum – Mobile Home Combining –Floodplain Secondary Combining), E-20 RS FPS (Estate Residential – 20 acres Minimum – Residential Suburban Combining – Floodplain Secondary Combining), E-20 RS GH FPS (Estate Residential – 20 acres Minimum – Residential Suburban Combining – Geologic Hazard Combining – Floodplain Secondary Combining), and PL RS FPS (Platted Lands – Residential Suburban Combining – Floodplain Secondary Combining), the project site would be developed in-accordance with those designations. The portions of the project site zoned as A would be developed with agricultural uses (approximately 1,180 acres), the portions of the project site zoned as E, would be developed with single-family residential units (approximately 1,078 acres), and the portions of the project site zoned PL RS FPS would be developed with single-family residential units as well (approximately 27 acres). No solar facilities would be developed under this alternative.

Finding

The General Plan and Zoning Build-Out Alternative would result in less impact to aesthetics, agricultural and forestry resources, and land use and planning. The alternative would result in similar impacts to biological resources, hazards and hazardous materials, and tribal cultural resources. This alternative would result in greater impacts in all remaining environmental issue areas. Greater impacts to air quality would result from emissions from the proposed agricultural uses on-site, such as agricultural vehicles and livestock emissions. Given the ground disturbance required, greater impacts would occur to potentially undiscovered cultural resources. This alternative would result in greater energy impacts as the project site would not generate renewable energy as compared to the proposed project, and would therefore, not assist the state in meeting its renewable energy generation goals. Greater impacts to geology and soils would result from greater initial soil disturbance during construction and greater potential to expose people to seismic hazards resulting from permanent human presence on-site from the proposed agricultural uses. This alternative would result in greater GHG emission impacts than the project because the potential offset or displacement of GHG emissions from operation of the solar power generating facility, compared with traditional gas- or coal-fired power plants, would not be realized. Greater impacts to hydrology and water quality would result from continued ground disturbance from activities such as grazing and plowing and the application of

pesticides or herbicides from the proposed agricultural uses. Greater impacts to noise would occur under this alternative during operation, through the noise associated with the daily operation of agricultural equipment and worker vehicles, as well as residential traffic. The increase in human population on-site is also responsible for greater impacts to public services, transportation, utilities and service systems, and wildfires. This alternative would not eliminate significant and unavoidable impacts associated with air quality (project and cumulative), and biological resources (cumulative only).

The General Plan and Zoning Build-Out Alternative would not achieve any of the project objectives listed above in Section 6.2, including the project's objective related to developing solar facilities to produce clean electricity to help achieve California's renewable energy goals.

ALTERNATIVE 3: REDUCED ACREAGE ALTERNATIVE

Under Alternative 3, the Reduced Acreage Alternative, the project site would be reduced to the portion of the project site outside of the Willow Springs Specific Plan. This alternative would reduce the project's footprint from 2,285 acres to 987 acres and would only allow construction on the northern site. The solar panels and associated infrastructure would all be located in the reduced project site, and gen-tie route options 1, 3, and 4, would extend their lines to connect with the western boundary of the reduced site. Gen-tie option 2 would continue to extend from the north portion of the site. The reduced project acreage under this alternative is still expected to contain enough land to construct a solar array field capable of generating approximately 55 MW, with up to 26 MW of BESS capacity due to the proportional reduction in project size. Similar to the proposed project, this alternative would still require the approval of six CUPs: to allow for the construction and operation of 55 MW photovoltaic electrical generating facility with up to 26 MW of BESS (Section 19.12.030.G) with associated facilities (substation, O&M facility) in an A District; to allow the operation of a temporary concrete batch plant (19.12.030.G) in an A District; to allow a construction microwave tower (19.12.030.F) in the A zone district; a general plan amendment to the circulation element to allow for the removal of section and mid-section lines; and to allow vacation of existing public access easements on the project site.

