HEARTLAND SOLAR PROJECT

Final Environmental Impact Report

EIR No. 7564; CUP No. 3630
State Clearinghouse No. 2022100609

Prepared for
County of Fresno Department of
Public Works and Planning

May 2026

ESA



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Final Environmental Impact Report

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CHAPTER 1
Introduction

1.1 Purpose of this Document

This final environmental impact report (Final EIR) (EIR No. 7564) is an informational document that examines and discloses the potential environmental impacts of the Heartland Solar Project (Heartland Project) and infrastructure and other improvements to be constructed, owned, and operated by the Pacific Gas and Electric Company (PG&E) (PG&E Components). The Heartland Solar Project and the PG&E Components collectively are referred to in this document as the *Project*.

As lead agency for purposes of the California Environmental Quality Act (CEQA) and its implementing regulations (the CEQA Guidelines), the County of Fresno (County) is preparing this EIR to document its analysis of the Project's potential direct, indirect, and cumulative effects. Although the County is analyzing the environmental impacts of the PG&E Components in this EIR as part of the whole of the Project, it does not have land use jurisdiction over the PG&E Components. Instead, PG&E would be subject to oversight by the California Public Utilities Commission (CPUC), which is a responsible agency for purposes of this EIR.

The County will rely on this EIR, along with other information in the formal record, in deciding whether to approve, approve with modifications, or deny land use applications for the Heartland Project that require discretionary approval, including unclassified conditional use permit (CUP) No. 3630.[1] The County will use this Final EIR, in conjunction with other information developed in the County's formal record, when considering whether to certify the Final EIR and whether to approve Heartland Solar 1, LLC's applications to the County for necessary land use approvals. Other agencies with trustee responsibilities or permitting authority over the Project (such as CPUC with respect to the PG&E Components) may also rely on this EIR in deciding whether to approve permits or issue other necessary approvals.

1.2 Project Overview

Heartland Solar 1, LLC, a wholly owned indirect subsidiary of Clearway Energy Group LLC, proposes to construct, operate, maintain, and decommission the Heartland Solar Project, which consists of renewable photovoltaic (PV) solar energy generation and energy storage system facilities. Proposed facilities would generate approximately 300 megawatts alternating current (MWAC) of solar PV energy and have capacity to store up to 300 MW of energy on approximately 2,362 acres of private land in western Fresno

[1] The Unclassified CUP process allows the County to consider, in its discretion, uses that would be essential or desirable, but that are not allowed as a matter of right within a zoning district. Photovoltaic solar power generation and public utility facilities may be conditionally permitted in the AE-20 (Exclusive Agricultural, 20-acre minimum parcel size) zoning district with the issuance of a CUP.

County. These facilities would interconnect to the regional electrical grid via an electrical generation-tie (gen-tie) line between the solar facility and the existing Tranquillity Switching Station, which is located approximately 1.25 miles south of the solar and energy storage facility site. The Tranquillity Switching Station is owned and operated by PG&E. PG&E also would conduct other necessary infrastructure work to support interconnection of the Heartland Solar Project.

The Project site is located approximately 6 miles southwest of the City of Mendota, 10 miles east of Interstate 5 (I-5), to the east of S. San Bernardino and Los Angeles avenues, south of W. American Avenue, west of State Route 33 (SR 33, also called S. Derrick Avenue), 0.5 mile north of W. Manning Avenue, and 1.25 miles north of PG&E's Tranquillity Switching Station. The Project site is located across SR 33 from the existing Adams East solar facility and immediately north of the approved Luna Valley solar facility. The Tranquillity Switching Station is located near the northeast corner of the intersection of W. Dinuba Avenue and S. Ohio Avenue, within the boundaries of the Tranquillity Solar Generating Facility.

1.3 Organization of the Final EIR

This Final EIR consists of the draft environmental impact report (DEIR) published September 24, 2025, together with the responses to comments provided in Chapter 2. The DEIR detailed the Project; evaluated and described the potential environmental impacts associated with Project construction, O&M, and decommissioning; identified those impacts that could be significant; and presented mitigation measures that, if adopted, would avoid or minimize these impacts. The DEIR also evaluated alternatives to the Project, including a No Project Alternative, Alternative 1: Reduced PV Solar Acreage Alternative; and Alternative 2, Distributed Solar Alternative.

Consistent with CEQA Guidelines section 15132, this Final EIR consists of the following elements:

a) The DEIR.

b) Comments received on the DEIR.

c) A list of persons, organizations, and public agencies that commented on the DEIR.

d) The County's responses to significant environmental points raised in the review and consultation process.

e) Other information added by the County.

CHAPTER 2
Responses to Comments

2.1 Public Review of the Draft EIR

The County of Fresno (County) advised interested parties that a draft environmental impact report (Draft EIR) for the Heartland Solar Project (Heartland Project) including infrastructure and other improvements to be constructed, owned, and operated by the Pacific Gas and Electric Company (PG&E) (PG&E Components) (Heartland Project and PG&E Components collectively, the Project) was available for review by filing a notice of completion (NOC) of the Draft EIR with the Governor's Office of Land Use and Climate Innovation's State Clearinghouse on September 22, 2025, by publishing the notice of the availability (NOA) of the Draft EIR in *The Business Journal* on September 24, 2025, by posting the Draft EIR on the County's website (http://www.co.fresno.ca.us/EIR), and by mailing notification of the document's availability to the Project's distribution list. The NOA briefly described the Project, identified locations where the Draft EIR and referenced documents would be available for review, and solicited comments on the Draft EIR during the comment period. The comment period began on September 24, 2025, and concluded November 7, 2025. All interested parties were invited to submit written comments regarding the adequacy and accuracy of the analysis and determinations made in the Draft EIR. Responses to comments received are provided in this Chapter 2. Public notices about the Draft EIR are included in **Appendix A**.

2.2 Availability of the Final EIR

A copy of the final environmental impact report (Final EIR) is being provided to all who commented on the Draft EIR. The NOA of the Final EIR and details about how to access it are also being provided to all others identified on the County's distribution list for this Project. Recipients of the Final EIR are identified in **Appendix B**.

An electronic copy of the Final EIR is available on the County's website: http://www.co.fresno.ca.us/EIR. Printed and electronic copies of the Final EIR, as well as electronic copies of reference materials, are available for review during normal working hours at the Fresno County Public Works and Planning Department, 2220 Tulare Street, Fresno.

A printed copy of the Final EIR, which includes an electronic copy of the Final EIR and copies of all reference materials relied upon in its drafting, will be provided to the library listed below with a request that the materials remain available for public review for at least 60 days:

- Fresno County Mendota Branch Library, 1246 Belmont Avenue, Mendota.

Electronic copies of the Final EIR and all documents referenced in the Final EIR also are available upon request by contacting Alyce Alvarez at 559.600.9669 or by email at alyalvarez@FresnoCountyCA.gov.

2.3 Approach to Comment Responses

The County received six letters regarding the Draft EIR. Copies of the letters are provided in Section 2.4, *Responses to Comments on the Draft EIR*.

