



CALIFORNIA CORRECTIONAL INSTITUTION SOLAR PROJECT

INITIAL STUDY/
MITIGATED NEGATIVE DECLARATION

Lead Agency:

California Department of General Services

Project Applicant:

Forefront Power
100 Montgomery Street, Ste. 1400
San Francisco, CA 94104

ENVIRONMENT | PLANNING | DEVELOPMENT SOLUTIONS, INC.

2 Park Plaza, Suite 1120
Irvine, CA 92614

July 2019

Table of Contents

1	INTRODUCTION	1
1.1	PURPOSE OF THE INITIAL STUDY.....	1
1.2	DOCUMENT ORGANIZATION.....	2
2	PROJECT SETTING	3
2.1	PROJECT LOCATION.....	3
2.2	EXISTING LAND USES OF THE PROJECT SITE AND SURROUNDING AREA.....	3
3	PROJECT DESCRIPTION	3
3.1	PROPOSED PROJECT.....	3
3.2	CONSTRUCTION	5
3.3	PURPOSE AND NEED.....	5
4	DISCRETIONARY APPROVALS	9
5	ENVIRONMENTAL CHECKLIST	9
5.1	ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED	9
5.2	DETERMINATION	10
5.3	ENVIRONMENTAL CHECKLIST QUESTIONS.....	12
1.	AESTHETICS.....	12
2.	AGRICULTURE AND FORESTRY RESOURCES	15
3.	AIR QUALITY	18
4.	BIOLOGICAL RESOURCES	21
5.	CULTURAL RESOURCES	25
6.	ENERGY	27
7.	GEOLOGY AND SOILS	29
8.	GREENHOUSE GAS EMISSIONS	33
9.	HAZARDS AND HAZARDOUS MATERIALS.....	36
10.	HYDROLOGY AND WATER QUALITY.....	40
11.	LAND USE AND PLANNING	45
12.	MINERAL RESOURCES	47
13.	NOISE	48
14.	POPULATION AND HOUSING	52
15.	PUBLIC SERVICES.....	53
16.	RECREATION	55
17.	TRANSPORTATION	56
18.	TRIBAL CULTURAL RESOURCES	59
19.	UTILITIES AND SERVICE SYSTEMS.....	62
20.	WILDFIRES	65
21.	MANDATORY FINDINGS OF SIGNIFICANCE.....	67
6	DOCUMENT PREPARERS AND CONTRIBUTORS	69

Figures

Figure 1: Regional Location4
Figure 2: Aerial of Project Site4
Figure 3: Proposed Site Plan.....8

Tables

Table PD-1: Construction Schedule5
Table AQ-1: Construction Emissions 19
Table AQ-2: Operational Emissions..... 20
Table GHG-1: Project Total GHG Emissions..... 34
Table N-1: Typical Construction Equipment Noise Levels..... 49
Table N-2. Vibration Source Levels for Construction Equipment 50
Table N-3 - Human Response to Vibration 50

Appendix

- A Air Quality and Greenhouse Gas Memorandum
- B Biological Habitat Assessment
- C Phase I Cultural and Paleontological Assessment
- D Geotechnical Engineering Investigation Report
- E Phase 1 Environmental Site Assessment
- F Construction Trip Generation

1 INTRODUCTION

1.1 PURPOSE OF THE INITIAL STUDY

This Initial Study has been prepared in accordance with the following:

- California Environmental Quality Act (CEQA) of 1970 (Public Resources Code Sections 21000 et seq.); and
- California Code of Regulations, Title 14, Division 6, Chapter 3 (State CEQA Guidelines, Sections 15000 et seq.).

Pursuant to CEQA, this Initial Study has been prepared to analyze the potential for significant impacts on the environment resulting from implementation of the proposed solar photovoltaic power plant project. As required by State CEQA Guidelines Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency, the Department of General Services (DGS), in consultation with other jurisdictional agencies, to determine if a Mitigated Negative Declaration (MND) or an Environmental Impact Report (EIR) is required for the project.

This Initial Study informs DGS decision-makers, affected agencies, and the public of potentially significant environmental impacts associated with the implementation of the project. A “significant effect” or “significant impact” on the environment means “a *substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project*” (Guidelines §15382). As such, the DGS’ intent is to adhere to the following CEQA principles:

- Provide meaningful early evaluation of site planning constraints, service and infrastructure requirements, and other local and regional environmental considerations. (Pub. Res. Code §21003.1)
- Encourage the applicant to incorporate environmental considerations into project conceptualization, design, and planning at the earliest feasible time. (State CEQA Guidelines §15004[b][3])
- Specify mitigation measures for reasonably foreseeable significant environmental effects and commit DGS and the applicant to future measures containing performance standards to ensure their adequacy when detailed development plans and applications are submitted. (State CEQA Guidelines §15126.4)

Existing Plans, Programs, or Policies (PPPs)

Throughout the impact analysis in this Initial Study, reference is made to requirements that are applied to all development on the basis of federal, state, or local law, and Existing Plans, Programs, or Policies currently in place which effectively reduce environmental impacts. Existing Plans, Programs, or Policies are collectively identified in this document as PPPs. Where applicable, PPPs are listed to show their effect in reducing potential environmental impacts. Where the application of these measures does not reduce an impact to below a level of significance, a project-specific mitigation measure is introduced. DGS will include these PPPs along with mitigation measures in the Mitigation Monitoring and Reporting Program (MMRP) for the project to ensure their implementation.

1.2 DOCUMENT ORGANIZATION

This IS/MND includes the following sections:

Section 1.0 Introduction

Provides information about CEQA and its requirements for environmental review and explains that an Initial Study/MND was prepared by DGS to evaluate the proposed project's potential to impact the physical environment.

Section 2.0 Project Setting

Provides information about the proposed project's location.

Section 3.0 Project Description

Includes a description of the proposed project's physical features and construction and operational characteristics.

Section 4.0 Discretionary Approvals

Includes a list of the discretionary approvals that would be required by the proposed project.

Section 5.0 Environmental Checklist

Includes the Environmental Checklist and evaluates the proposed project's potential to result in significant adverse effects to the physical environment.

Section 6.0 Document Preparers and Contributors

Includes a list of the persons that prepared this IS/MND.

2 PROJECT SETTING

2.1 PROJECT LOCATION

The project site is located within State land adjacent to the California Correctional Institution (CCI) within the city of Tehachapi in Kern County. CCI is located at 24900 Highway 202, which is the western terminus for State Route (SR) 202, as shown in Figure 1. Local and regional access to the project area is from SR-202. The project is located on the Cummings Mountain USGS 7.5-minute quadrangles, within Section 29 of Township 32 South, Range 32 East.

2.2 EXISTING LAND USES OF THE PROJECT SITE AND SURROUNDING AREA

The project site consists of undeveloped vacant land that is located to the northeast and east of the CCI facility and an existing solar field, as shown in Figure 2. The CCI is located in the city of Tehachapi; however, it is located approximately 3 miles west of the urbanized portions of the city and is completely surrounded by undeveloped vacant land. The Tehachapi General Plan identifies the CCI as Planning Area 6 and states that the CCI is not further addressed in the General Plan.

3 PROJECT DESCRIPTION

3.1 PROPOSED PROJECT

The project would install and operate photovoltaic solar power generation facilities totaling approximately 4 MW_{ac} (subject to final design and site optimization) on approximately 28 acres of undeveloped land that is adjacent to the CCI, adjacent to existing solar array fields. The project has been designed to avoid and/or minimize potential significant environmental impacts.

The solar systems would be configured into two separate areas of arrays, located to avoid impacts to drainage and natural resource features identified during on-site environmental surveys. The north array area consists of approximately 13.5 acres and the south array area consists of 13.9 acres. The project includes installation of approximately 13,440 modules on ground-mounted solar arrays within the two areas that would convert sunlight to direct current (DC) electrical power which would then be converted to alternating current (AC) by string inverters before being delivered to the electrical system.

The solar system will utilize either fixed-tilt or single-axis tracking mounting technology to optimize efficiency and performance. Single-axis trackers are designed to rotate the arrays in the east-to-west plane to track the sun's movement across the horizon. The ground-mounted arrays would be supported on driven pipe piles, driven H-piles, or reinforced-concrete cast-in-drilled-hole (CIDH) piers, with the foundation design to be finalized following completion of on-site geotechnical surveys and structural engineering. Once installed, the ground-mounted solar arrays would be up to approximately 8 feet in height depending on the time of day to the extent a tracking system is utilized.

The electrical collection system is not expansive due to the contiguous nature of the site. Conduits and wires would be buried in trenches that run between rows and/or installed above-grade running

Figure 1: Regional Location

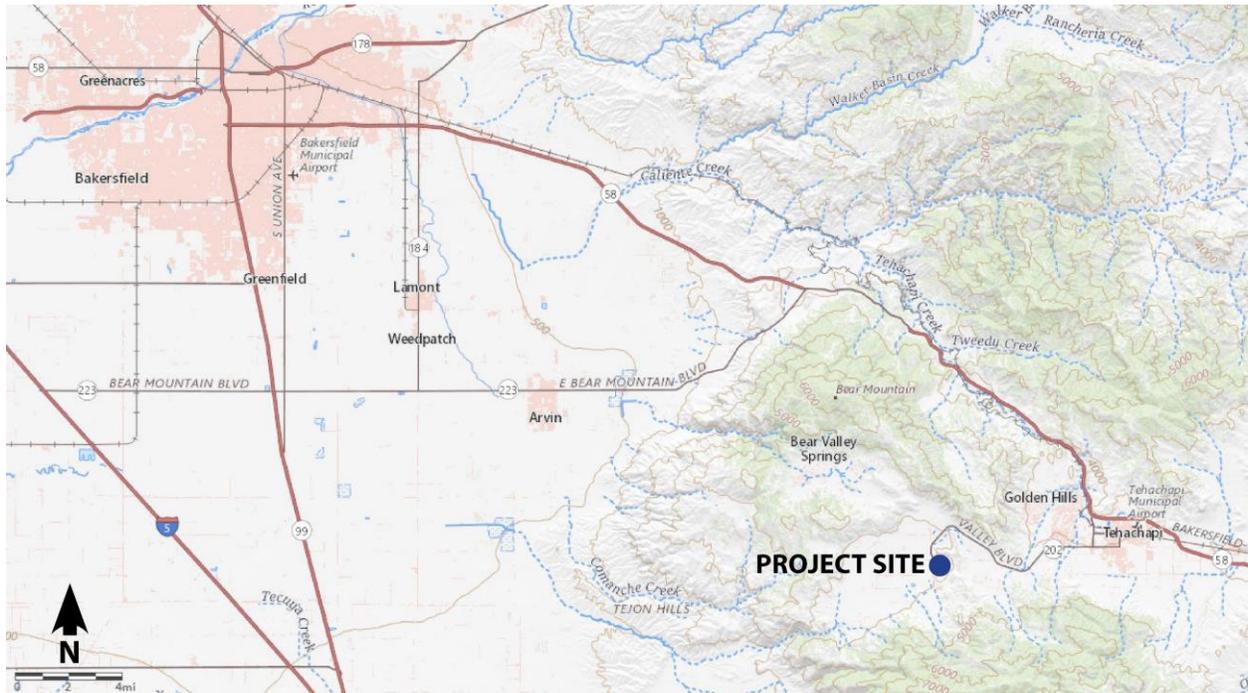
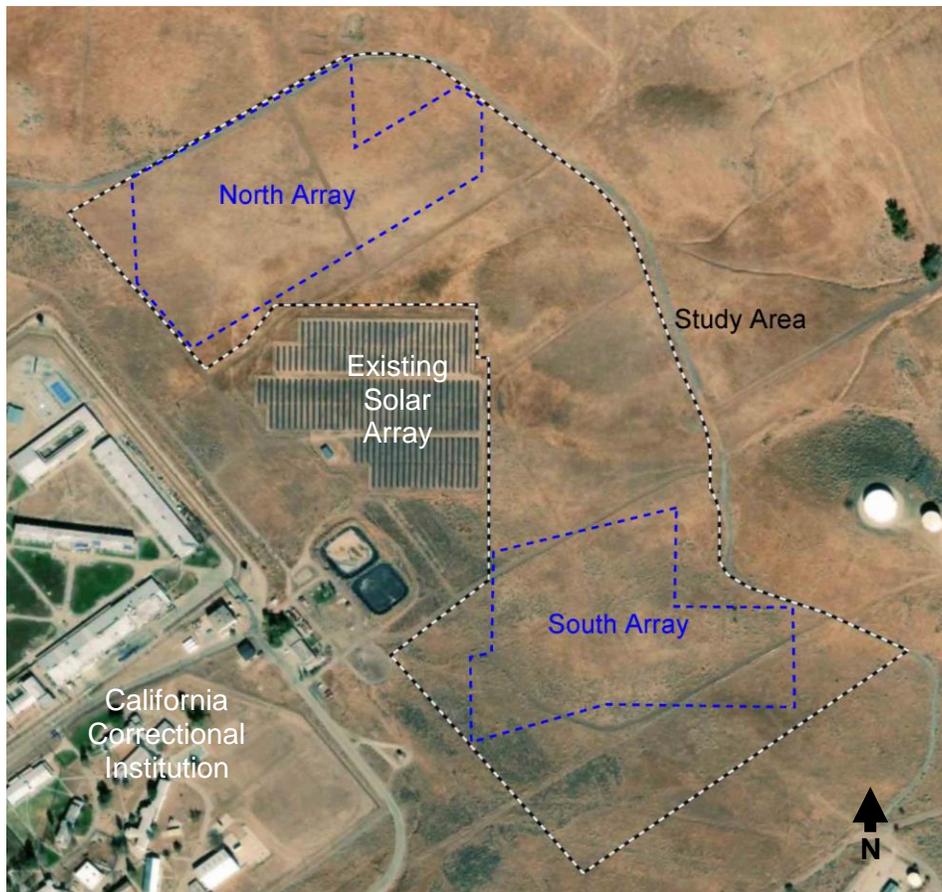