Finding

The Reduced Acreage Alternative would be reduced in size compared to the proposed project, and would generate approximately 55 MW, with up to 26 MW of Battery Storage capacity due to the proportional reduction in project size and therefore, all construction and operational methods, workforce, and timing for the Reduced Acreage Alternative would be reduced in comparison with the proposed project. Due to the reduced footprint, the Reduced Acreage Alternative would result in less or similar impacts for all of the environmental issue areas. However, this alternative would not eliminate significant and unavoidable impacts associated with aesthetics (cumulative only), air quality (project and cumulative), noise (project and cumulative), biological resources (cumulative only), and wildfires (cumulative).

The Reduced Acreage Alternative would meet most of the project objectives listed above. Under the Reduced Acreage Alternative, the project would avoid developing within the Willow Springs Specific Plan area located within the southern portion of the project site and would reduce the project's footprint from 2,285 acres to 987 acres. Therefore, this alternative would create fewer environmental impacts; however, it would not reduce any identified significance and unavoidable impact to less than significant.

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 Antelope 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 2,285 acres of total rooftop area) may be required to attain project's capacity of 128 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 128 MW of electricity, but it would be for on-site 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. Table 6-1, *Summary of Development Alternatives*, provides a summary of the relative impacts and feasibility of each alternative. A complete discussion of each alternative is also provided below.

Finding

The No Ground-Mounted Utility-Solar Development Alternative would result in less impact related to aesthetics, agricultural and forestry resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, population and housing, noise, public services, transportation, tribal cultural resources, and utilities and service systems. Further, this alternative would avoid the significant and unavoidable impacts to aesthetics (cumulative only), air quality (project and cumulative), biological resources (cumulative only), and noise (project and cumulative) that would occur under the proposed project.

This alternative would satisfy some of the project objective of assisting California in reducing GHG emissions. However, up to 60 MW of BESS (a component of the proposed project) would not be constructed under this alternative. The alternative would not achieve other project objectives including utilizing existing transmission infrastructure to minimize costs. It is also unlikely the project would have an average insolation value of 6 kWh/m2/day or greater given the lack of efficiency of rooftop solar compared to solar tracking technology. Additionally, there are some drawbacks to this alternative that include, but not limited to those listed below.

- Up to 60 MW of BESS is not included.
- The system would not likely be built out within a timeframe that would be similar to that of the proposed project.
- Given the distributed nature of such a network of facilities, construction, management, and maintenance would not be as efficient, and total capital costs would likely be higher.
- The project proponent does not have immediate control or access to potential urban sites that could accommodate facilities to generate 128 MW of solar power.
- A distributed system of the scale of the project would be cost-prohibitive.

This alternative theoretically has the potential to generate of up to 128 MW of electricity but it would be used on the sites generating the power, and would not achieve the project objective of assisting California load-serving entities in meeting their obligations under California's RPS Program. Additionally, this alternative does not include up to 60 MW of BESS. Given the size of the proposed project, the project objectives, and the need to arrange a suitable assemblage of participating commercial and industrial properties, it is impractical and infeasible to propose a distributed generation project of this type and still proceed within a reasonably similar timeframe.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

The *CEQA Guidelines* require the identification of an environmentally superior alternative to the project (*CEQA Guidelines*, Section 15126.6[e][2]). An environmentally superior alternative is an alternative to the project that would reduce and/or eliminate the significant environmental impacts associated with the project without creating other significant impacts and without substantially reducing and/or eliminating the environmental benefits attributable to the project.

Selection of an environmentally superior alternative is based on an evaluation of the extent to which the alternatives reduce or eliminate the significant impacts associated with the project on a comparison of the remaining environmental impacts of each alternative. In conducting this comparative evaluation, it can be difficult to make a determination of relative significance because some categories are relatively more or less important and cannot be simply summed. In some cases, these categories do not create a picture of the nuances of the alternatives.

Finding

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 4, the No Ground-Mounted Utility-Solar Development alternative, would be environmentally superior to the proposed project on the basis of its minimization or avoidance of physical environmental impacts. Section 15126.6(e)(2) of the CEQA Guidelines states that if the No Project Alternative is found to be environmentally superior, "the EIR shall also identify an environmentally superior alternative among the other alternatives."