TABLE 2-1
COMMENTERS ON THE HEARTLAND SOLAR PROJECT DRAFT EIR

Letter	Name	Agency or Interested Party	Date
A	Jeff Kimber, Supervising Oil and Gas Engineer	State of California Natural Resources Agency Department of Conservation, Geologic Energy Management Division (CalGEM)	October 3, 2025
B	Dave Padilla, Branch Chief, Local Development Review	California Department of Transportation (Caltrans)	November 3, 2025
C	Sophia Markowska, Senior California Representative	Defenders of Wildlife	November 4, 2025
D	Julie A. Vance, Regional Manager	California Department of Fish and Wildlife (CDFW)	November 5, 2025
E	Mark Montelongo, Director of Policy and Government Affairs, and Daniel Martinez, Program Manager	San Joaquin Valley Air Pollution Control District (SJVAPCD)	November 6, 2025
F	Jose Gutierrez, Assistant General Manager	Westlands Water District (WWD)	November 7, 2025

Source: Compiled by Environmental Science Associates in November 2025.

Under the California Environmental Quality Act (CEQA), the lead agency "shall evaluate comments on environmental issues" received from people who have reviewed a Draft EIR and prepare written responses that "describe the disposition of each significant environmental issue that is raised by commenters" (Public Resources Code Section 21091[d]; CEQA Guidelines Section 15088[c]). The responses to comments in this chapter are intended to provide clarification and refinement of information presented in the Draft EIR.

2.4 Responses to Comments on the Draft EIR

In this section, individual pieces of correspondence received on the Draft EIR are followed by responses to the comments they contain.

[redacted]

Attachments: 2025-10-03_Alyce Alvarez_Fresno_LetterSigned.pdf

From: CalGEMCentralCSWR@DOC <CalGEMCentralCSWR@conservation.ca.gov>
Sent: Friday, October 3, 2025 2:53 PM
To: Alvarez, Alyce <alyalvarez@fresnocountyca.gov>
Cc: Jeffries, Randall@DOC <Randall.Jeffries@conservation.ca.gov>
Subject: SCH Number 2022100609 Heartland Solar Project

Good afternoon,

We would like to inform you of an update to our process regarding construction site well reviews.

The Division will no longer be reviewing the abandonment of oil wells as part of this process. Instead a formal letter will be attached to all requests identifying oil wells on the premises and stating that it is our recommendation to not impede access to any wells that have been abandoned and buried. Furthermore, any and all wells that have access impeded or are to be built over should be evaluated by a qualified petroleum professional. If it is deemed that any well(s) requires abandonment or re-abandonment the responsible party must submit a Notice of Intention to the Division through WellSTAR. A-1

Thank you,

Construction Site Well Review Team
California Department of Conservation
CalGEM | Central District
11000 River Run Blvd. Bakersfield, CA 93311
E: CalGEMCentralCSWR@conservation.ca.gov

California
Department of Conservation
Geologic Energy Management Division

Gavin Newsom, Governor
Jennifer Lucchesi, Director

October 3, 2025

VIA ELECTRONIC MAIL

Fresno County Department of Public Works and Planning
Alyce Alvarez
2220 Tulare Street, Suite B Annex
Fresno, CA 93721

alyalvarez@FresnoCountyCA.gov

Assessor Parcel Number(s): Multiple
Project Location Address: SR 33, S. Ohio Ave, W. American Ave, S. San Bernardino Ave, Los Angeles Ave.

PROJECT TITLE: Heartland Solar Project

Public Resources Code (PRC) section 3208.1 establishes re-abandonment responsibility when previously plugged and abandoned oil, gas or geothermal wells will be impacted by planned property development or construction activities. Local permitting agencies, property owners, and/or developers should be aware of, and fully understand, that significant and potentially dangerous issues may be associated with development near previously abandoned oil, gas, and geothermal wells. A-2

The California Geologic Energy Management Division (CalGEM) has received the above-referenced project dated September 22, 2025. To assist local permitting agencies, property owners, and developers in making safe and practical land use decisions regarding potential development near oil, gas, or geothermal wells, CalGEM provides a table in the attached enclosure of the wells within the parcel boundary or in its vicinity, based on CalGEM's Well Finder database (https://maps.conservation.ca.gov/doggr/wellfinder/).

CalGEM categorically advises against building over, or in any way impeding access to, oil, gas, or geothermal wells. Impeding access to a well could result in the need to remove any structure or obstacle that prevents or impedes access including, but not limited to, buildings, housing, fencing, landscaping, trees, pools, patios, sidewalks, roadways, and decking at the landowner's expense if there is a need to access a well. Maintaining sufficient access is considered the ability for a well servicing unit and associated necessary equipment (consisting of well servicing rig, pumping equipment, pipe trailer) to reach a well from a public street or access way, solely over the parcel on which the well is located. A well servicing unit, and any necessary equipment, should be able to pass unimpeded along and over the route, and should be able to access the well without disturbing the integrity of surrounding infrastructure. Impermeable A-3

barriers such as asphalt, concrete, and plastic may trap hazardous gases and liquids underneath and could create a safety hazard if built over a well that later develops a leak.

A-3 cont.

CalGEM recommends that any well for which access is impeded or built over, against CalGEM's advice, should be evaluated by a qualified petroleum professional for compliance with the statutory objectives of isolating all hydrocarbon-bearing strata; protecting underground and surface waters; prevention of subsequent damage to life, health, property, and other resources; and prevention of loss of oil, gas, or reservoir energy. CalGEM recommends that wells that do not meet these standards are abandoned or re-abandoned prior to construction. The well information can be accessed through CalGEM's Well Finder database mentioned above. PRC section 3208, subdivision (a), provides the primary statutory authority for CalGEM to oversee adequate abandonment of wells. Additionally, CalGEM has developed the regulatory guidance for operators to be followed during well abandonment, which are listed within California Code of Regulation, title 14 (CCR) section 1723 and associated sub-sections (for onshore wells), and section 1745 and associated sub-sections (for offshore wells).

There is no guarantee that a well abandoned in compliance with current Division requirements as prescribed by law will not start leaking in the future. Due to the inability to predict all subsurface conditions or changes, it always remains a possibility that any well may start to leak oil, gas, and/or water after abandonment, no matter how thoroughly the well was plugged and abandoned. CalGEM acknowledges wells plugged and abandoned to the most current Division requirements as prescribed by law have a lower probability of leaking in the future, however there is no guarantee that such abandoned wells will not leak.

CalGEM advises that all wells identified on the development parcel prior to, or during, development activities be tested for liquid and gas leakage. Surveyed locations in Latitude and Longitude, NAD 83 decimal format, and leak testing results should be provided to CalGEM. CalGEM expects any wells found leaking to be reported to CalGEM immediately.

A-4

PRC section 3208.1 gives CalGEM the authority to order or permit the re-abandonment of any well where it has reason to question the integrity of the previous abandonment. Responsibility for re-abandonment costs may be affected by the choices made by the local permitting agency, property owner, and/or developer in considering the general advice set forth in this letter. The PRC continues to define the person or entity responsible for re-abandonment as:

1. The property owner - If the well was plugged and abandoned in conformance with Division requirements at the time of abandonment, and in its current condition does not pose an immediate danger to life, health, and property, but requires additional work solely because the owner of the property on which the well is located proposes construction on the property that would prevent or impede access to the well for purposes of remedying a currently perceived future

A-5

problem, then the owner of the property on which the well is located shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.