Figure 2: Aerial of Project Site



along the backside of strings to connect the output of each string to the inverters. String inverters would be attached to racking adjacent to each array to convert electricity from direct current to alternating current. The inverters then send alternating current electricity to on-site transformers to step the electricity up to the interconnection voltage of 12 kilovolts. The transformers are planned to be pad mounted. From the transformers, power lines will be buried underground to the point of interconnection where reclosers, metering, and other utility features will be installed prior to connecting with the electrical system. Alternatively, aboveground power lines may be used. Trenching will either be excavated and backfilled pending the final conduit size and equipment utilized or may be directionally drilled to avoid any existing natural resources or infrastructure features. Power generated by the project would be released into the electrical grid by a connection to Southern California Edison (SCE).

The project includes installation of 8-foot-high chain link fencing around the two solar array areas. The northeastern solar array area is surrounded by approximately 3,630 linear feet of fencing and the southeastern array area is surrounded by approximately 3,700 linear feet of fencing. Both areas would include a 20-foot-wide access gate, 20-foot setbacks from the fencing to the solar arrays, and a 20-foot-wide compacted native soil access road.

After construction, the facilities would be automated to allow operation with no staffing present. Production and system health data, as well as onsite weather data, would be monitored and gathered electronically. Washing of the solar panels, which would be necessary to maintain efficiency, is anticipated to occur approximately two times per year. Such maintenance would require temporary staffing onsite and use of a water truck. Additionally, maintenance staff would visit the site on an as-needed basis when dispatched by the offsite operations center, which would continuously monitor the system.

3.2 CONSTRUCTION

Construction of the project is anticipated to last a total of 4 months. As shown on Table PD-1 below, construction activities include mobilization, site preparation, and facility construction and panel installation. The site preparation process would include the clearing of vegetation and minimal grading. Thereafter, shallow trenching would occur to install cable conduit that would run between the solar units and connect the output of each unit to inverters and from the inverters to the step-up transformer. The arrays would be installed with pile driven foundation systems that would extend 5 to 15 feet below the ground surface and would limit soil disturbance in the project area, with the final foundation system subject to completion of structural engineering.

Table PD-1: Construction Schedule

Construction Phase	Total Working Days
Mobilization	10
Site Preparation	20
Construction and Panel Installation	45

3.3 PURPOSE AND NEED

The purpose of the project is to construct solar photovoltaic energy generation facilities that would produce emissions-free renewable energy for the state's power grid. The project aids in the reduction of criteria air pollutants and greenhouse gas emissions from power generation by

displacing polluting non-renewable sources of electricity generation, primarily natural gas. The project also aids in meeting renewable energy mandates established by the State's Renewables Portfolio Standard (RPS). Originally established in 2002, and most recently updated in 2018 by Senate Bill 100, the RPS requires retail sellers and publicly owned utilities to procure 60 percent of their electricity from eligible renewable energy resources by 2030 and requires all of the state's retail electricity supply to consist of zero-carbon resources by 2045.

Several policies, regulations, and standards have been adopted by the State of California to address global climate change issues. These include:

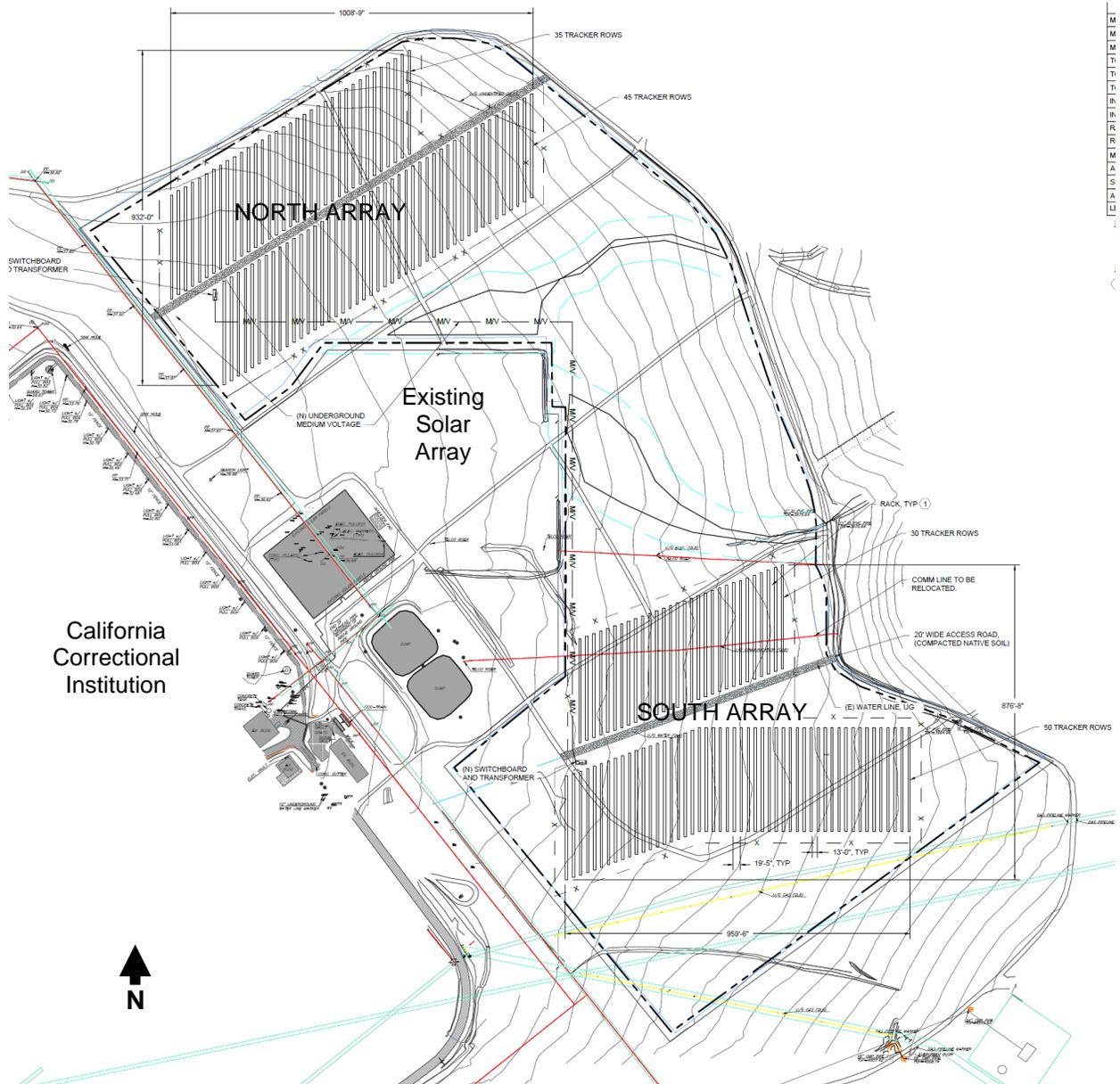
- Assembly Bill 32, the California Global Warming Solutions Act of 2006, requires California to reduce its greenhouse gas emissions to 1990 levels by 2020.
- Senate Bill 1368 of 2006 limits long-term investments in baseload generation by the state's utilities to power plants that meet an emissions performance standard for greenhouse gas emissions. The performance standard was established at 1,100 pounds of carbon dioxide per megawatt-hour.
- Governor's Green Building Order S-20-04, which mandates that State agencies evaluate the merits of using clean and renewable on-site energy generation technologies in all new building or large renovation projects. Incorporating solar PV technology supports energy reduction goals and achievement of Leadership in Energy and Environmental Design (LEED) building certifications from the U.S. Green Building Council.
- Governor's Executive Order S-03-05 establishes greenhouse gas emission reduction targets, creates the Climate Action Team, and directs the California Environmental Protection Agency (Cal/EPA) to coordinate efforts with meeting the targets with the heads of other state agencies.
- Governor's Executive Order S-20-06 establishes responsibilities and roles of Cal/EPA and state agencies in climate change.
- Governor's Executive Order S-01-07 establishes a 2020 target and Low Carbon Fuel Standard.
- Governor's Executive Order S-13-08 directs state agencies to plan for sea level rise and climate impacts through coordination of the state Climate Adaptation Strategy.
- Governor's Executive Order B-16-12 orders State agencies to facilitate the rapid commercialization of zero-emission vehicles.
- Governor's Executive Order B-18-12 calls for significant reductions in state agencies' energy purchases and greenhouse gas emissions. The Executive Order included a Green Building Action Plan.
- Governor's Executive Order B-30-15 requires California to reduce its greenhouse gas emissions to 40 percent below 1990 levels by 2030.
- Governor's Executive Order B-32-15 directs State agencies to develop an integrated freight action plan by July 2016. Among other things, the plan calls for targets for transportation efficiency and a transition to near-zero-emission technologies.
- Governor's Executive Order B-55-18 establishes a statewide goal of carbon neutrality no later than 2045, and to achieve and maintain net negative emissions thereafter.

To comply with policies, regulations, and standards that have been adopted by the State to address global climate change issues, DGS and other participating State agencies have created the Power Purchase Program. This program includes the installation of PV systems at State facilities. The PV

systems are installed, operated, and owned by third parties, in this case Forefront Power, who enter long-term power purchase agreements (PPAs) with the participating State agency.

Electricity generated by the project is contracted with DGS for use at the CCI. Excess electricity would be delivered to the existing power grid via an onsite interconnection with the SCE system.

Figure 3: Proposed Site Plan



M
M
M
T
T
T
I
N
R
R
R
M
A
S
A
L
L

4 DISCRETIONARY APPROVALS

The following discretionary approvals by the Department of General Services, as Lead Agency, are anticipated to be necessary for implementation of the proposed project:

- Adoption of a Mitigated Negative Declaration (MND)
- Approval of the proposed project

5 ENVIRONMENTAL CHECKLIST

This section includes the completed environmental checklist form. The checklist form is used to assist in evaluating the potential environmental impacts of the proposed project. The checklist form identifies potential project effects as follows: 1) Potentially Significant Impact; 2) Less Than Significant with Mitigation Incorporated; 3) Less Than Significant Impact; and, 4) No Impact. Substantiation and clarification for each checklist response is provided in Section 5 (Environmental Evaluation). Included in the discussion for each topic are standard condition/regulations and mitigation measures, if necessary, that are recommended for implementation as part of the proposed project.