This alternative would avoid significant and unavoidable impacts to aesthetics, air quality, biological resources, and noise. 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 and it would not include up to 60 MW of BESS. This alternative could potentially result in greater impacts to land use and wildfire risks due to the numerous power lines that would be required to harness the distributed solar panel energy. However, the No Ground-Mounted Utility-Solar Development Alternative would reduce the significant and unavoidable impact as it relates to construction noise. In addition, this alternative would result in less impact to aesthetics, agricultural and forestry resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, public services, 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 128 MW of distributed solar generated electricity and the required land associated to support up to 60 MW of BESS. 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 General Plan and Zoning Build-Out Alternative and Reduced Acreage Alternative, the No Ground-Mounted Utility-Solar Development Alternative is considered the Environmentally Superior Alternative.

EXHIBIT B

STATEMENT OF OVERRIDING CONSIDERATIONS

State CEQA Guidelines Section 15093

for

BigBeau Solar Project

By BigBeau Solar, LLC/EDF Renewables Development, Inc. (PP19161)

ZCC 13, Map 215
ZCC 44, Map 232
CUP 13, Map 215
CUP 14, Map 215
CUP 15, Map 215
CUP 41, Map 232
CUP 42, Map 232
CUP 43, Map 232
GPA 4, Map 215
SPA 32, Map 232
Final Environmental Impact Report

SCH# 2019071059

Lead Agency: Kern County Planning and Natural Resource Department

EXHIBIT B

The California Environmental Quality Act (CEQA) requires a public agency to balance the benefits of a proposed project against its significant unavoidable adverse impacts in determining to approve the project. The BigBeau Solar Project would result in environmental effects that, although mitigated to the extent feasible by the implementation of mitigation measures required for the project, would remain significant and unavoidable adverse impacts, as discussed in the Environmental Impact Report (EIR) and CEQA findings of fact. These impacts are summarized below and constitute those impacts for which this statement of overriding considerations is made.

1) The proposed project would substantially degrade the existing visual character or quality of the site and its surroundings. When introduced into the project viewshed, the industrial nature of the project would substantially change the existing visual character of the landscape as viewed from sensitive receptors for the life of the project. The project facilities would add cultural modifications to the project site's landscape from certain viewpoints. Operation of a solar power generation and battery storage facility of this size would introduce new infrastructure and other anthropogenic features; alter the existing visual character of the landscape from one that is rural to more industrial in nature; be seen by viewers of high, moderately high, and moderate sensitivity; and reduce existing scenic quality through the intrusion of human-made elements on land that is currently largely undeveloped. Native vegetation would be left in place around the project site where feasible, allowing for a natural screening of project components, and the proposed project would incorporate a 100-foot building set-back for solar arrays, the operations and maintenance building, and other project features from the project property lines in areas directly adjacent to residential parcels. Implementation of mitigation measures would help to reduce visual impacts associated with the proposed project by limiting vegetation removal, planting native vegetation, providing privacy fencing, reducing the visibility of project features, and ensuring that the site is kept free of debris and trash. Nevertheless, even with implementation of these measures, project level impacts to visual character and quality would remain significant and unavoidable.

2) The proposed project would result in cumulative aesthetics impacts. The project in combination with the cumulative projects would have significant and unavoidable impacts related to aesthetics. If construction at the locally cumulative project locations were to occur at the same time as, or consecutively before or after, construction of the proposed project, equipment from these sites would combine with similar activities and equipment from the project site. Construction of the proposed project and the other cumulative projects in the immediate project vicinity would lead to the continued presence of construction equipment on roads and in the landscape in the local project region for several years, and cause a substantial cumulative visual impact. In addition, with regard to operation, if the solar project applications in the vicinity of the proposed project are realized, the project, in combination with these cumulative projects, would result in a cumulatively considerable visual impact. Furthermore, the project and other projects in the region would be required to implement various mitigation measures to reduce impacts. However, the conversion of thousands of acres in a presently rural area to solar and wind energy production uses cannot be mitigated to a degree that impacts are no longer significant. These have the potential to result in cumulative impacts to aesthetics when considered together with the proposed project. As such, the proposed project and other projects in the region would result in significant and unavoidable impacts related to aesthetics, even after implementation of mitigation. Additionally, mitigation measures would assist in reducing impacts to scenic resources created by the cumulative scenario. However, where the existing natural basin and range landscape still currently predominate, the industrial character

of spatially extensive, highly prominent wind and solar projects would come to strongly dominate, substantially degrading the existing visual character and quality. The resulting cumulatively considerable visual impact would be significant and unavoidable.