2. The person or entity causing construction over or near the well - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and the property owner, developer, or local agency permitting the construction failed either to obtain an opinion from the supervisor or district deputy as to whether the previously abandoned well is required to be re-abandoned, or to follow the advice of the supervisor or district deputy not to undertake construction that impedes access, then the person or entity causing the construction over or near the well shall obtain all rights necessary to re-abandon the well and be responsible for the re-abandonment.

3. The party or parties responsible for disturbing the integrity of the abandonment - If the well was plugged and abandoned in conformance with Division requirements at the time of plugging and abandonment, and after that time someone other than the operator or an affiliate of the operator disturbed the integrity of the abandonment in the course of developing the property, then the party or parties responsible for disturbing the integrity of the abandonment shall be responsible for the re-abandonment.

A-5 cont.

Should any wells require abandonment or re-abandonment, the responsible party must submit a Notice of Intention (NOI) to CalGEM through WellSTAR. The NOI form can be accessed in the 'Plugging and Abandonment' section of the following link: https://www.conservation.ca.gov/calgem/for_operators.

No well work may be performed on any oil, gas, or geothermal well without written approval from CalGEM. Well work requiring approval includes, but is not limited to, mitigating leaking gas or other fluids from abandoned wells, modifications to well casings, and/or any other re-abandonment work. CalGEM also regulates the top of a plugged and abandoned well's minimum and maximum depth below final grade. CCR section1723.5 states well casings shall be cut off at least 5 feet but no more than 10 feet below the surface of the ground. If any well needs to be lowered or raised (i.e. casing cut down or casing riser added) to meet this regulation, a permit from CalGEM is required before work can start.

CalGEM makes the following additional recommendations to the local permitting agency, property owner, and developer:

1. To ensure that present and future property owners are aware of (a) the existence of all wells located on the property, and (b) potentially significant issues associated with any improvements near oil or gas wells, CalGEM recommends that information regarding the below identified well(s), and any other pertinent information obtained after the issuance of this letter, be communicated to the appropriate county recorder for inclusion in the title information of the subject real property.

2. CalGEM recommends that any soil containing hydrocarbons be disposed of in accordance with local, state, and federal laws. Please notify the appropriate authorities if soil containing significant amounts of hydrocarbons is discovered during development.

A-5 cont.

As indicated in PRC section 3106, CalGEM has statutory authority over the drilling, operation, maintenance, and abandonment of oil, gas, and geothermal wells, and attendant facilities, to prevent, as far as possible, damage to life, health, property, and natural resources; damage to underground oil, gas, and geothermal deposits; and damage to underground and surface waters suitable for irrigation or domestic purposes. In addition to CalGEM's authority to order work on wells pursuant to PRC sections 3208.1 and 3224, it has authority to issue civil and criminal penalties under PRC sections 3236, 3236.5, and 3359 for violations within CalGEM's jurisdictional authority. CalGEM does not regulate grading, excavations, or other land use issues.

A-6

Should you have any questions, or if any wells are encountered that were not part of this letter, contact CalGEM at (661) 322-4031 or via email at CalGEMCentralCSWR@conservation.ca.gov.

A-7

Sincerely,

Jeff Kimber

Jeff Kimber
Supervising Oil and Gas Engineer

Enclosure

Enclosure: The wells listed below are reported to be located within and nearby the parcel boundary and may have future access impeded.

Township, Range, Section	API No.	Well Name
T15S, R14E, Sec. 24	0401906075	Coffin 1

2.4.1 Letter A: State of California Natural Resources Agency Department of Conservation, Geologic Energy Management Division

A-1 The County has included this update regarding State of California Natural Resources Agency Department of Conservation, Geologic Energy Management Division's (CalGEM's) process for construction site well reviews as part of the Project record, where it may be considered by decision-makers and members of the public generally. However, because the comment does not provide input that is specific to the adequacy or accuracy of the Draft EIR, the County has made no changes to the Draft EIR in response to this comment.

A-2 The well re-abandonment provisions of Public Resources Code Section 3208.1 do not affect the adequacy or accuracy of the Draft EIR. Nonetheless, receipt of this information is acknowledged and has been included in the public record, where it is accessible to all.

A-3 The County has considered the well identified by CalGEM as near the Project boundary and has overlayed the Project site location and well location data in Figure 1, *Wells within the Project Vicinity*, to further inform consideration of the Project and its potential impacts.

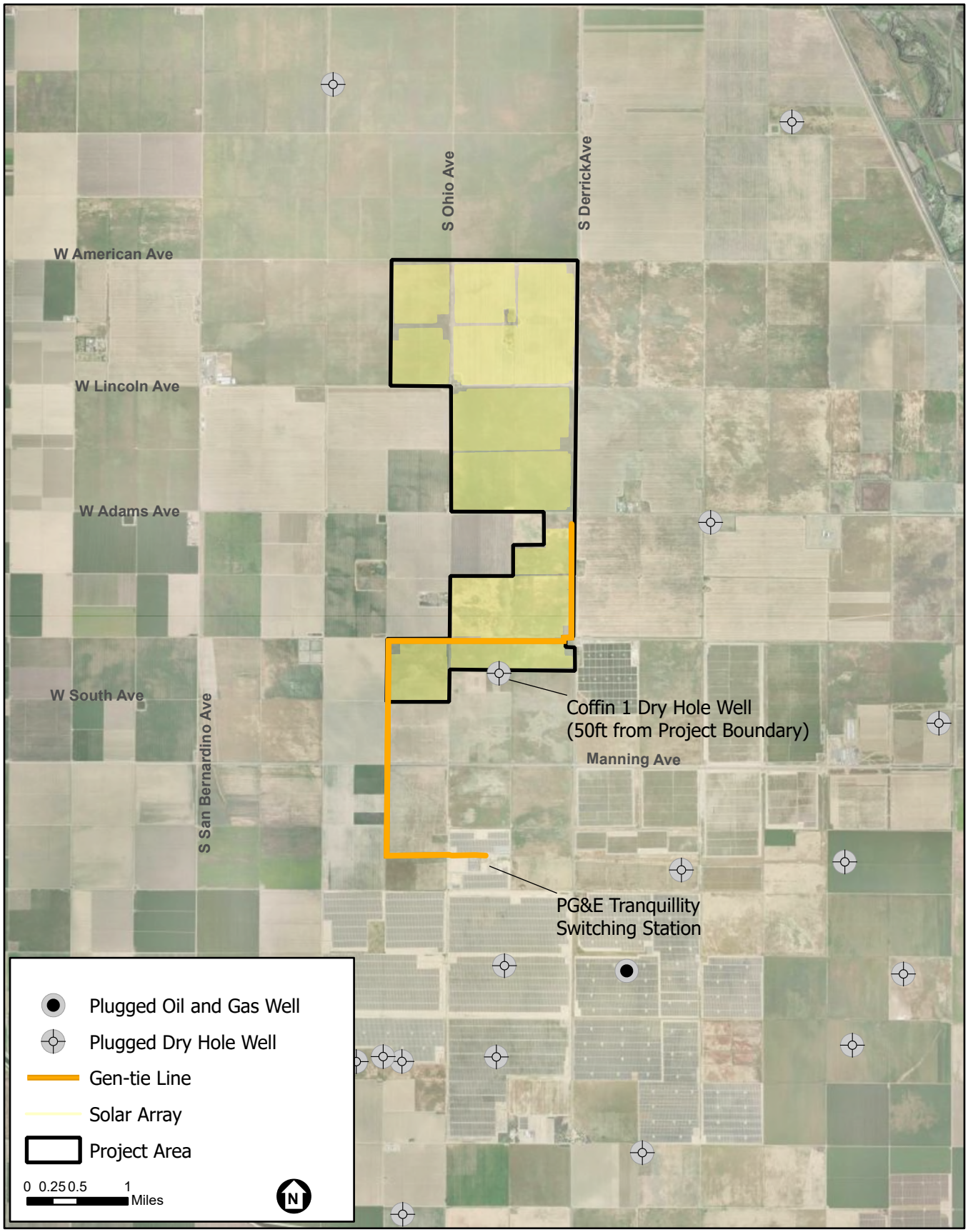
Figure 1 shows that no wells are located on the Project site. "Coffin 1," identified in the enclosure to this letter as the closest well, is located over 50 feet from the Project boundary within the existing Scarlet Solar Energy Project site. It is a plugged, dry hole well. The Project would not build over or impede access to Coffin 1 or any of the other wells located outside the Project boundary.