5.1 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

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

Environmental Factors Potentially Affected

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

5.2 DETERMINATION
(To be completed by the Lead Agency) on the basis of this initial evaluation

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

Signature _____ Date _____

Printed Name _____ For _____

EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g. the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is

appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.

- 4) “Negative Declaration: Potentially Significant Unless Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Significant Impact.” The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from “Earlier Analysis,” as described in (5) below, may be cross-referenced).
- 5) Earlier analysis may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063 (c)(3)(d). In this case, a brief discussion should identify the following:
 - (a) Earlier Analysis Used. Identify and state where they are available for review.
 - (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - (c) Mitigation Measures. For effects that are “Less than Significant with Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g. general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project’s environmental effects in whatever format is selected.
- 9) The analysis of each issue should identify: (a) the significance criteria or threshold used to evaluate each question; and (b) the mitigation measure identified, if any, to reduce the impact to less than significance.

5.3 ENVIRONMENTAL CHECKLIST QUESTIONS

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

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

No Impact. Scenic vistas consist of expansive, panoramic views of important, unique, or highly valued visual features that are seen from public viewing areas. This definition combines visual quality with information about view exposure to describe the level of interest or concern that viewers may have for the quality of a particular view or visual setting.

The Tehachapi General Plan identifies hillsides and open space areas provide long-distance scenic views. Existing views of the Tehachapi Mountains can be seen from public roadways throughout the Tehachapi area, including SR-202.

The project site is located adjacent to existing solar infrastructure, to the northeast and east of the CCI. The project site is not within a scenic vista. However, long distance views of mountains can be seen from areas around the project site. The project would install solar equipment on the project site, which would not be seen from SR-202 or other roadways due to the low height of equipment, the significant setback (over 1/4 mile) of the solar array locations from the highway. In addition, the proposed solar equipment would be adjacent to existing solar facilities and would not hinder the existing public views of mountainsides.

Installation of the solar equipment on the site would be similar in character and height as the existing solar arrays and would be located near existing prison facilities. The project facilities would not hinder any scenic vistas or panoramic views. Therefore, the proposed project would not result in an adverse effect on a scenic vista.

b) Substantially damage scenic resources, including, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. The proposed project would not damage any scenic resources or historic buildings within a state scenic highway. There are no designated state scenic highways near the project site. The closest eligible state scenic highways (not officially designated) are portions of SR-14 and SR-58, north and east of the town of Mojave, over 24 miles east of the project site. As no designated state scenic highways are located in the region of the project site and no eligible state scenic highways are visible from the site, no impacts to state scenic highways would occur from implementation of the proposed project.

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

Less than Significant Impact. The project site is located in a non-urbanized area that is surrounded by undeveloped lands with exception of the CCI and the existing solar infrastructure. The proposed solar equipment would not be higher than the existing solar arrays or prison facilities, including the fences onsite. Because the project site contains vacant land that is adjacent to solar and prison facilities, impacts related to the degradation of the visual character or quality site and vicinity from installation of the proposed solar equipment would be less than significant.

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

Less than Significant Impact. The project would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area. The project uses dark photovoltaic solar cells, which absorb rather than reflect sunlight.

Lighting

Construction of the proposed project would generally occur during daytime hours and could occur as late as 6:00 p.m. in order to meet the construction schedule. No overnight construction would occur. In the event that work is performed between dusk and 6:00 p.m., the construction crew would only use the minimum illumination needed 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. As applicable, work in the solar field areas and on the distribution lines at night would be performed using light stands that would be directed to the active work area. Because lighting would be shielded and focused downward and lighting used to illuminate work areas would be turned off by 6:00 p.m., construction related lighting would be less than significant.

The proposed project could include small domestic light fixtures at equipment pads, as required by relevant electrical codes. No other lighting is planned. Cutoffs would be employed to prevent

spillover beyond the solar field. With the application of these typical construction methods, impacts related to lighting would be less than significant.

Glare

The reflection of sunlight would be the primary potential producer of glare off the glass surfaces of the solar panels in the proposed project. A solar panel comprises numerous solar cells. A solar cell differs from a typical reflective surface in that it has a microscopically irregular surface designed to trap the rays of sunlight for the purposes of energy production. The intent of solar technology is to increase efficiency by absorbing as much light as possible (which further reduces reflection and glare). Therefore, the project would result in less-than-significant impacts related to glare.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

California Department of Transportation, *California Scenic Highway Mapping System* [Map].
Accessed: http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm.

City of Tehachapi General Plan. Accessed: <https://www.liveuptehachapi.com/272/Planning-Documents>

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
---	---	---	----------------------

2. AGRICULTURE AND FORESTRY

RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

No Impact. The project site includes land that is designated as Urban and Built-Up Land by the California Department of Conservation's Farmland Mapping and Monitoring Program. The project site does not include prime farmland, unique farmland, or farmland of statewide importance. Therefore, the project would not cause the conversion of Farmland to non-agricultural use.

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

No Impact. The project site is not zoned for agricultural uses. The existing correctional institution has been present onsite since 1943 and no agricultural uses either exist or have historically occurred onsite. In addition, the site is not subject to a Williamson Act contract. Thus, the project would also not conflict with a Williamson Act contract, and no impacts would occur.

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

No Impact. The existing correctional institution has been present onsite since 1943 and no forest or timberland exists on or adjacent to the site. In addition, the site is not zoned for forest land, timberland, or timberland zoned Timberland Production; therefore, there would be no impact related to a conflict with such zones.

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

No Impact. The project site consists of vacant area adjacent to existing solar facilities and CCI. There is no forest land on the site. The project would not result in impacts related to the loss of forest land or conversion of forest land to non-forest use.

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

No Impact. As described in the previous responses, the project site does not contain existing agricultural uses or forest land. The project would not result in the conversion of farmland to non-agricultural use or forest land to non-forest use.

Existing Plans, Programs, or Policies

None.

Mitigation Measure

None.

Sources

California Department of Conservation, California Important Farmland Finder. Accessed:
<https://maps.conservation.ca.gov/dlrp/ciff/>

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

The discussion below is based on the Focused Air Quality and Greenhouse Gas Memorandum (AQ/GHG Memo), prepared by Urban Crossroads (included as Appendix A). The AQ/GHG Memo included modeling of construction- and operational-period air pollutant emissions using the California Emissions Estimator Model (CalEEMod).

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

No Impact. The project site is located in the portion of Kern County that is under the jurisdiction of the Eastern Kern Air Pollution Control District (EKAPCD). The EKAPCD and the Kern Council of Governments (Kern COG) are responsible for preparing the Air Quality Management Plan (AQMP), which addresses federal and state Clean Air Act (CAA) requirements. The AQMP details goals, policies, and programs for improving air quality in the Basin. In preparation of the AQMP, Kern COG and EKAPCD uses regional growth projections to forecast, inventory, and allocate regional emissions from land use and development-related sources. For purposes of analyzing consistency with the AQMP, if a proposed project would result in growth that is substantially greater than what was anticipated, then the project would conflict with the AQMP. On the other hand, if a project’s density is within the anticipated growth of a jurisdiction, its emissions would be consistent with the assumptions in the AQMP, and the project would not conflict with air quality attainment plans. In addition, the EKAPCD considers projects consistent with the AQMP if the project would not result in an increase in the frequency or severity of existing air quality violations or cause a new violation.

The proposed project involves the development of a solar facility adjacent to the CCI. The project would generate solar energy that would be conveyed to the SCE power grid and would not lead to any growth in population. In addition, as described in the response below, the project would not

result in emissions that would violate any air quality standard or contribute to an existing nonattainment. Therefore, the project would not conflict with or obstruct implementation of the AQMP, and impacts would not occur.

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

Less than Significant Impact.

Construction

Construction activities associated with the proposed project would generate pollutant emissions from site preparation and grading, construction workers traveling to and from project site, panel and other equipment installation, and the construction of equipment pads. The amount of emissions generated on a daily basis would vary, depending on the intensity and types of construction activities occurring and the equipment that is being utilized.

EKAPCD has established daily mass thresholds for regional pollutant emissions, which are shown in Table AQ-1. The AQ/GHG Memo evaluated development of a 3,625 kW project, which is 375 kW smaller than the proposed 4,000 kW project. As shown in Table AQ-1, emissions from construction of the 3,625 kW would be far below the significance thresholds—less than 10 percent of maximum daily emissions for each pollutant. Thus, construction of the additional 375 kW of solar arrays would also not result in a threshold exceedance. Therefore, construction of the project would result in a less-than-significant impact related to an air quality standard.

Table AQ-1: Construction Emissions

Construction Year	Emissions (tons per year)					
	VOC	NO _x	CO	SO _x	PM-10	PM-2.5
2019	0.15	1.39	1.03	<0.01	0.35	0.17
Maximum Annual Emissions	0.15	1.39	1.03	<0.01	0.35	0.17
Significance Threshold	25	25	--	27	15	--
Exceeds threshold?	No	No	No	No	No	No

Source: Urban Crossroads, 2018. Appendix A.

Operation

Operational emissions would be limited to vehicle trips related to maintenance and twice-yearly cleaning of the solar panels. The proposed solar facility would be unmanned and would not generate daily vehicle trips. However, it is conservatively assumed for air quality analysis purposes that 5 vehicle trips per day would occur, with trip lengths of 40 miles roundtrip. Table AQ-2 provides the emissions from these trips and compares them to EKAPCD significance thresholds. As shown, none of the significance thresholds would be exceeded. Therefore, operation of the project would result in a less-than-significant impact related to air quality standards.

Table AQ-2: Operational Emissions

	Emissions (tons per year)					
	VOC	NO _x	CO	SO ₂	PM-10	PM-2.5
Emissions	<0.01	0.02	0.02	<0.01	<0.01	<0.01
Significance Threshold	25	25	--	27	15	--
Exceeds threshold?	No	No	No	No	No	No

Source: Urban Crossroads, 2018. Appendix A.

c) Expose sensitive receptors to substantial pollutant concentrations?

No Impact. Sensitive air quality receptors can include uses such as residences, long-term health care facilities, rehabilitation centers, retirement homes, schools, playgrounds, child care centers, and athletic facilities. The proposed project would not exceed any applicable criteria pollutant thresholds during construction and on-going operational activities; therefore, sensitive receptors would not be subjected to a significant air quality impact during project construction. There is no impact related to the exposure of sensitive receptors to substantial pollutant concentrations.

d) Create objectionable odors affecting a substantial number of people?

No Impact. The proposed project would not create objectionable odors that would affect a substantial number of people. Solar energy generation is not odor-generating and would generate any objectionable odors. Potential odor generation associated with the proposed project would be limited to short-term construction sources such as diesel exhaust; however, these odors would be short-term and would not affect a substantial number of people. No impacts related to odors would occur from implementation of the project.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

California Correctional Institution Focused Air Quality and Greenhouse Gas Memorandum, prepared by Urban Crossroads, 2018.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
--	---	---	---	----------------------

4. BIOLOGICAL RESOURCES.

Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The discussion below is based on the Biological Habitat Assessment, prepared by Phoenix Biological Consulting (Bio 2019) (included as Appendix B). Comments on the project received from the California Department of Fish and Wildlife (CDFW, Lisa Gymer, October 11, 2018) and the U.S. Fish and Wildlife Service (USFWS, Jill-Marie Seymour, September 28, 2018) have been incorporated into the project. CDFW identified the potential for the project to impact jurisdictional waters. In response, an evaluation of potential jurisdictional waters was prepared, and the site plan was revised to relocate all solar panels and other equipment outside of these drainages and a 50-foot buffer. CDFW also recommended biological surveying for species that have the potential to be present on site; such surveying has been completed and the results are incorporated in this document as Appendix B. CDFW recommended pre-construction nesting bird surveys be conducted;

these are required by Mitigation Measure BIO-1. USFWS noted that federally endangered California condors have been documented in the vicinity of the project area in recent years, and recommended various measures to minimize impacts to this species. In response, the project's power line has been placed underground, thereby avoiding the potential for electrocution of birds to occur. If the project instead incorporates aboveground power lines, such lines would be approximately 12 kV in capacity, which is a small-scale line, low in height (generally 35 feet or less). Lines of this scale have not been identified as posing a risk for condor collisions.