3) The proposed project would conflict with or obstruct implementation of the applicable air quality plan. Compliance with Eastern Kern County Air Pollution Control District (EKAPCD) Rule 402 and implementation of standard dust control procedures would substantially reduce effects on air quality resulting from the release of fugitive dust during construction. However; while mitigation measures would be implemented during construction of the project that would reduce emissions of criteria air pollutants, emissions of NO_X and PM_{10}, they would not be reduced below the EKAPCD significance threshold. Therefore, the proposed project would result in a significant and unavoidable impact for NOx and PM_{10} emissions during construction.

4) The proposed project would result in a cumulatively considerable net increase of a criteria pollutant for which the projects' region (EKADPC) is nonattainment under applicable federal or state ambient air quality standards (including released emissions that exceed quantitative thresholds for ozone precursors). There are a number of projects within a 6-mile radius that have the potential for overlapping construction schedules. The associated emissions of NOx and PM_{10}, when cumulatively considered, could be above the respective significance thresholds and therefore could result in significant impacts related to the generation of fugitive dust, particulate matter exhaust, and ozone precursors. However, given the project exceeds the EKAPCD standard for construction-related PM_{10} and NOx emissions, and the potential for cumulatively considerable impacts associated with construction-related NOx, construction of the project would result in a significant and unavoidable cumulative impact.

5) The proposed project would result in cumulative air quality impacts. Emissions from the simultaneous construction of multiple cumulative projects in conjunction with the proposed project could result in an exceedance of EKAPCD's annual and/or daily significance thresholds. Given that the project area is currently nonattainment of state standards for ozone and PM_{10}, which represents an existing adverse condition, and since the proposed project's construction emissions would exceed the EKAPCD annual threshold for NO_X and PM_{10}, the proposed project's contribution to air quality impacts related to construction would be cumulatively considerable, and the associated cumulative impact as it relates to CEQA would be significant and unavoidable even with implementation of mitigation measures.

6) The proposed project would result in cumulative biological resources impacts. There are a number of special-status species that currently utilize the project site and surrounding vicinity. Implementation of the project in addition to the other projects under way or proposed within Kern County would impact habitat for transient wildlife species, including burrowing owls, loggerhead shrike, yellow-headed blackbird, other raptors, migratory birds, and desert kit fox. The project site contains habitat that support insects, rodents, and small birds that provide a prey base for raptors and terrestrial wildlife. In addition, based on the literature review and database search completed for the project, the region is known to support a diversity of special-status species, most of which are expected to utilize the project site on at least a transient basis. Given the number of present and reasonably foreseeable future development projects in the Antelope Valley, the proposed project, when combined with other projects, would result in a significant and unavoidable cumulative loss of foraging and nesting habitat for special-status species even with implementation of mitigation measures.

7) The proposed project would result in the generation of a substantial temporary increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance. With project implementation, maximum noise levels generated by project construction equipment would range from approximately 74 to 88 dBA Lmax at a reference distance of 50 feet and average noise levels generated by project construction phases would range from approximately 79 to 95 dBA Leq at a reference distance of 50 feet. Sensitive land uses in the project site vicinity that would be exposed to project construction noise levels include the sparsely distributed residential dwellings that are in the vicinity of the project site. Chapter 8.36 of the Kern County Municipal Code includes established hours of construction and limitations on construction related noise impacts on adjacent sensitive receptors. Noise producing construction activities are prohibited between the hours of 9:00 p.m. and 6:00 a.m. on weekdays and 9:00 p.m. and 8:00 a.m. on weekends, when they are audible to a person with average hearing ability at a distance of 150 feet from the construction site, or if the construction site is within 1,000 feet of an occupied residential dwelling. Given the fact that construction activities could generate noise greater than the standard 65dB(a) for the Kern County General Plan and 55 dB(A) for short period of times, temporary construction and decommissioning impacts are considered significant and unavoidable even with implementation of mitigation measures.