A-4 See Response A-3, which explains that the Project would not build over or impede access to any well. Therefore, CalGEM's well abandonment and testing recommendations are acknowledged, but do not affect the adequacy or accuracy of the Draft EIR.

A-5 The County recognizes CalGEM's authority to regulate re-abandonment of wells; however, as indicated in Response A-3, no wells are located on or within 50 feet of the Project site boundary.

A-6 The County recognizes CalGEM's authority to regulate wells independent of the County's CEQA process for the Project. Although this input has been included in the record, no responsive changes have been made to the Draft EIR.

A-7 CalGEM's contact information on the Project's mailing list has been supplemented to include these additional contact details.



SOURCE: ESA 2025; CalGEM, 2025

Heartland Solar Project

Figure 1

Wells within the Project Vicinity

CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, GOVERNOR

California Department of Transportation

DISTRICT 6 OFFICE
1352 WEST OLIVE AVENUE | P.O. BOX 12616 | FRESNO, CA 93778-2616
(559) 981-7284 | FAX (559) 488-4195 | TTY 711
www.dot.ca.gov

November 3, 2025

FRE-33-55.202
Heartland Solar Project
Notice of Availability
Environmental Impact Report (EIR) No. 7564
GTS #: https://ld-igr-gts.dot.ca.gov/district/6/report/28017

SENT VIA EMAIL

Mx. Alyce Alvarez, Planner
Fresno County – PWP
2220 Tulare St. 6th Fl.
Fresno, CA 93723
alyalvarez@fresnocountyca.gov

Dear Mx. Alvarez:

Caltrans has completed the review of the Notice of Availability of Environmental Impact Report No. 7564 for the Heartland Solar Project. The project is proposing to construct, operate, maintain, and eventually decommission facilities to generate hydrogen fuel from renewable sources (photovoltaic solar energy and treated wastewater) on approximately 2,371 acres in western Fresno County. B-1

The project site is located approximately 6 miles southwest of the City of Mendota, 10 miles east of Interstate 5 (I-5), to the east of S. San Bernardino and Los Angeles avenues, south of W. American Avenue, west of State Route 33 ((SR) 33, also called S. Derrick Avenue), 0.5 mile north of W. Manning Avenue, and 1.25 miles north of the PG&E's Tranquility Switching Station B-2

The mission of Caltrans is to provide a safe and reliable transportation network that serves all people and respects the environment. The Local Development Review (LDR) process reviews land use projects and plans through the lenses of our mission and state planning priorities of infill, conservation, and travel-efficient development. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network. B-3

Caltrans provides the following comments consistent with the State's smart mobility goals that support a vibrant economy and sustainable communities: B-4

1. This facility is not expected to have a significant traffic safety impact on the State Highway System when fully operational; however, construction operations could potentially have an impact.

B-4 cont.

2. The Draft EIR, Implement Mitigation Measure 3.18-1, provides, "Construction and Decommissioning Traffic Management Plan Prior to the issuance of construction or building permits and the issuance of decommissioning authorizations, the Project owner and/or its construction contractor shall prepare and submit a Traffic Management Plan to the Fresno County Public Works Department and the California Department of Transportation, District 6, as appropriate, for approval."

B-5

   Our Office considers this Mitigation Measure acceptable. The Traffic Management Plan should be reviewed and approved by the Caltrans District 6 Office of Work Zone Operations.

B-6

If you have any other questions, please call or email: Keyomi Jones, Associate Transportation Planner at (559) 981-7284 or keyomi.jones@dot.ca.gov.

Sincerely,



Mr. Dave Padilla, Branch Chief,
Local Development Review Branch

2.4.2 Letter B: California Department of Transportation

B-1 The comment correctly notes that the County is preparing EIR No. 7564 for the Heartland Solar Project. However, as explained in the Notice of Project Refinement issued by the County on December 16, 2024, the Project (as currently evaluated) does not propose to generate hydrogen fuel on the Project site.

The County initiated a CEQA scoping process in October 2022 for a green hydrogen generation project (the Heartland Hydrogen Project) to be developed on approximately 2,371 acres in western Fresno County, approximately 6 miles southwest of the City of Mendota and 10 miles east of Interstate 5. The County completed the scoping process covering an application by Heartland Solar 1, LLC for CUP No. 3630 for solar PV and battery energy storage facilities and an application by Plug Project Holding Co., LLC for CUP No. 3631 for a green hydrogen fuel generation facility. The Notice of Project Refinement explained that Plug Project Holding Co., LLC had withdrawn its application and that Heartland Solar 1, LLC was proceeding with its application. As a result, the initially proposed wastewater treatment facility upgrade and green hydrogen generation facility are not part of the Project. Solar project development is proposed where the green hydrogen generation facility initially had been proposed.

The County circulated the notice of project refinement by email to those for whom the County's Project-specific distribution list contained email addresses, including two individuals at Caltrans (Dave Padilla and Edgar Hernandez).[1] The County also provided public notice more widely, by posting the notice of project refinement on the County's website.[2]

The Project described and analyzed in County EIR No. 7564 is consistent with the description provided in the notice of project refinement. See, for example, Draft EIR Section ES.1 (p. ES-1), "Heartland Solar 1, LLC… proposes to construct, operate, maintain, and decommission the *Heartland Solar Project*, which consists of renewable photovoltaic (PV) solar energy generation and battery energy storage system facilities. Proposed facilities would generate approximately 300 megawatts alternating current (MWAC) of solar PV energy and have capacity to store up to 300 MW of energy on approximately 2,362 acres of private land in western Fresno County…." See also, Draft EIR Chapter 2, *Project Description* (p. 21 et seq.).