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

No Impact. A Biological Habitat Assessment was prepared for the proposed project, which included a literature search to identify special status plants, wildlife, and habitats known to occur in the vicinity of the project site. General plant and wildlife surveys were also conducted to identify any biological resources on or adjacent to the project site. An analysis of the habitat requirements for each regionally occurring special-status species was completed and compared to the type and quality of habitats observed on site during the field surveys. The potential for many species to occur within the project area was eliminated due to lack of suitable habitat, elevation, lack of appropriate soils/substrate, and/or known distribution of the species.

As described in the Biological Habitat Assessment, the site is covered with highly disturbed rubber rabbitbrush scrub vegetation. The Biological Habitat Assessment determined that due to lack of suitable habitat no sensitive plant or wildlife species have a potential to occur within the project site. As a result, impacts related to special status plant and wildlife species would not occur.

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

No Impact. The project site consists of undeveloped land. The Biological Habitat Assessment identified that the project site does not contain any riparian habitat or any other sensitive natural community (Bio 2019). Therefore, the project would not result in impacts on riparian habitats or other sensitive natural communities.

c) Have a substantial adverse effect on state or federally protected wetlands through direct removal, filling, hydrological interruption, or other means?

Less than Significant Impact. The project site consists of undeveloped land. Potential drainage features were mapped in Exhibit 7 of the Biological Habitat Assessment. The project site plan was designed to avoid placing solar panels or other equipment within these drainages, plus a 50-foot buffer. The project site (north array and south array) therefore does not contain any drainages, creeks, rivers, or other wetland areas. The project site does not contain any jurisdictional areas that would be subject to permitting under state or federal regulations.

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

Less than Significant Impact with Mitigation Incorporated. The project site is adjacent to existing solar infrastructure and the CCI. The site is relatively isolated due to surrounding undeveloped lands and existing solar array fields. Due to the limited presence of existing wildlife corridors, it is not anticipated the project would have an impact on such corridors.

Bird deaths have been reported at solar power collection facilities in California. The deaths of migrating waterfowl and other birds have been postulated to occur as a result of a “lake effect,” where birds may mistake reflections from massed solar arrays for water. According to this hypothesis, upon landing, the birds are either killed instantly by direct impact, injured and directly preyed upon, or are injured and unable to become airborne again and die of exposure and starvation.

The characteristics of the proposed project minimize the potential for lake effect impacts. The proposed project technology includes PV modules specifically designed to absorb light, rather than reflect it. PV modules are dark in color and have a coating that enables the panels to absorb as much available light as possible. In addition, the project plan is based on using horizontal single-axis tracking (HSAT) systems to eliminate panel shading and to track the sun across the sky, with the intent to maximize electrical power output at the beginning and end of the day. HSAT arrays are designed with slightly greater spacing between individual arrays, meaning that more of the ground between each of the arrays will be visible from above, causing the solar field to look less monolithic or less like a lake. The array fields have 20-foot-wide access road separation and the arrays would provide approximately 6 feet between rows of panels when they are closest to each other, parallel to the ground (a condition that would not occur routinely, as the panels would be tilted to the south to maximize exposure to the sun). When the panels are tilted, the distance between rows is larger and the amount of earth visible is increased. This design ensures that, from the air, the site would be visually distinct from a lake or other body of water. For these reasons, potential impacts associated with lake effect would be less than significant.

It is noted that the CCI facility contains electrified fences, in place since before 1999. If the proposed project attracted birds due to the lake effect, such birds would have a higher potential for electrocution by coming into contact with the existing electrified fences. As described above, the project’s design would not attract birds and would therefore result in a less-than-significant impact related to the death of birds via electrified fencing after being attracted to the site as a result of the lake effect.

The highly disturbed rubber rabbitbrush scrub vegetation that covers the project site could have the potential to provide nesting habitat for various bird species that are protected by the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code, which make it unlawful to collect, sell, pursue, hunt, or kill native migratory birds, their eggs, nests, or any parts thereof. The laws were adopted to eliminate the commercial market for migratory bird feathers and parts, especially those of larger raptors and other birds of prey. The potential for encounter and to disrupt these species is highest during their nesting season when nests are likely to be active, and eggs and young are present. Therefore, Mitigation Measure BIO-1 is included to require a pre-construction survey for nesting birds if project construction occurs during the avian nesting season (between February 15 and August 15). With implementation of Mitigation Measure BIO-1, impacts related to native wildlife nursery sites would be less than significant.

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

No Impact. The City of Tehachapi does not have any local policies protecting biological resources, such as a tree preservation ordinance related to the project site. There are no other applicable policies protecting biological resources. No impacts would occur.

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

No Impact. CCI is included within the Statewide Electrified Fence Project Habitat Conservation Plan (HCP), adopted in 1999 and covering 29 prisons across California. The project does not add or modify any existing electrified fencing, and it would not change conditions on the site in any way that would conflict with the HCP. There would be no impact related to a conflict with an HCP or NCCP.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

Mitigation Measure BIO-1. Preconstruction Nesting Bird Survey. All vegetation clearing shall occur outside of the breeding bird season (February 15 to August 15) to reduce the potential to impact an active nest. If clearing activities cannot be avoided during the breeding season, all suitable habitats shall be thoroughly surveyed for the presence of nesting birds by a qualified biologist with experience identifying local and migratory bird species and conducting bird surveys using appropriate survey methodology within 7 days prior to initial ground disturbing activities. Suitable nesting habitat on the project site includes all vegetation. If any active nests are detected, the area shall be delineated to ensure its location is known by all persons working within the vicinity, but shall not be marked in such a manner that it attracts predators. A biologist shall immediately establish a conservative buffer surrounding the nest based on their best professional judgement and experience. The nest will be monitored at the onset of project activities and at the onset of any changes in project activities to determine the efficacy of the buffer and shall adjust accordingly. The nest shall be avoided until the nesting cycle is complete or it is determined by the biological monitor that the chicks have fledged the nest and the nest is no longer active. If there is a two-week or longer lapse in site clearing activities and construction is restarted during the breeding bird season, nesting bird surveys shall be repeated unless the project biologist determines no additional surveying is required on the basis of site conditions.

Sources

Biological Habitat Assessment, prepared by Phoenix Biological Consulting, 2019.

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

The discussion below is based on the Phase I Cultural and Paleontological Assessment prepared by Material Culture Consulting in 2019 (MCC 2019) (included as Appendix C). Preparation of the reports included cultural records searches, background research, and a pedestrian field survey.

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

No Impact. The project site is a vacant and undeveloped area that is adjacent to existing solar array fields and the CCI. The literature review and pedestrian survey conducted by the Phase I Cultural and Paleontological Assessment did not identify any historical resources within the project area. Thus, the project would not result in impacts to historical resources.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

Less than Significant Impact with Mitigation Incorporated. The Phase I Cultural and Paleontological Assessment identified two archaeological resource previously recorded within a one-mile radius of the project site. The project area has a low sensitivity for the presence of prehistoric or historical archaeological deposits or features (MCC 2019). In addition, project excavation activity is limited to shallow trenching for conduit and drilling/pile driving for installation of solar panels. Thus, it is unlikely that crews would encounter significant cultural resources during the course of project development. However, Mitigation Measure CUL-1 is included to provide a plan to expediently address any inadvertent discoveries of buried archaeological resources, if encountered during construction. This mitigation measure requires the halting of work within 50 feet of the find until it can be evaluated by an archaeologist. With the implementation of this mitigation measure, the project would result in a less-than-significant impact related to archaeological resources.

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

Less than Significant Impact. The project site is a vacant and undeveloped area that is adjacent to existing solar array fields and the CCI. As described previously, the project has been previously disturbed, and the proposed project would involve limited ground disturbance from pile installation and does not involve excavation or substantial grading activities that could unearth human remains. Also, no evidence of the burial of human remains at the site was identified in literature reviews or during the pedestrian survey. Existing regulations in the Health and Safety Code, Public Resources Code, and California Code of Regulations regulates the procedure for the proper handling of unidentified human remains; this process is summarized in PPP CUL-1. With the implementation of this PPP, impacts related to the disturbance to any human remains, including those interred outside of formal cemeteries, would be less than significant.

Existing Plans, Programs, or Policies

The following PPP is incorporated into the project and would reduce impacts related to cultural resources. This action will be included in the project's mitigation monitoring and reporting program:

PPP CUL-1. Human Remains. Procedures of conduct following the discovery of human remains on non-federal lands have been mandated by California Health and Safety Code §7050.5, California Public Resources Code §5097.98, and California Code of Regulations (CCR) §15064.5(e). Should human remains be encountered, all work in the immediate vicinity of the burial must cease, and any necessary steps to insure the integrity of the immediate area must be taken. The Kern County Coroner will be immediately notified. The Coroner must then determine whether the remains are Native American. If the Coroner determines the remains are Native American, the Coroner has 24 hours to notify the NAHC, who will, in turn, notify the person they identify as the most likely descendent (MLD) of any human remains. Further actions will be determined, in part, by the desires of the MLD. The MLD has 48 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 48 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC.

Mitigation Measures

Mitigation Measure CUL-1. Inadvertent Discoveries. In the event that archaeological resources are inadvertently discovered during ground-disturbing activities, work must be halted within 50 feet of the find until it can be evaluated by a qualified archaeologist. Construction activities could continue in other areas. If the discovery proves to be significant, additional work, such as data recovery excavation or fossil recovery, may be warranted and would be discussed in consultation with the appropriate regulatory agency(ies).

Sources

Phase I Cultural and Paleontological prepared by Material Culture Consulting in 2019 (MCC 2019).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6. ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

No Impact. The project would utilize energy from construction activities by use of construction equipment and construction workers traveling to and from project site. The amount of energy used on a daily basis would vary, depending on the intensity and types of construction activities occurring and the equipment that is being utilized. However, construction activities would be limited and short term in length (3 months). Also detailed in Section 8, *Greenhouse Gas Emissions*, the amount of energy (shown in terms of GHG emissions) generated from construction activities would be limited and would not have the potential to result in a significant impact on the environment.

Operation of the project involves generation of 4 MW renewable energy. Any energy produced by the project that is not used by the CCI would be released into the electrical grid by a connection with SCE. Thus, the project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, and impacts would not occur.

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

No Impact. As described previously, the project involves generation of 4 MW of renewable energy. Any energy produced by the project that is not used by the CCI would be released into the electrical grid by a connection with SCE. The project aids in meeting the renewable energy mandates established by the State’s RPS. The RPS requires retail sellers and publicly owned utilities to procure 60 percent of their electricity from eligible renewable energy resources by 2030 and requires all of the state’s retail electricity supply to consist of zero-carbon resources by 2045. In addition, the project would assist the State in its goals for renewable energy as set forth by AB 32. Therefore, the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

California Correctional Institution Focused Air Quality and Greenhouse Gas Memorandum, prepared by Urban Crossroads, 2018.

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

The discussion below is based on the Geotechnical Engineering Investigation Report, prepared by BSK Associates in 2018 (GEO 2018) (included as Appendix D) and the Phase I Cultural and Paleontological Assessment, prepared by Material Culture Consulting in 2019 (MCC 2019) (included as Appendix C).

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

- i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?**

No Impact. The project site does not contain and is not in the vicinity of an earthquake fault, is not affected by a state-designated Alquist-Priolo Earthquake Fault Zone. The closest active fault to the project site is the White Wolf fault, which is located approximately 10.9 miles northwest the site and the San Andreas fault zone (Cholame-Carrizo section), located approximately 32.4 miles southwest of the site (GEO 2018) Thus, impacts related rupture of a known earthquake fault would not occur.