8) The proposed project would result in cumulative noise impacts. The cumulative projects nearest to the project site are all either adjacent or close to the proposed project. Therefore, should construction of the proposed project and any of the cumulative projects occur currently, cumulative construction noise impacts would occur. As construction of the proposed project would result in significant and unavoidable impacts, the construction of the proposed project concurrently with the construction of adjacent and nearby cumulative projects, if it were to occur, would result in a cumulatively considerable contribution to construction noise impacts in the vicinity of the project. Therefore, the cumulative impact would be significant and unavoidable even with implementation of mitigation measures.

9) The proposed project would result in cumulative wildfire impacts. The project site is not classified as being within a high fire hazard severity zone, the project site is located in a rural, sparsely developed area with limited population, is not located along an identified emergency evacuation route or within an adopted emergency evacuation plan, and would be in compliance with Fire Code and Building Code requirements. Nevertheless, given the location in a rural area and limited infrastructure, the project and related projects have the potential to result in a cumulative impact related to conflicting with an adopted emergency response plan or emergency evacuation plan, exposing people to pollutant concentrations from a wildfire, the installation or maintenance of associated infrastructure, exposing people or structures to significant risks as a result of runoff, post-fire slope instability, or drainage changes and, thus, would result in a significant and unavoidable cumulative impact even with implementation of mitigation measures.

Findings

This Planning Commission finds and determines that it has considered the identified means of lessening or avoiding the project's significant effects and the extent any significant direct or indirect environmental effects, including cumulative project impacts, remain unavoidable or not reduced to below a level of significance after mitigation. The Planning Commission further finds and determines that the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits of the project, as discussed below, outweigh its unavoidable adverse environmental effects. Such

benefits override, outweigh, and make "acceptable" any such remaining environmental impacts of the project (*CEQA Guidelines* Section 15092(b)).

The following benefits and considerations outweigh the identified significant and unavoidable adverse environmental impacts. All of these benefits and considerations are based on the facts set forth in the findings, the Final EIR, and the record of proceedings for the project. Each of these benefits and considerations is a separate and independent basis that justifies approval of the project, so that if a court were to set aside the determination that any particular benefit or consideration would occur and justifies project approval, this Planning Commission would otherwise stand by its determination that the remaining benefit(s) or considerations are sufficient to justify and substantiate project approval.

Facts

Each benefit set forth below constitutes an overriding consideration warranting approval of the project, independent of the other benefits, and the Planning Commission determines that the adverse environmental impacts of the project are "acceptable" if any of these benefits would be realized. The project would provide benefits to the County of Kern as follows:

1) The proposed project would help to meet the increasing demand for clean, safe, renewable electrical power.

2) The proposed project would establish a solar PV power-generating facility and associated infrastructure that are of a sufficient size and configuration to produce approximately 128 MW of electricity and up to 60 MW of battery energy storage.

3) The proposed project would produce and transmit electricity at a competitive cost.

4) The proposed project would minimize environmental effects by:
   a) Using existing electrical distribution facilities, ROW, roads, and other existing infrastructure, where practicable;
   b) Minimizing impacts to threatened species and endangered species;
   c) Minimizing water use; and
   d) Reducing greenhouse gas emissions.

5) The proposed project would supply clean, safe, renewable energy.

6) The proposed project would support the economic development of Kern County, Los Angeles County, and the State of California.

7) The proposed project would produce and transmit electricity at a competitive cost and in a manner that is eligible for commercial financing.

8) The proposed project would assist the state of California in achieving the Renewable Portfolio Standard (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, by providing a significant new source of renewable energy (California State Assembly Bill [AB] 32, Senate Bill [SB] 1078, SB 107, SB 350, and SB 2).

9) The proposed project would enhance existing electrical distribution infrastructure and provide greater support to existing and future customer loads.

10) The proposed project would generate an estimated 220 construction jobs with a peak workforce of 450 workers and up to 12 full time equivalent (FTE) jobs on site, and provide increased business for local contractors and vendors.