B-2 This summary of the location of the Project site is consistent with information provided in the Draft EIR. See Draft EIR Section ES.2, *Project Site* (p. ES-2). See also, Draft EIR Section 2.2, *Location of the Project Site* (p. 2-1).

B-3 Thank you for the agency's review of County EIR No. 7564, which relies in part on Caltrans's expertise and reference materials. Caltrans input received following issuance of the notice of

1 Pretzer, 2024. Fresno County EIR No. 7564, Heartland: Notice of project refinement. December 16, 2024.

2 County of Fresno, Department of Public Works and Planning, 2024. County Environmental Impact Report (EIR) No. 7564: Notice of Project Refinement. December 16, 2024. Available online: www.fresnocountyca.gov/files/sharedassets/county/v/1/public-works-and-planning/development-services/environmental-impact-reports/heartland_informational_2024_1216.pdf.

preparation (NOP) is summarized and considered in Draft EIR Section 3.18, *Transportation* (see, e.g., p. 3.18-1), and included in the scoping report provided in Draft EIR Appendix A.

B-4 Caltrans's conclusions about the impacts of the Project are consistent with conclusions reached by the County in Section 3.18 of the Draft EIR, which documents the analysis of direct and indirect effects in Section 3.18.3.2 (p. 3.18-7 et seq.) and cumulative effects in Section 3.18.4 (p. 3.18-18 et seq.).

B-5 The text quoted in this comment is found on page 3.18-13 of the Draft EIR. The County acknowledges Caltrans's acceptance of the mitigation measure.

B-6 Caltrans's contact information on the Project's mailing list has been supplemented to include Elizabeth Yelton's contact details.

California Program Office
P.O. Box 401, Folsom, California 95763
www.defenders.org

November 4, 2025

Alyce Alvarez
Fresno County
Department of Public Works and Planning
2220 Tulare Street, 6th Floor
Fresno, California 93721

Delivered via email to alyalvarez@fresnocountyca.gov

Re: Draft Environmental Impact Report for the Proposed Heartland Solar Project; SCH No. 2022100609

Dear Ms. Alvarez,

Thank you for the opportunity to provide comments in response to the Draft Environmental Impact Report (DEIR) for the proposed Heartland Solar Project (Project). Defenders of Wildlife (Defenders) is dedicated to protecting all wild animals and plants in their natural communities and has nearly 2.1 million members and supporters in the United States, with more than 311,000 residing in California.

Defenders strongly supports renewable energy generation. A low-carbon energy future is critical for California's economy, communities and environment. As we transition toward a clean energy future, it is imperative that we consider the near-term impacts of renewable energy development on our biodiversity, fish and wildlife habitat and natural landscapes while addressing the long-term impacts of climate change. Therefore, renewable energy projects must be planned, sited, developed and operated to avoid, minimize and mitigate adverse impacts on wildlife and lands with known high-resource values.

C-1

The proposed Project is a solar photovoltaic facility that would generate up to 300 MW of renewable energy and includes up to 300 MW of battery storage. The proposed Project would be sited on approximately 2,362 acres in the unincorporated Fresno County portion of the San Joaquin Valley. It is located approximately 6 miles southwest of the City of Mendota and 10 miles east of Interstate 5. The gen-tie line and associated improvements at the existing Tranquillity Switching Station are analyzed in the DEIR because, together with the Heartland Solar Project, they constitute the entirety of the project being evaluated under CEQA.

C-2

Comments
We offer the following comments on the DEIR for the proposed Project.

Project Objectives
Defenders appreciates the inclusion of the objective to "[d]evelop a renewable PV solar energy and energy storage project in proximity to transmission infrastructure in order to minimize environmental impacts." A "Smart from the Start" approach to renewable energy project siting and development emphasizes the selection of project sites that prioritize minimizing environmental impacts.[1] Siting the Project near existing energy infrastructure reduces the amount of new construction required and, in turn, minimizes potential Project impacts to special-status species and their habitat. Defenders appreciates the prioritization of minimizing environmental impacts, and we encourage the continued development of projects with objectives that prioritize least conflict siting.

C-3

Project Location
We applaud the "Smart from the Start" approach to renewable energy siting, which emphasizes directing development to disturbed lands with low habitat value. The project is located on land identified as having very low or low conservation value as designated through the San Joaquin Valley Least Conflict Solar Project, as depicted below.

C-4

Figure 1: Approximate Vicinity of the Proposed Project with the Environmental Conservation Value



[1] Defenders of Wildlife. 2012. *Smart From the Start: Responsible Renewable Energy Development in the Southern San Joaquin Valley*.

Leaders from the agricultural, conservation, solar development communities, tribes and key agencies identified this area as a "low conflict" and "low value" area based on present biological resources. We support the development and operation of renewable energy projects on sites identified as least conflict lands, as development projects should avoid areas with high conservation values for natural resources, such as the presence of special-status species, high biodiversity or connectivity corridors. Siting on impaired lands can minimize potential project-related impacts on special-status species and their habitats.

C-4 cont.

San Joaquin Kit Fox Den Excavation

Mitigation Measure (MM) 3.5-1 provides procedures for the evacuation of San Joaquin kit fox (SJKF) dens; however, the California Department of Fish and Wildlife (CDFW) guidelines specify that a take authorization or permit is required to destroy any SJKF den, including those that have been vacated. Defenders therefore requests that MM 3.5-1 be revised to explicitly state that a CDFW take authorization or permit is required prior to the destruction of any SJKF den, even after the dens are deemed vacated.

C-5

Burrowing Owl No-Disturbance Buffers

MM 3.5-1 states that burrowing owl (BUOW) buffers will be established at 50 meters for active burrows during the nonbreeding season and 75 meters during the breeding season. The measure further specifies that, depending on the level of disturbance, a smaller buffer may be established by a qualified biologist. This approach does not conform to the CDFW's *Staff Report on Burrowing Owl Mitigation*, which recommends buffers of up to 500 meters depending on the type and intensity of disturbance, and does not provide any buffers smaller than 50 meters.[2] MM 3.5-1 must be revised to be consistent with CDFW guidelines.

C-6

Table 1: Burrowing Owl Avoidance Buffers

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting Sites	April 1 – Aug 15	200 meters	500 meters	500 meters
Nesting Sites	Aug 16 – Oct 15	200 meters	200 meters	500 meters
Nesting Sites	Oct 16 – Mar 31	50 meters	100 meters	500 meters

Nighttime Construction

The DEIR states that nighttime construction may be required for installation, service or electrical connection, inspection and testing activities. Defenders recommends avoiding nighttime construction whenever feasible, as prohibiting such activities would avoid and minimize impacts to sensitive species that are most active at night and therefore more vulnerable to construction- and traffic-related disturbances or collisions. MM 3.5-2 sets the

C-7

[2] California Department of Fish and Game. 2012. *Staff Report on Burrowing Owl Mitigation*.

speed limit at 20 miles per hour within all construction areas; however, if nighttime construction must occur, Defenders requests that the speed limit be reduced to 10 miles per hour to conform with the US Fish and Wildlife Service (USFWS) SJKF guidelines and further reduce the risk of wildlife injury or mortality.[3]

C-7 cont.