- ii. Strong seismic ground shaking?**

Less than Significant Impact. The project site is within a seismically active region and is potentially subject to strong ground acceleration from earthquake events along major regional faults. The proposed project would be unmanned and would not include any habitable structures. Further, the structures installed on the site would comply with the applicable standards of the California Building Code (CBC), including, as appropriate, a site-specific geotechnical analysis. This requirement is incorporated into the project as PPP GEO-1. With the application of PPP GEO-1, impacts related to the exposure of people or structures to substantial adverse effects from strong seismic ground shaking would be less than significant.

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

Less than Significant Impact. Soil liquefaction is a phenomenon in which saturated, cohesionless soils layers, located within approximately 50 feet of the ground surface, lose strength due to cyclic pore water pressure generation from seismic shaking or other large cyclic loading. During the loss of stress, the soil acquires “mobility” sufficient to permit both horizontal and vertical movements. Soil properties and soil conditions such as type, age, texture, color, and consistency, along with historical depths to ground water are used to identify, characterize, and correlate liquefaction susceptible soils.

The project site does not have high groundwater levels. The Geotechnical Engineering Investigation describes that the historic high groundwater in the vicinity of the project site is 64.3 feet below the ground surface (bgs) and that the site is underlain by gravelly silty sand, clayey silty sand, and silty clayey sand. In addition, the site is not mapped within a liquefaction zone (GEO 2018).

The proposed project would be an unmanned facility and would not include any habitable structures. Structures installed on the site would comply with the California Building Code, including, as appropriate, a site-specific geotechnical analysis. This requirement is incorporated into the project as PPP GEO-1. With the application of PPP GEO-1, impacts related to the exposure of people or structures to impacts from seismic-related ground failure, including liquefaction, would be less than significant.

iv. Landslides?

No Impact. The proposed project would not have any risks associated with landslides. Landslides are the downslope movement of geologic materials. The stability of slopes is related to a variety of factors, including the slope's steepness, the strength of geologic materials, and the characteristics of bedding planes, joints, faults, vegetation, surface water, and groundwater conditions. The project site is an undeveloped area that is not identified as a landslide hazard zone (GEO 2018) and is not adjacent to any steep hillsides that could result in landslides. Thus, impacts related to seismic-related landslide hazards would not occur.

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

Less than Significant Impact. Active construction sites are a source of topsoil erosion if site drainage is not controlled. The implementation of PPP WQ-1, requiring preparation of a Stormwater Pollution Prevention Plan (SWPPP) in compliance with NPDES standards, and including an Erosion & Sediment Control Plan, would minimize the risk of construction-period soil erosion or loss of topsoil. During operations, there would be no activity on the site that could cause soil erosion or the loss of topsoil. With the implementation of PPP WQ-1, impacts related to soil erosion and the loss of topsoil would be less than significant.

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

Less than Significant Impact. As described previously, the project site is a flat area that is not a risk related to landslides and not within an area of high groundwater levels or identified as a potentially liquefiable area, and effects related to liquefaction and lateral spreading would not occur. The proposed project would be an unmanned facility and would not include any habitable structures. Additionally, the solar equipment installed on the site would comply with the applicable standards of the California Building Code, including, as appropriate, a site-specific geotechnical analysis. This requirement is incorporated into the project as PPP GEO-1. With the application of PPP GEO-1, potential impacts related to unstable geologic units or soils resulting in on- or offsite landslides, lateral spreading, subsidence, liquefaction, or collapse would be less than significant.

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

Less than Significant Impact. Expansive soils contain significant amounts of clay particles that swell when wet and shrink when dry. The onsite soils contain fine to coarse grained gravelly silty sand in the upper 5 feet. The material varies from gravelly silty sand, clayey silty sand, and silty clayey sand through out to the bottom of the boreholes (GEO 2018). The Geotechnical Engineering Investigation determined that the onsite soils have a low expansion potential. In addition, the proposed project would be an unmanned facility and would not include any habitable structures. The solar equipment installed on the site would comply with the California Building Code, including a site-specific geotechnical analysis. This requirement is incorporated into the project as PPP GEO-1. With the application of PPP GEO-1, impacts related to expansive soils would be less than significant.

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

No Impact. No septic tanks or alternative wastewater disposal systems are proposed. Hence, no impacts related to the use of such facilities would occur from implementation of the project.

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

Less than Significant Impact. The paleontological records search contained in the Phase I Paleontological Assessment did not identify any paleontological finds within the project area or within a one-mile radius, and no paleontological resources were identified during a pedestrian survey (MCC 2019). As the construction of solar power plants does not require deep excavations, there would be a less-than-significant impact related to the destruction of any unique paleontological resource. In addition, the site has no identified geologic features, and there would be no impact related to the destruction of such features.

Existing Plans, Programs, or Policies

The following PPPs are incorporated into the project and would reduce impacts related to geology and soils. These actions will be included in the project's mitigation monitoring and reporting program:

PPP GEO-1. Code Compliance. The project is required to comply with the California Building Standards Code. CBC-related and geologist and/or civil engineering specifications for the proposed project are required to be incorporated into construction plans and specifications as a condition of project approval.

PPP WQ-1. Stormwater Pollution Prevention Plan. Prior to the initiation of ground disturbance, the project developer shall have a Stormwater Pollution Prevention Plan (SWPPP) prepared by a QSD (Qualified SWPPP Developer) that shall incorporate all necessary Best Management Practices (BMPs) to comply with the National Pollutant Discharge Elimination System (NPDES) requirements to limit the potential of polluted runoff during construction activities. Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site to confirm compliance.

Mitigation Measures

None.

Sources

Geotechnical Engineering Investigation Report, prepared by BSK Associates (GIO 2018).

Phase I Cultural and Paleontological prepared by Material Culture Consulting in 2019 (MCC 2019).

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
--	---	---	---	----------------------

8. GREENHOUSE GAS EMISSIONS.

Would the project:

- | | | | | |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

The discussion below is based on the Focused Air Quality and Greenhouse Gas Memorandum, prepared by Urban Crossroads, included as Appendix A. The AQ/GHG Memo includes modeling of greenhouse gas emissions using CalEEMod.

Explanation

Constituent gases of the Earth’s atmosphere, called atmospheric greenhouse gases (GHGs), play a critical role in the Earth’s radiation amount by trapping infrared radiation from the Earth’s surface, which otherwise would have escaped to space. Prominent greenhouse gases contributing to this process include carbon dioxide (CO₂), methane (CH₄), ozone (O₃), water vapor, nitrous oxide (N₂O), and chlorofluorocarbons (CFCs). This phenomenon, known as the Greenhouse Effect, is responsible for maintaining a habitable climate. Anthropogenic (caused or produced by humans) emissions of these greenhouse gases in excess of natural ambient concentrations are responsible for the enhancement of the Greenhouse Effect and have led to a trend of unnatural warming of the Earth’s natural climate, known as global warming or climate change. Emissions of gases that induce global warming are attributable to human activities associated with industrial/manufacturing, agriculture, utilities, transportation, and residential land uses.

Section 15364.5 of the California Code of Regulations defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. Transportation is responsible for 37 percent of the state’s greenhouse gas emissions, followed by electricity generation. Emissions of CO₂ and N₂O are byproducts of fossil fuel combustion. Methane, a potent greenhouse gas, results from off-gassing associated with agricultural practices and landfills. Sinks of CO₂, where CO₂ is stored outside of the atmosphere, include uptake by vegetation and dissolution into the ocean.

California has passed several bills and the Governor has signed at least three executive orders regarding greenhouse gases. GHG statues and executive orders (EO) include AB 32, SB 1368, EO S-03-05, EO S-20-06 and EO S-01-07. These regulations require the use of alternative energy, such as solar power. Solar projects produce electricity with no GHG emissions and assist in offsetting GHG emissions produced by fossil-fuel-fired power plants.

GHG Thresholds

The EKAPCD has adopted a significance threshold for GHGs of 25,000 tons/yr. Construction activities of the proposed project would result in emissions of CO₂ and CH₄. Pursuant to EKAPCD methodology, GHGs are quantified and amortized over 30 years then added to the annual operational phase GHG emissions.

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

Less than Significant Impact.

Construction

Construction activities produce combustion emissions from various sources, such as site grading, heavy-duty construction vehicles onsite, equipment hauling materials to and from the site, and motor vehicles transporting the construction crew. Exhaust emissions from onsite construction activities would vary daily as construction activity levels change. The CalEEMod2016.3.2 computer model estimated that the construction activities for the proposed project would generate 10.4 MTCO_{2e} per year when amortized over 30 years.

Operations

Project operations would generate GHG emissions primarily as a result of worker vehicle trips. Additionally, the project's construction-related GHG emissions, amortized over 30 years, are added to the operational emissions estimate, per EKAPCD methodology, in order to determine the project's total annual GHG emissions. As shown in Table GHG-1, the project's total annual GHG emissions would be less than 20 MTCO_{2e} per year.

Table GHG-1: Project Total GHG Emissions

Consumption Source	MTCO_{2e} per year
Construction (amortized over 30 years)	10.43
Operation	9.15
Subtotal	19.58
Displaced Electricity Generation	-3,500.39
TOTAL NET GENERATION	-3,480.81
Threshold	25,000
Exceeds Threshold?	No

Source: Urban Crossroads, 2018. Appendix A.

The AQ/GHG Memo concluded that, based on generation of 3,625 kW, the solar energy generated from the project would result in a net reduction of 3,481 MTCO_{2e} per year of GHG emissions by avoiding generation of this electricity from other sources (e.g., natural gas). As the project has been increased in size by 375 kW (to a total 4,000 kW facility), the amount of clean electricity generation would increase, along with the offset of greenhouse gas emissions. Therefore, no adverse impacts related to greenhouse gas emissions would occur from implementation of the proposed project.

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

No Impact. The project would provide renewable energy and consequently would assist the State in its goals for renewable energy as set forth by AB 32. As such, the project would not conflict with the goals for AB 32 in reducing GHG emissions and no impacts would occur.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

California Correctional Institution Focused Air Quality and Greenhouse Gas Memorandum, prepared by Urban Crossroads, 2018.

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

The discussion below is based on the Phase 1 Environmental Site Assessment, prepared by Geo Tek, Inc. (ESA 2019), included as Appendix E.

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

Less than Significant Impact.

Construction

During construction, the project would involve the transport of general construction materials (i.e., concrete, metal, fuel, etc.) as well as the materials necessary to construct the proposed solar arrays. Construction activities would involve the limited use of hazardous materials such as fuels and greases for the fueling and servicing of construction equipment. Such substances may be stored in temporary storage tanks/sheds that would be located on the project site. Although these types of materials are not acutely hazardous, they are classified as hazardous materials and create the potential for accidental spillage, which could expose workers. The use, storage, transport, and disposal of hazardous materials for construction of the facility would be carried out accordance with federal and state regulations. No extremely hazardous substances (such as those governed under Title 40, Part 335 of the Code of Federal Regulations) would be used, stored, transported, or disposed of during project construction. Thus, impacts related to construction would be less than significant.

Operation

The solar panels and inverters would produce no waste during operation. Solar panels are in a solid and non-leachable state and should a solar panel break it would not be a source of pollution and would not result in pollutants in stormwater. Solar panels would be cleaned twice a year by spraying demineralized water on the panels to remove dust and other material buildup. Cleaning water would infiltrate into the ground or evaporate as it drips off the solar modules. No cleaning agents would be used during this process. Overall, the project would result in less than significant hazards related to the routine transport, use, or disposal of hazardous materials.

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

With the exception of construction-related materials such as fuels, lubricants, adhesives, and solvents, the proposed project would not generate or require the use or storage of hazardous substances. As described in the previous response, hazardous materials used in construction of the facility would done in compliance with federal and state regulations that limit potential risks related to upset and accident conditions. In addition, no extremely hazardous substances would be used, stored, transported, or disposed of during project construction. Thus, impacts related to the release of hazardous materials during construction would be less than significant

Operation

Also, as described in the previous response, operation of the solar facility would not utilize hazardous materials. The solar panels used in the proposed project consist of sealed collections of solar cells that require no chemicals and produce no waste materials. There is no a battery storage system contemplated, thus minimizing the need for transporting, using, or disposing of the hazardous materials that may be associated with the project. As such, impacts associated with a hazard to the public or the environment from the release of hazardous materials would not occur from operation of the project.

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

No Impact. There is no existing or proposed school within one-quarter mile of the project site. The closest school is the Cummings Valley School, located at 24220 Bear Valley Road, which is approximately 1.7 miles to the north of the project site. Thus, the project would not result in an impact related to hazardous emissions or the handling of hazardous materials, substances, or waste near a school.

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

No Impact. As verified by the California Department of Toxic Substances Control's database and the Phase 1 Environmental Site Assessment prepared for the project, the project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. There would be no significant hazard to the public or environment resulting from the site's presence on such a list.

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

No Impact. The project site is not within 2 miles of an airport. The closest airports are the Tehachapi Municipal Airport located approximately 6.8 miles northeast of the project site, and the Mountain Valley Airport located 7.2 miles southeast of the project site. The project site is not located within any airport land use plan, nor is it within an airport safety zone. In addition, the project site would be unmanned and would not generate permanent onsite employees. Therefore, impacts related to a safety hazard from airport operations would not occur from implementation of the project.

f) Impair implementation of an adopted emergency response plan or emergency evacuation plan?

No Impact. The project site is located adjacent on vacant state land adjacent to the CCI. The project does not involve substantial persons or traffic trips at the project site that could hinder or impair emergency response or evacuation. After construction, the project site would not require daily employees. Hence, the project would not impair implementation of an emergency response plan or emergency evacuation plan, and impacts would not occur.

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

Less than Significant Impact. The project site is located within an identified high fire hazard area by the Kern County Fire Hazard Map (CALFIRE 2019). However, the proposed solar facilities would be unmanned and would not result in additional persons on site. Thus, the project would result in less than significant impacts related to the exposure of people or structures to loss, injury, or death involving wildland fires.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

Phase 1 Environmental Site Assessment, prepared by Geo Tek, Inc.

California Department of Toxic Substances Control database. Accessed:
<https://www.envirostor.dtsc.ca.gov/public/>

Kern County Fire Hazard Map (CALFIRE 2019). Accessed:
https://www.fire.ca.gov/fire_prevention/fhsz_maps_kern

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

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

Less than Significant Impact. Operation of the proposed solar facilities would not require the regular use of water or produce any form of wastewater. Waste Discharge Requirements per the

Regional Water Quality Control Board (RWQCB) are not applicable to the project. As further explained below, the project would result in less-than-significant impacts related to the violation of water quality standards.

Construction

Implementation of the project has the potential to generate stormwater pollutants during the construction phase. Stormwater runoff from the project site could contain pollutants such as soils and sediments that are released during grading and excavation activities, as well as chemical and petroleum-related pollutants due to spills or leaks from heavy equipment and machinery. Other common pollutants that may result from construction activities include solid or liquid chemical spills; concrete and related cutting or curing residues; wastes from paints, sealants, solvents, detergents, glues, acids, lime, plaster, and cleaning agents; and heavy metals from equipment.

Hazardous materials (such as fuels, solvents, and coatings, among others) associated with construction activities would be stored and used in accordance with manufacturer's specifications and applicable hazardous material regulations. However, soil disturbance (from construction activities associated with site grading, mounting of the solar panels, equipment installation, electrical conduit trenching, and scraping for the access roads) could cause soil erosion and the eventual release of sediment into stormwater runoff.

The National Pollutant Discharge Elimination System (NPDES) permit program was established to control water pollution by regulating point sources that discharge pollutants into Waters of the U.S. Pursuant to Section 402(p) of the Clean Water Act (CWA), which requires regulations for permitting of certain stormwater discharges, the SWRCB issued the statewide NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Order No 2009-009-DWQ, as amended), which became effective on July 1, 2010.

Under this Construction General Permit, individual NPDES permits or Construction General Permit coverage must be obtained for discharges of stormwater from construction sites with a disturbed area of one or more acres and are required to either obtain individual NPDES permits for stormwater discharges or be covered by the Construction General Permit. Compliance with SWPPP requirements is incorporated into the project by PPP WQ-1, listed in Section 6.

Coverage under the Construction General Permit is accomplished by completing and filing Permit Registration Documents (PRDs) with the SWRCB prior to commencement of construction activities. Among the PRDs are a Risk Assessment, a Site Map, and a SWPPP. The primary objective of the SWPPP is to identify, construct, implement, and maintain BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges from the construction site during construction. The Construction General Permit requires dischargers to assess the risk level of a project based on both sediment transport and receiving water risk, and each project would then be categorized into Risk Level 1, 2, or 3, with increased monitoring required for certain higher-risk sites.

Pursuant to permit requirements, the applicant will be required to implement the BMPs outlined in the project's SWPPP, which would be implemented by PPP WQ-1, which would limit the potential of construction-related pollutants in stormwater runoff. Compliance with this requirement would ensure that temporary water quality impacts associated with construction activities would be less than significant.

Operation

During operations, the project would not require the use of chemicals, hazardous materials, or other pollutants that could impact waters. Panels would be washed twice per year by spraying a biodegradable cleaning solution to remove dust and other material buildup from the panels. The biodegradable solution would infiltrate into the ground or evaporate as it drips off the solar modules. No chemical cleaning agents would be used during this process.

The solar panels and inverters would produce no waste during operation. Solar panels are in a solid and non-leachable state. Thus, should any solar panels break, it would not be a source of pollution in stormwater. Therefore, operational-period impacts related to water quality would be less than significant.

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

Less than Significant Impact. The project would require a temporary source of water during the 4-month construction process. This limited and short-term use of water would not have the potential to substantially deplete groundwater supplies.

During operations, the solar facility would be unmanned. There would be no restrooms needed for the solar facility and no process water would be required. No water would be required for cleaning of modules, as a biodegradable cleaning solution would be delivered from an offsite manufacturer.

The project would include solar modules mounted on driven piles, subject to final structural design. The project would result in a minor increase in imperviousness at the site from installation of piles in the undeveloped portion of the project site, which would not significantly impede groundwater recharge. Due to the lack of need for water for the project and the lack of significant new impervious area, impacts related to the depletion of groundwater supplies or interference with groundwater recharge would be less than significant.

c) i) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

Less than Significant Impact. The project site does not include a stream, river, or creek, and the project would not involve any substantial alteration to the drainage pattern of the area. No major earth movement is required to place piles supporting the modules. Piles would be separated from each other and would therefore avoid creating an impervious surface that would substantially re-route storm flows; rather, water would flow around each pile and continue in the same direction that currently prevails. Furthermore, the piles would not result in a new source of erosion or siltation. Therefore, impacts related to alteration of the drainage pattern of the area or an increase in runoff that results in erosion, siltation, or flooding on- or offsite, would be less than significant.

c) ii) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less than Significant Impact. The project site does not include a stream, river, or creek, and the project would not involve any substantial alteration to the drainage pattern of the area. The project does not require significant grading. No major earth movement is required to place piles supporting the modules. Piles would be separated from each other and would therefore avoid creating an impervious surface that would substantially re-route storm flows; rather, water would flow around each pile and continue in the same direction that currently prevails. Furthermore, the piles would not result in a substantial increase in impervious surfaces. The project site is undeveloped and would remain pervious, with the exception of the piles, which would not be substantial. Therefore, impacts related to alteration of the drainage pattern or an increase in runoff that results in flooding on- or off-site would be less than significant.

- c) **iii) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

Less than Significant Impact. As described in the previous response, installation of the proposed solar equipment would not result in a substantial increase in impervious surfaces. The equipment installation area is undeveloped and would remain pervious, with the exception of the piles, which would not be substantial. Therefore, the project would not generate runoff that would exceed drainage facilities or provide substantial additional sources of polluted runoff, and impacts would be less than significant.

- c) **iv) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?**

No Impact. The Federal Emergency Management Agency (Panel 06029C2825E), shows that the project site is not within a 100-year flood hazard area. In addition, the piles installed by the project would be separated from each other and would not create an impervious surface that would impede or re-route storm flows; rather, water would flow around each pile and continue in the same direction that currently prevails. Thus, the project would not impede or redirect flood flows and impacts would not occur.

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

No Impact. As described in the previous response, the project site is not within a 100-year flood hazard area. In addition, the project site is not in proximity to any coastline and is therefore not subject to inundation by tsunami.

A seiche is an oscillating surface wave in a restricted or enclosed body of water generated by ground motion, usually during an earthquake. Inundation from a seiche can occur if the wave overflows a containment wall or the banks of a water body. The project site is not in proximity to any water body. Thus, potential impacts related to seiche would not occur. Overall, the project site is not located in a flood hazard, tsunami, or seiche zone, and risk of pollutant release related to these types of hazard zones would not occur.

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

Less than Significant Impact. The project would require a temporary source of water during the 4-month construction process. This limited and short-term use of water would not have the potential to substantially deplete groundwater supplies.

During operations, the solar facility would be unmanned. There would be no restrooms needed for the solar facility and no process water would be required. Water would be required twice per year for cleaning of modules, which would be trucked onto the site for efficient use at the solar panels. This may require up to 2 gallons per module per year. Based on the 13,440 solar modules proposed for the project, a water demand of 26,880 gallons per year would result from the project. This water would be imported to the site and would not be pumped from groundwater.

The project would include solar modules mounted on driven piles, subject to final structural design. The project would result in a minor increase in imperviousness at the site from installation of piles in the undeveloped portion of the project site, which would not significantly impede groundwater recharge. Due to the negligible amount of water required for the project and the lack of significant new impervious area, impacts related to the depletion of groundwater supplies or interference with groundwater recharge would be less than significant.

Existing Plans, Programs, or Policies

The following PPPs are incorporated into the project and would reduce impacts related to hydrology and water quality. These actions will be included in the project's mitigation monitoring and reporting program:

PPP WQ-1. Stormwater Pollution Prevention Plan. See *Section 7*.

Mitigation Measures

None.

Sources

Federal Emergency Management Agency Flood Map Service Center. Map Number 06029C2825E. Accessed: <https://msc.fema.gov>

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

a) Physically divide an established community?

No Impact. The physical division of an established community could occur if a major road (expressway or freeway, for example) were built through an existing community or neighborhood, or if a major development was built which was inconsistent with the land uses in the community such that it divided the community. The environmental effects caused by such a facility or land use could include lack of, or disruption of, access to services, schools, or shopping areas. It might also include the creation of blighted buildings or areas due to the division of the community.

The project site is located adjacent to existing solar facilities and the CCI. Off-site adjacent areas are undeveloped areas. No impact related to physically dividing an established community would occur from implementation of the proposed project.

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

No Impact. The project site is under the State of California and land use decision-making authority is vested with the Department of General Services. The project would install solar equipment adjacent to existing solar facilities and the CCI, which would convey electricity directly to the SCE grid to offset electricity demand from the prison facilities. Including additional solar facilities on the project site does not conflict with the existing land use of the project site. In addition, the project supports regulations related to the effects related to greenhouse gas generation, such as Senate Bill 350 of 2015, which mandated a Renewables Portfolio Standard of 50 percent by the year 2030. As a result, no impact related to a conflict with an applicable land use plan, policy, or regulation of an agency with jurisdiction over the project would occur from implementation of the proposed project.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

None.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

12. MINERAL RESOURCES. Would the project:

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

No Impact. As described previously, the proposed solar facilities would be located adjacent to the CCI in a vacant area that is not designated for mineral resource uses. Thus, implementation of the proposed project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the state, and impacts would not occur.