Prohibition of Firearms

The DEIR fails to include a prohibition on firearms in accordance with the USFWS 2011 SJKF guidelines.[4] Defenders recommends revising MM 3.5-2 to explicitly prohibit the possession or use of firearms on the project site.

C-8

Connectivity

The DEIR notes that the nearest areas supporting natural habitat include the Mendota Wildlife Area, located approximately 3.5 miles northeast of the Project site, and Fresno Slough, located about 2.3 miles northeast of the site. The Mendota Wildlife Area is an approximately 12,000-acre wildlife habitat management area located southeast of the City of Mendota. Comprised largely of wetlands, it provides critical habitat for numerous bird species as well as a variety of special-status wildlife, including but not limited to the giant garter snake, San Joaquin kit fox, blunt-nosed leopard lizard, Swainson's hawk and tricolored blackbird. Similarly, Fresno Slough serves as an important natural waterway that supports riparian and wetland habitats essential for migratory birds, amphibians and other native wildlife species, and contributes to regional ecological connectivity. These areas are vital components of the regional landscape and provide habitat for numerous species, and the Project site may serve as a potential connectivity area linking to these natural habitats. While the DEIR states that the proposed Project site consists primarily of fallowed agricultural fields and disturbed lands with limited cover or surface water, and therefore has limited utility for wildlife movement, this conclusion appears premature. The DEIR not only failed to adequately consider connectivity by omitting these nearby natural areas from its analysis but also failed to evaluate any other potential impacts to the Mendota Wildlife Area and Fresno Slough overall. Defenders requests that the DEIR be revised to include a comprehensive analysis of both connectivity and potential direct, indirect, and cumulative impacts to these important natural areas.

C-9

Compensatory Mitigation

The DEIR states that compensatory mitigation requirements would be set forth in any Incidental Take Permit (ITP) issued by CDFW for impacts to burrowing owls. However, the DEIR fails to identify or include compensatory mitigation for other special-status species that may be affected by the Project, even though CDFW specifically recommended compensatory mitigation to offset the loss of Swainson's hawk foraging habitat in their

C-10

[3] US Fish and Wildlife Service. 2011. *U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior To or During Ground Disturbance*.
[4] Ibid.

scoping comments.[5] Deferring the development of compensatory mitigation until the ITP stage is inappropriate under CEQA, as it prevents meaningful public review and input on key mitigation measures during the environmental review process. CEQA's fundamental purpose is to inform both the public and decision-makers of a project's potential environmental impacts and the adequacy of proposed mitigation to reduce those impacts to less-than-significant levels. Accordingly, compensatory mitigation measures must be clearly described and incorporated within the DEIR itself to ensure transparency, enforceability and compliance with CEQA's intent.

C-10 cont.

Conclusion

Thank you once again for the opportunity to provide comments on the DEIR for the proposed Heartland Solar Project and for considering our comments. Defenders looks forward to reviewing the Final EIR for the Project and requests to be notified when it is available. Please feel free to contact me with any questions.

C-11

Respectfully submitted,

Sophia Markowska

Sophia Markowska
Senior California Representative
SMarkowska@defenders.org

[5] California Department of Fish and Wildlife. 2022. *Heartland Hydrogen Project, Unclassified Condition Use Permit Application Nos. 3630 and 3631 and Variance Application No. 4122 (Project) Notice of Preparation (NOP) State Clearinghouse No. 2022100609.*

2.4.3 Letter C: Defenders of Wildlife

C-1 The County acknowledges the stated support for renewable energy generation. The Draft EIR analyzes short-term and long-term impacts on each of the resources identified in CEQA Guidelines Appendix G's environmental checklist. For example, see Section 3.5, *Biological Resources* (page 3.5-1 et seq.) and, regarding agricultural land as a natural landscape, see Section 3.3, *Agriculture and Forestry Resources* (page 3.3-1 et seq.).

C-2 This summary of Project details is consistent with information provided in Draft EIR Chapter 2, *Project Description* (p. 2-1 et seq.).

C-3 Draft EIR Section 2.4 (p. 2-6 et seq.) sets forth seven Project objectives. This comment accurately quotes objective 6. The summary of Project details is consistent with information provided in Draft EIR Chapter 2, *Project Description* (p. 2-1 et seq.). The County agrees with this statement of the environmental benefits that could accrue from a "smart from the start" approach such as the one described in the comment and in the material cited.

C-4 The County has reviewed and appreciates the information the comment provides based on San Joaquin Valley Least Conflict Solar Project mapping details. A conclusion of low or very low conservation value does not conflict with the descriptions provided of the environmental setting for agricultural resources in Draft EIR Section 3.3.1.2 (p. 3.3-1 et seq.), for biological resources in Draft EIR Section 3.5.1.1 (p. 3.5-1 et seq.), and for cultural resources and tribal cultural resources in Draft EIR Section 3.6.1.2 (p. 3.6-1 et seq.).

C-5 The comment references unidentified California Department of Fish and Wildlife (CDFW) guidelines regarding San Joaquin kit fox and indicates those guidelines require take authorization to destroy vacated San Joaquin kit fox dens. The County has revised Mitigation Measure 3.5-1 to clarify measure consistency with the USFWS's 2011 *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* and to require the Project owner to confer with USFWS and CDFW prior to implementing a passive relocation program, which could include destruction of vacated San Joaquin kit fox dens. Mitigation Measure 3.5-1 is revised as follows:

> **Mitigation Measure 3.5-1: Protection of San Joaquin Kit Fox, Burrowing Owl and American Badger During Construction**
>
> ***San Joaquin kit fox and American badger*:** Preconstruction surveys shall be conducted by a qualified biologist for the presence of San Joaquin kit fox and American badger ~~within~~ 14-to 30 days prior to commencement of construction activities pursuant to the USFWS (~~1999~~2011) *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance*. The surveys shall be conducted in areas of suitable habitat for San Joaquin kit fox and American badger. ~~Areas that have been disked or cultivated within 12 months prior to the start of ground-disturbing activities are not considered suitable.~~ Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur ~~within~~ 14-to-30 days prior to disturbance within active portions of the site. If no Known, P~~p~~otential, or Natal/pupping San Joaquin kit

fox or American badger dens are identified (as those terms are defined in USFWS [2011]), then no further mitigation is required. If ~~potential~~ such dens are observed and avoidance is determined to be feasible (as defined in CEQA Guidelines Section 15364 consistent with the USFWS [~~1999~~2011] *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance*) by a qualified biologist in consultation with the Project owner and the County, buffer distances shall be established prior to construction activities.