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

No Impact. The Tehachapi General Plan and California Department of Conservation mapping do not identify the project site as a locally-important mineral resource recovery site. Thus, implementation of the proposed project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on the general plan, and impacts would not occur.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

City of Tehachapi General Plan Accessed: <http://www.liveuptehachapi.com/272/Planning-Documents>

Department of Conservation Mineral Land Classification Mapping. Accessed: <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>

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

Tehachapi General Plan Community Safety Element: Noise

The City’s General Plan Community Safety Element: Noise, provides interior and exterior noise standards for residential uses, which limit interior noise at 45 dBA CNEL and exterior noise at 65 dBA CNEL.

Sensitive Receptors

The project site is in a remote area. The closest sensitive receptors are offsite residences that are located approximately over 0.5 mile to the east of the project site.

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

Less than Significant.

Construction

The proposed project would create noise during the 4-month construction process. The construction noise would be short-term and periodic in nature and generated by construction equipment, including trucks, graders, bulldozers, concrete mixers and portable generators, and pile drivers. Pile driving and grading equipment would cause the loudest noise levels. Minimal grading would be required for the proposed project. Construction noise levels generated by commonly-used grading equipment (i.e., loaders, graders, and trucks) generate noise levels that are identified in Table N-1.

Table N-1: Typical Construction Equipment Noise Levels

Construction Equipment	Noise Level at 50 Feet (dBA, L_{max})	Noise Level at 50 Feet (dBA, L_{eq})
Chain Saw	83.7	76.7
Compactor (Ground)	83.2	76.2
Concrete Pump Truck	81.4	74.4
Concrete Saw	89.6	82.6
Dozer	81.7	77.7
Dump Truck	76.5	72.5
Excavator	80.7	76.7
Front End Loader	79.1	75.1
Generator	80.6	77.6
Grader	85.0	81.0
Jackhammer	88.9	81.9
Paver	77.2	74.2
Pile Driver	101.0	95.0
Pneumatic Tools	85.2	82.2
Pumps	80.9	77.9
Scraper	83.6	79.6
Tractor	84.0	80.0

Source: FHWA, 2006.

Noise impacts would be significant if they caused a violation of any adopted standards. The project construction would occur during the daytime hours (7:00 a.m. to 6:00 p.m. Monday through Friday and 9:00 a.m. to 5:00 pm on Saturdays). However, the project is located in an incorporated island of the City of Tehachapi and is surrounded by unincorporated Kern County. Per Chapter 8.36.020 of the Kern County Code of Ordinances, construction noise audible to a person with average hearing faculties at a distance of 150 feet from the construction site is prohibited between 9:00 p.m. and 6:00 a.m. on weekdays and 9:00 p.m. and 8:00 a.m. on weekends, unless the construction site is located farther than 1,000 feet from an occupied residence. The project site is surrounded by vacant land and is within a rural portion of the County. The closest offsite sensitive receptors are more than ½ mile to the east. Therefore, impacts related to construction noise standards would not occur.

Operations

During operations, noise would be generated by inverters located within the solar field. Per manufacturer specifications, these inverters would generate noise levels of less than 55 dBA at a distance of 3 meters. The closest offsite sensitive receptors are more than ½ mile to the east. At this distance, inverter noise would not be audible and would be well below the maximum 65 dBA noise level criteria established by the City.

Additionally, during operations the facility would be unmanned, with no daily site visits by staff. Occasional visits by fewer than five staff persons for maintenance and twice annual cleaning that would result in a negligible noise increase and would be short-term and transitory. Therefore, operational noise impacts would be less than significant.

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

Less than Significant Impact. Groundborne vibration and groundborne noise would be generated from the pile driving activities during construction of the proposed project. Table N-2 presents typical vibration levels emanating from typical construction equipment. As detailed, at 50 feet from the pile driving activity, a peak particle velocity (PPV) of 0.300 would result, which would generate

the greatest vibration from construction activities. As shown on Table N-3, a PPV of 0.300 is in the lower end of the range for “distinctly perceptible” vibrations.

Table N-2. Vibration Source Levels for Construction Equipment

Equipment	PPV (in/sec) at 25 feet	PPV (in/sec) at 50 feet
Large Bulldozer	0.089	0.031
Loaded Trucks	0.076	0.027
Impact Pile Driving	0.644	0.300
Sonic Pile Driving	0.170	0.079
Jackhammer	0.035	0.012
Small Bulldozer	0.003	0.001

Source: FTA Transit Noise and Vibration Impact Assessment, 2006

Table N-3 - Human Response to Vibration

Average Human Response	ppv (in/sec)
Severe	2.000
Strongly perceptible	0.900
Distinctly perceptible	0.240
Barely perceptible	0.035

Source: Caltrans Transportation and Construction Vibration Guidance Manual, 2013.

The closest existing residence is over 1/2 mile from the project site. At this distance, the vibrations from the construction pile driving would not be perceptible and construction related vibration impacts would be less than significant.

During operations, no activities would occur that could generate significant groundborne vibration. Impacts related to both construction- and operational-period groundborne vibration and groundborne noise would be less than significant.

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

No Impact. The project site is not within 2 miles of an airport. The closest airports are the Tehachapi Municipal Airport located approximately 6.8 miles northeast of the project site, and the Mountain Valley Airport located 7.2 miles southeast of the project site. The project site is not located within any airport land use plan. In addition, the project site would be unmanned and would not generate permanent onsite employees. Therefore, impacts related to an exposure of people to noise from airport operations would not occur from implementation of the project.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

- Federal Highway Administration Construction Noise Handbook, 2006. Accessed:
https://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm
- City of Tehachapi Municipal Code. Accessed:
https://library.municode.com/ca/teahachapi/codes/code_of_ordinances
- U.S. Department of Transportation, Federal Transit Administration. (2006, May). *Transit Noise and Vibration Impact Assessment*. Accessed:
https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf
- City of Tehachapi General Plan Accessed: <http://www.liveuptehachapi.com/272/Planning-Documents>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
--	---	---	---	----------------------

14. POPULATION AND HOUSING.

Would the project:

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly?

No Impact. The project does not include housing or business, which would directly induce growth. The project includes installation and operation of solar power facilities on undeveloped land adjacent to the CCI. Solar power generation is consistent with policies adopted by the State of California to replace fossil-fuel power generation with renewable energy generation. The project would connect to the existing electricity grid and would not extend or expand infrastructure. Thus, indirect growth would not occur. Overall, there are no features of the project that would be expected to induce substantial population growth.

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

No Impact. The project site is located within an undeveloped State-owned land adjacent to the CCI. No housing would be displaced by implementation of the proposed project, and impacts would not occur.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

None.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
---	---	---	----------------------

15. PUBLIC SERVICES.

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

Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Result in substantial adverse physical impacts associated with the provision of 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?**
- Police protection?**
- Schools?**
- Parks?**
- Other public facilities?**

Fire Protection – Less than Significant Impact. The Kern County Fire Department provides fire services in the project area. The closest fire stations include:

- Station 16, approximately 6.7 miles from the project site at 28946 Bear Valley Road;
- Station 18, approximately 6.5 miles from the project site at 28381 Braeburn Drive;
- Station 13, approximately 8.6 miles from the project site at 21415 Reeves Street; and
- Station 12, approximately 8.7 miles from the project site at 800 S Curry Street.

The proposed project would install an unmanned solar facility. There would be no permanent onsite staffing that could require the need for emergency services. In addition, the project includes comprehensive safety measures that comply with federal and state worker safety and fire protection codes and regulations that would be verified during the permitting process, which would minimize the potential for fires to occur during project construction and operations. Therefore, impacts related to fire protection would be less than significant.

Police Protection – No Impact. The Tehachapi Police Department provides policing services throughout the city from its headquarters at 220 West C Street, which is approximately 9 miles east of the project site. As described in the previous response, the project site would be unmanned and would not have permanent staffing that could generate the need for police services. The project would include 8-foot security fencing around the panels and would be under the security supervision of the CCI staff. The fencing would have a 20-foot wide access gates to provide direct access for emergency equipment. The entry gates would have Knox locks or similar devices to allow 24-hour access for emergency responders. Therefore, the proposed project would not result in impacts related to police protection.

Schools – No Impact. Construction and operation of the project would place no demand on school services because it would not involve the introduction of housing to the project site, and the short-term demand for construction would not result in new residents to the area. In addition, the project site would be an unmanned facility and would require limited maintenance related employment needs. Thus, the project would not result in impacts on schools.

Parks – No Impact. As described in the previous response, the project does not involve housing. Short-term construction would not result in new residents to the area, and operation would require limited maintenance related employment needs. Thus, construction and operation of the project would not result in impacts related to parks.

Other Services – No Impact. Refer to the previous responses. The proposed project would not result in an increased resident population or a significant increase in the local workforce. Based on these factors, the proposed project would not result in any long-term impacts to other public facilities.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

Kern County Fire Department website. Accessed: <http://www.kerncountyfire.org/>

City of Tehachapi Police Department website. Accessed:
<http://www.liveuptehachapi.com/29/Tehachapi-Police-Department>

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
--	---	---	---	----------------------

16. RECREATION.

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that physical deterioration of the facility would be accelerated?

No Impact. Refer to Response 15. The proposed would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. No new residences would be constructed as part of the proposed project, and the project would not induce population growth. Thus, impacts related to recreation would not occur from implementation of the project.

b) Require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. As described in the previous response, the proposed would not develop residences or induce population growth. The project does not include or require the construction or expansion of recreational facilities. Thus, impacts related to recreation would not occur from implementation of the project.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

None.

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

The discussion below is based on the Construction Trip Generation prepared by EPD Solutions, Inc., included as Appendix F.

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

Less than Significant Impact. The Trip Generation Letter describes that during construction, a maximum of 274 passenger car equivalent (PCE) trips per day would occur, including a combination of passenger vehicles and large trucks. There would be up to 31 trips during the peak hour.

The project site is served by SR-202. SR-202 is a two-lane highway with a speed limit of 45 mph and provides access between the CCI and SR-58. According to Caltrans 2016 traffic volume data, SR-202 at Cummings Valley Road (between the CCI and SR-58) carries approximately 700 peak-hour and 8,850 daily trips. At the junction of SR-58, SR-202 carries approximately 1,200 peak-hour and 12,000 daily trips.

Approximately 59 percent of the peak hour trips travel in the peak direction during the both the a.m. and p.m. peak hour. As a result, the highest directional peak hour volume on SR-202 is approximately 708 trips. According to the Highway Capacity Manual, 6th Edition, the capacity of a two-lane highway is 1,700 passenger cars per hour (pc/h) in one direction with a limit of 3,200 pc/h for both directions. The peak hour volume of 708 vehicles near the project would result in the roadway operating at LOS A, well below the capacity of the roadway. The addition of 31 peak hour (PCE) trips would not cause a change in the LOS or the roadway to operate near its capacity.

These construction trips would be a temporary condition, lasting 4 months. Once the project is operational, project trips would not occur on a daily basis. Project trips generated by maintenance

or panel washing would be nominal and would likely not be noticeable by users of the roadway network. Hence, the project would result in less than significant impacts.

In addition, the project would not modify any bicycle paths, pedestrian pathways, or transit facilities. Also, construction and operation of the project would not result in additional bicycle, pedestrian or transit trips. Because the site would be unmanned, there would be no increase in demand for pedestrian or bicycle transportation. Overall, the project would result in a less-than-significant impact related to a conflict with any applicable plan, ordinance or program addressing the circulation system.

b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

No Impact. The CEQA Guidelines § 15064.3(b) provides criteria for analyzing transportation impacts. For land use projects, such as the proposed project, CEQA Guidelines § 15064.3(b) states that vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. In addition, it states that the analysis includes evaluation of factors such as the availability of transit, proximity to other destinations, etc. As described in the previous response, the proposed project would add a minimal number of trips to the roadway on a daily or peak hour basis and would not result in exceedance of level of service standards. Thus, the project would not result in impacts related to consistency with CEQA Guidelines § 15064.3(b).

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

No Impact. The project does not include design features that would increase hazards, nor would it cause incompatible uses to be present on local roads. The project site is located in a vacant area adjacent to the CCI and would not increase roadway hazards. In addition, the new solar facilities would be located next to existing solar infrastructure, which are compatible uses. Thus, no impacts related to hazards and incompatible uses would occur from implementation of the project.

Additionally, the project would include maximum 8-foot security fencing around the panels, which would have a 20-foot wide access gate and 20-foot wide setbacks from the solar arrays that would provide direct access for emergency equipment. The entry gate would have a Knox lock or similar device to allow 24-hour access for emergency responders. Therefore, impacts related to a design feature or incompatible use would not result from implementation of the project.

d) Result in inadequate emergency access?

No Impact. The project site is located adjacent to the CCI within an undeveloped area. As described in the previous response, the fenced portion of the project site would have a 20-foot wide access gate and 20-foot wide setbacks from the solar arrays that would provide direct access for emergency equipment. The entry gate would have a Knox lock or similar device to allow 24-hour access for emergency responders. Thus, the proposed project would not result in impacts related to emergency access.

Existing Plans, Programs, or Policies

None.

Mitigation Measure

None.

Sources

Solar Project Construction Trip Generation, prepared by EPD Solutions, Inc., 2019.

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
---	---	---	----------------------

18. TRIBAL CULTURAL RESOURCES.

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

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

The discussion below is based on the Phase I Cultural and Paleontological Assessment, prepared by Material Culture Consulting in 2019 (MCC 2019) (included as Appendix C). Preparation of the report included cultural records searches, a search of the Sacred Lands File by the Native American Heritage Commission (NAHC), outreach efforts with Native American tribal representatives, background research, and a pedestrian field survey.

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

No Impact. The project site is an undeveloped area adjacent to existing solar array fields and the CCI. The Phase I Cultural Resources Assessment identified no tribal historical resources within the project area (MCC 2019). Thus, no impacts would occur.

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

No Impact.

Assembly Bill 52

There are no tribes that have previously requested to be notified of projects in the vicinity of the site per the requirements of Assembly Bill 52. Therefore, no consultation was required or conducted.

General Information Outreach to Tribes

As part of the Cultural Resources Assessment prepared by Material Culture Consulting, a search of the Sacred Lands File by the Native American Heritage Commission (NAHC) was conducted for each of the project subareas. NAHC responded on March 6, 2018, stating that there are no known sacred lands within one mile of the project area and recommending contact be made with 13 tribes for further information regarding the general project vicinity. Letters were sent to the 13 tribal contacts on March 8 requesting any information related to cultural resources or heritage sites within or adjacent to the project site. Additional attempts to contact by letter, email, or phone call were made on March 27 and August 6. The following responses were received to the general information outreach communications:

- On March 12, 2018, an email from a representative of the San Manuel Band of Mission Indians was received. The email stated that the project site is outside the Serrano ancestral lands and that the tribe would no longer be a consulting party for the project.
- On August 6, 2018 a representative of the Big Pine Paiute Tribe of the Owens Valley (BPPTO), stated that the project site is located outside BPPTO's Traditional Use Area and they defer to closer tribes for consultation. However, the representative did state that BPPTO were marched through this area when they were driven away from their homelands during the 1860s.
- On August 6, 2018 an email from a representative of the Kern Valley Indian Community (KVIC) was received, which stated that the Cummings Valley area has been the homeland of the Nuwa people for over 10,000 years. An abundance of resources and the presence of graves in the region raises concerns for KVIC and they recommend culturally-affiliated Native American monitors be employed to monitor all ground disturbing activities related to the project for cultural resources. A follow-up email was sent and a phone call with voicemail to the representative from KVIC occurred on June 10, 2019. The email listed the applicable existing policy (PPP CUL-1, Human Remains) and the proposed cultural resources mitigation measure (MM CUL-1, Inadvertent Discoveries) for the project that are included in this Initial Study. The follow-up email offered to provide the final cultural resources study and to conduct additional discussions. No response has been received to the follow-up communications.

Although tribal cultural resources are known to existing in the broader region, local American Indian tribes provided no specific information regarding any tribal cultural resources that may be impacted by the project. Impacts related to tribal cultural resources are less than significant.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

Phase I Cultural and Paleontological Assessment prepared by Material Culture Consulting in 2019 (MCC 2019).

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
---	---	---	----------------------

19. UTILITIES AND SERVICE SYSTEMS.

Would the project:

- | | | | | |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Require or result in the relocation or construction of new or expanded water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Generate solid waste in excess of State or local standards or in excess of the capacity of local infrastructure or otherwise impair the attainment of solid waste reduction goals? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

a) Require or result in the relocation or construction of new or expanded water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

No Impact. No employees would be permanently stationed at the site, and the solar facility does not include restrooms. The proposed project would not require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities. The project would utilize a biodegradable cleaning solution in lieu of water for the routine cleaning of panels. Because the site would not contain a permanent workforce and no toilet facilities would be required, there would be no demand for wastewater service, and wastewater infrastructure would not be developed. Therefore, no impacts related to requiring the construction of new or expansion of existing water or wastewater facilities would occur from implementation of the proposed project.

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

No Impact. The project would not require any regular water supply during operations. Because of the limited water supply requirements for the project, no impacts associated with the need for new or expanded water supply entitlements would occur from implementation of the proposed project.

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

No Impact. During construction, wastewater would be contained within portable toilet facilities and disposed of at an approved site. No employees would be permanently stationed at the site, and the solar facility does not include restrooms. Thus, operation of the proposed project would not generate wastewater and would not impact existing wastewater treatment facilities.

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

Less than Significant Impact. The Tehachapi Sanitary Landfill is located approximately 15 miles east of the project site and is permitted to accept 1,000 tons per day of solid waste and is permitted to operate through 2020. In addition, the Bakersfield Metropolitan Landfill is located approximately 55 miles northwest of the project site and is permitted to accept 4,500 tons per day of solid waste and is permitted to operate through 2046. (CalRecycle 2019) The proposed project consists of short-term waste generation limited to minor quantities of construction debris, most of which would be recyclable. Both the Tehachapi Sanitary Landfill and the Bakersfield Metropolitan Landfill have the capacity to accommodate the limited solid waste from the 4-month construction process.

The panels would eventually need to be disposed of (decommissioned). Most parts of the proposed solar system are recyclable. Panels typically consist of silicon, glass, and a metal frame. Panel structures typically consist of aluminum and concrete. These materials can be recycled. Concrete from deconstruction would be recycled through local recyclers. Metal and scrap equipment and parts that do not have free flowing oil would be sent for salvage. Equipment containing any free-flowing oil would be managed as hazardous waste and be evaluated before disposal at a properly-permitted disposal facility. Oil and lubricants removed from equipment would be managed as used oil and disposed in accordance with applicable hazardous waste disposal requirements.

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

No Impact. The project would comply with all federal, state, and local statutes and regulation related to solid waste. The project would consist of short-term construction activities (with short-term waste generation limited to minor quantities of construction debris) and thus would not result in long-term solid waste generation. Solid wastes produced during the construction phase of this project, or during future decommissioning activities would be disposed of in accordance with all applicable statutes and regulations. Accordingly, anticipated impacts from the proposed project related to landfill capacity and compliance with applicable regulations would be less than significant.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

CalRecycle SWIS Database. Accessed: <http://www.calrecycle.ca.gov>.

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
20. WILDFIRES. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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

No Impact. The project site is located within an area identified as a high fire hazard area by the Kern County Fire Hazard Map (CALFIRE 2019). However, the project site is located adjacent on vacant state land adjacent to the CCI. The project would include maximum 8-foot security fencing around the panels, which would have a 20-foot wide access gate and 20-foot wide setbacks from the solar arrays that would provide direct access for emergency equipment. The entry gate would have a Knox lock or similar device to allow 24-hour access for emergency responders. In addition, the project does not involve substantial persons or traffic trips at the project site that could hinder or impair emergency response or evacuation. After construction, the project site would not require daily employees. Hence, the project would not impair an emergency response plan or emergency evacuation plan, and impacts would not occur.

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

No Impact. As described in the previous response, the project site is located within an area identified as a high fire hazard area by the Kern County Fire Hazard Map (CALFIRE 2019). However, the project site is vacant and relatively flat and does not contain a slope or other factors that could exacerbate wildfire risks. In addition, the proposed project would be an unmanned

facility and would not include any habitable structures. Therefore, the project would not involve any occupants that could be exposed to pollutant concentrations from a wildfire. Thus, not impacts would occur.

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

Less than Significant Impact. The project site is located adjacent to the CCI within an undeveloped area. The project would implement solar infrastructure and associated conduits and wires to convey the electricity generated onsite. However, this infrastructure would not exacerbate the fire risks of the area. The solar arrays would be above ground on piles. The conduits and wires would be buried in trenches that run between rows and/or installed above-grade running along the backside of strings to connect the output of each string to the inverters. Additionally, the onsite vegetation would be mowed regularly to avoid interference with electrical equipment.

The project includes a 20-foot wide access gate and 20-foot wide setbacks from the solar arrays that would provide direct access for emergency equipment. The entry gate would have a Knox lock or similar device to allow 24-hour access for emergency responders. Therefore, although the project includes installation of infrastructure, it would not exacerbate fire risks. Thus, impacts would be less than significant.

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

No Impact. As described in the previous responses, the project would install solar infrastructure that would not exacerbate fire risks. In addition, the project site does not include or adjacent to any steep slopes or locations where landslides could occur. In addition, the project site would be unmanned and would not generate permanent onsite employees. Therefore, the project would not expose people or structures to impacts related to post-fire slope instability or drainage changes.

Existing Plans, Programs, or Policies

None.

Mitigation Measures

None.

Sources

Kern County Fire Hazard Map (CALFIRE 2019). Accessed:
https://www.fire.ca.gov/fire_prevention/fhsz_maps_kern

21. MANDATORY FINDINGS OF SIGNIFICANCE.

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

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

Less than Significant Impact with Mitigation Incorporated. As described in Section 4, Biological Resources, the project would not reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. To ensure that impacts related to nesting birds would not occur, Mitigation Measure BIO-1 has been included to require a pre-construction survey for nesting birds if project construction occurs during the avian nesting season (between February 15 and August 15). With implementation of Mitigation Measure BIO-1, impacts related to migratory birds would be less than significant.

As described in Section 5, Cultural Resources, the project site does not contain any known historic or prehistoric attributes and would not eliminate important examples of the major periods of California history or prehistory. Mitigation Measure CUL-1 ensures that any previously unidentified cultural resources discovered during construction would not be impacted. With the application of Mitigation Measure CUL-1, impacts related to important examples of the major periods of California history or prehistory would be less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are

considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant Impact with Mitigation Incorporated. Mitigation Measures BIO-1 and CUL-1 are incorporated into the project to minimize impacts related to biological resources and cultural/archaeological resources, respectively. No project impacts are identified in this Initial Study that could combine with the impacts of other projects to be cumulatively considerable. With the implementation of these mitigation measures, impacts would not combine to be cumulatively considerable.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact with Mitigation Incorporated. Impacts that could result in substantial adverse effects on human beings, either directly or indirectly, would be less than significant. Existing Plans, Programs, or Policies are in place to minimize the potential for impacts. These include PPP WQ-1 (Stormwater Pollution Prevention Plan), PPP CUL-1 (Human Remains), and PPP GEO-1 (Code Compliance). With the application of standard requirements of development and project-specific mitigation measures, impacts related to human beings would be less than significant.

Existing Plans, Programs, or Policies

PPP CUL-1. Human Remains. See Section 5.

PPP WQ-1. Stormwater Pollution Prevention Plan. See Section 7.

PPP GEO-1. Code Compliance. See Section 7.

Mitigation Measures

Mitigation Measure BIO-1. Preconstruction Nesting Bird Survey. See Section 4.

Mitigation Measure CUL-1. Inadvertent Discoveries. See Section 5.

6 DOCUMENT PREPARERS AND CONTRIBUTORS

Lead Agency:

California Department of General Services

CEQA Document Preparer:

EPD Solutions, Inc.

Rafik Albert, AICP

Renee Escario