If avoidance of the potential dens is not feasible, the following measures shall be implemented to avoid potential adverse effects to the San Joaquin kit fox or American badger:

- ~~If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent them from being used during construction.~~

- ~~If the qualified biologist determines that a potential non-natal den may be active, an on-site passive relocation program shall be implemented with prior approval from the USFWS and CDFW. This program shall consist of excluding San Joaquin kit foxes or badgers from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for 72 hours to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that the San Joaquin kit foxes or American badgers have stopped using active dens within the Project boundary, the dens shall be hand-excavated, as stated above for inactive dens.~~

- If the qualified biologist identifies known or natal/pupping dens occupied by San Joaquin kit fox, the Project owner shall initiate consultation with USFWS and CDFW to discuss how to avoid take or, if take avoidance is not feasible, to acquire an Incidental Take Permit (ITP) pursuant to federal Endangered Species Act Section 7 and California Fish and Game Code section 2081(b), prior to initiating or resuming ground-disturbing activities.

- If the qualified biologist identifies dens occupied by American badger, an on-site passive relocation program shall be implemented in coordination with CDFW. This program shall consist of excluding badgers from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for 72 hours to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that the badgers have stopped using active dens within the Project boundary, the dens shall be hand-excavated.

***Burrowing owl*:** The Project owner shall have burrowing owl surveys performed within 14 days before the initiation of equipment staging or ground-disturbing activities. A qualified wildlife biologist shall conduct preconstruction surveys on the site and immediate vicinity only in areas of the site with suitable burrowing habitat to locate any active breeding or wintering burrowing owl burrows, no fewer than 14 days prior to initial ground-disturbing activities (e.g., vegetation clearance, grading, tilling). Areas that have been plowed within 12 months prior to the start of ground-disturbing activities are not considered suitable habitat. The survey methodology shall be consistent with the methods outlined in the Appendix D of the CDFG (2012) *Staff Report on*

Burrowing Owl Mitigation, or latest appropriate guidance documents, with regard to transect spacing, weather conditions, and time of day requirements. If the work activity halts for a period of 14 days or more, the survey would need to be conducted again prior to the continuation of site activities. Copies of the survey results shall be submitted to CDFW and the Fresno County Department of Public Works and Planning.

- If inactive (unoccupied) burrowing owl burrows are detected any time of the year, the burrows may be excavated by hand with a shovel or covered (i.e., with sandbags) to prevent burrowing owls from re-using them during construction. The burrow's inactive status will be determined by the approved biologist through monitoring prior to burrow excavation.
- If active (occupied) burrowing owl burrows are detected, no ground-disturbing activities, such as vegetation clearance, grading, or other construction activities, shall be permitted within a no-disturbance buffer around the burrow. The size of any employed no-disturbance buffers will be in accordance with the recommended restricted activity dates and setback distances by level of disturbance for burrowing owls outlined in the CDFG (2008) *Guidance for Burrowing Owl Conservation:*
  - 75 meters (250 feet) from occupied burrows during breeding season, and
  - 50 meters (160 feet) from occupied burrows during non-breeding season.
- Occupied burrowing owl burrows shall be regularly monitored by a qualified biologist or biological monitor throughout project construction. Depending on the level of disturbance and its duration, visual and auditory screening, and similar, a larger or smaller buffer may be established by a qualified biologist in coordination with CDFW based on the visibility and sensitivity responses of each individual burrowing owl.
- If active burrowing owl avoidance is infeasible, then the project owner shall consult with CDFW regarding potential for project activities to result in take of burrowing owl and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ITP issued for the project by CDFW authorizing take of the species.

The list of references provided in Draft EIR Section 3.5.5 (p. 3.5-35) has been updated for consistency with the updated citation referenced in the mitigation measure, and a copy of USFWS 2011 has been included in the record where it may be reviewed by decision-makers or others.

C-6 In response to the commenter's request that the burrowing owl buffer sizes in Mitigation Measure 3.5-1 be expanded to conform to CDFW (2012) guidance, which recommends buffers up to 500 meters, Mitigation Measure 3.5-1 states that burrowing owl survey methodology shall adhere to the Staff Report on Burrowing Owl Mitigation (2012).[3] The 2012 staff report's guidance on buffer sizes is based on a study of oil drilling installations in Alberta, Canada, where terrain conditions differ from the San Joaquin Valley. As noted in CDFW (2012), "[b]ased on existing vegetation, human development, and land uses in an area, resource managers may decide to allow

[3] CDFG (California Department of Fish and Game). 2012. *Staff Report on Burrowing Owl Mitigation*. March 7, 2012. Available: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=83843. Accessed October 21, 2025.

human development or resource extraction closer to" burrowing owl nests than recommended in the guidance, provided robust monitoring is performed. Mitigation Measure 3.5-1 is consistent with the guidance, in that it establishes minimum buffer sizes consistent with 2008 California Department of Fish and Game (CDFG) guidance,[4] which notes that if "the level and duration of disturbance will be brief and tolerance of human activity by individual owls at the site is high, then buffer zones may be smaller in size." These conditions describe the Heartland Solar Project site, where the burrowing owls are residing adjacent to an agricultural field and roadway.

Mitigation Measure 3.5-1 (as noted in response C-5) has been revised to clarify that occupied burrowing owl burrows shall be regularly monitored throughout project construction and that a larger or smaller buffer would be established if determined necessary by a qualified biologist in consultation with CDFW, based on the level of disturbance and its duration, visual and auditory screening, and sensitivity responses of each individual burrowing owl. These revisions to Mitigation Measure 3.5-1 ensure consistency with CDFW (2012) guidance.

C-7 In response to the request that nighttime construction be minimized, and that the nighttime speed limit on the Project site be reduced to 10 mph, to conform to USFWS SJKF guidance (2011), Mitigation Measure 3.5-2 is revised as follows:

Mitigation Measure 3.5-2: Worker Environmental Awareness Program Training and Best Management Practices for Biological Resources

During construction, operation and maintenance, and decommissioning of the facility, the Project owner and/or contractor shall implement the following general avoidance and protective measures to protect San Joaquin kit fox and other special-status wildlife species:

- Prior to the issuance of grading or building permits and for the duration of construction activities, the Project owner, or its contractor, shall implement a Worker Environmental Awareness Program (WEAP) to train construction personnel how to recognize and protect biological resources on the Project site. The WEAP training shall include a review of the special-status species and other sensitive biological resources that could exist in the Project area, the locations of sensitive biological resources and their legal status and protections, and measures to be implemented for avoidance of these sensitive resources, highlighting San Joaquin kit fox, Swainson's hawk, burrowing owl, and loggerhead shrike.

- The Project owner shall limit the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid special-status species where feasible. Construction-related activities, vehicles, and equipment outside of the impact zone shall be avoided. These areas shall be flagged and disturbance activities, vehicles, and equipment shall be confined to these flagged areas.

- To prevent inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches with a 2-foot or greater depth shall be covered with plywood or

[4] CDFG (California Department of Fish and Game). 2008. *Guidance for Burrowing Owl Conservation*. April 14, 2008. Page 10. Available: https://thebirdersreport.com/BUOW_Guidance_14_April_2008-CDFG.pdf. Accessed October 21, 2025.

similar materials at the close of each working day, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected by the approved biological monitor for trapped animals. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If a listed species is trapped, the USFWS and/or CDFW shall be contacted immediately.

- All construction pipes, culverts, or similar structures with a 4-inch or greater diameter that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for special-status wildlife or nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved until a qualified biologist has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated by the biologist.
- Vehicles and equipment parked on the site shall have the ground beneath the vehicle or equipment inspected for the presence of wildlife prior to moving.
- Vehicular traffic shall use existing routes of travel. Cross-country vehicle and equipment use outside of the Project properties shall be prohibited.
- A speed limit of 20 miles per hour shall be enforced within all construction areas in daylight; in the event night work is required, the enforced speed limit shall be 10 miles per hour.
- A long-term trash abatement program shall be established for construction, operation, and decommissioning and submitted to the County. Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to wildlife such as common raven (*Corvus corax*), coyote (*Canis latrans*), and feral dogs.
- Workers shall be prohibited from bringing pets and firearms to the Project site and from feeding wildlife in the vicinity.
- Intentional killing or collection of any wildlife species shall be prohibited.

C-8 In response to the request to add prohibition on firearms on the construction site in accordance with USFWS SJKF guidelines, Mitigation Measure 3.5-2 has been revised to include this provision, as shown above under response C-7.

C-9 The comment correctly notes that Mendota Wildlife Area, located approximately 3.5 miles northeast of the Project site, and Fresno Slough, located 2.3 miles northeast of the site, are critical wildlife habitat management areas for special-status and migratory birds, reptiles, and mammals, as well as amphibians in season. The comment provides information consistent with what is presented in the Draft EIR. See Draft EIR (p. 3.5-1); in context of special-status species occurrences, see also pages 3.5-5 and 3.5-7). These refuges are important to the regional populations of special-status species evaluated in the EIR. However, the Heartland Project site lacks connectivity to these natural areas, being separated by major roadways, agricultural areas, and the City of Mendota. Thus, wildlife would not be expected to move from Mendota Wildlife Area or Fresno Slough to the Heartland Solar Project site, which lacks forage, cover, and other needed habitat features. In addition, while direct, indirect and cumulative impacts on special-

status species are analyzed in Draft EIR Section 3.5, *Biological Resources* (pp. 3.5-18 to 3.5-33), the Project's construction 2 to 3 miles southwest of these natural areas, at a site lacking connectivity to them, would not be expected to impact these natural areas or the movement of wildlife to those areas, either directly, indirectly or cumulatively. Thus, no change has been made to the EIR in response to this comment.

C-10 In response to the commenter's request for inclusion of compensatory mitigation for Swainson's hawk foraging habitat, the impact of the Project on Swainson's hawk foraging habitat is discussed in the Draft EIR on pages 3.5-19 and 3.5-20. The discussion notes that removal of 2,362 acres of low-quality foraging habitat would reduce available foraging habitat by 3.5 percent, which is considered less than significant. Foraging habitat loss is also considered in the context of cumulative effects on page 3.5-30. The analysis is based on the cumulative impact assessment for Swainson's hawk in Draft EIR Appendix E4, and concludes that the Project would contribute to a less-than-significant cumulative impact to the regional population of Swainson's hawk, given that the combined loss of foraging habitat due to solar projects would represent less than 1/10,000 of available foraging acreage in Fresno County. Thus, no change has been made to the EIR in response to this comment.

C-11 The County's Project-specific distribution list has been updated to include the letter author's contact information. Future CEQA notifications about the Project will be emailed.

Docusign Envelope ID: 3CBD8702-49EC-40C2-A528-162041285F6F

State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
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GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director

November 5, 2025

Alyce Alvarez
Fresno County Department of Public Works and Planning
2220 Tulare Street, Suite B Annex
Fresno, California 93721
(559) 600-9669
alyalvarez@FresnoCountyCA.gov

Subject: **Heartland Solar Project (Project)**
Draft Environmental Impact Report (DEIR)
State Clearinghouse No. 2022100609

Dear Alyce Alvarez:

The California Department of Fish and Wildlife (CDFW) received a DEIR from Fresno County, as Lead Agency, for the Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.[1]

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

D-1

[1] CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code will be required. D-1 cont.

Nesting Birds: CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs, and nests include 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird). D-2

Unlisted Species: Species of plants and animals need not be officially listed as Endangered, Rare, or Threatened (E, R, or T) on any State or Federal list to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for E, R, or T, as specified in the CEQA Guidelines section 15380, CDFW recommends it be fully considered in the environmental analysis for the Project. D-3

As a responsible agency, CDFW is responsible for providing, as available, biological expertise during public agency environmental review efforts (e.g., CEQA), focusing specifically on project activities that have the potential to adversely affect fish and wildlife resources. CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts. D-4

PROJECT DESCRIPTION SUMMARY

Proponent: Heartland Solar 1, LLC

Objective: The proposed Project involves construction, operation, maintenance, and decommissioning of a 300-megawatt (MW) solar and energy storage complex and 300 MW alternating current (ac) battery energy storage facility. The Project would include O&M buildings, parking, and an onsite substation, totaling approximately 2,362 acres. An approximately 5-mile-long transmission (generation-tie) line would deliver power to the existing Pacific Gas and Electric Company (PG&E) owned 70 kilovolt (kV) Tranquility Switching Station, which would be the Project's point of interconnection with the grid. Roughly 3 miles of the generation-tie line would be constructed within the footprint of the Project Site. D-5

Docusign Envelope ID: 3CBD8702-49EC-40C2-A528-162041285F6F

Location: The Project site is located approximately 6 miles southwest of the City of Mendota, 10 miles east of Interstate 5 (I-5), to the east of S. San Bernardino and Los Angeles avenues, south of W. American Avenue, west of State Route (SR) 33 (also called S. Derrick Avenue), 0.5 mile north of W. Manning Avenue, and 1.25 miles north of PG&E's Tranquillity Switching Station.

D-5 cont.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Fresno County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct, and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the Final Environmental Impact Report (FEIR).

As stated in the DEIR, the Project site primarily consists of previously irrigated agricultural land that is intermittently dry farmed and disked for weed control. Some nonnative grassland habitat occurs around the margins of the Project site that have not been heavily disturbed. Based on a review of the Project description and habitat assessments within the DEIR, California Natural Diversity Database (CNDDB) records, aerial imagery, and the Biological Resources Evaluation (BRE), a number of special-status species could potentially be impacted by the Project.

Currently, the DEIR acknowledges that the Project site is within the geographic range of several special-status animal species and proposes specific mitigation measures to reduce impacts for these species to a less than significant level. CDFW has concerns about the ability of some of the proposed mitigation measures to reduce impacts to less than significant and avoid unauthorized take of the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica)*, the State threatened Swainson's hawk (*Buteo swainsonii*); and the State candidate western burrowing owl (*Athene cunicularia hypugaea*).

D-6

San Joaquin Kit Fox

The Project site is within the range of the San Joaquin kit fox (SJKF) and, as documented in the DEIR, potentially suitable habitat exists around the margins of the Project site. There is a CNDDB occurrence 4.5 miles south of the Project (CDFW 2025).

D-7

Currently, the DEIR provides Mitigation Measure (MM) 3.5-1 to mitigate for potentially significant impacts to SJKF. MM 3.5-1 requires a qualified biologist to conduct preconstruction surveys, implement avoidance buffers, and potentially passively relocate SJKF from active SJKF dens. CDFW does not concur that MM 3.5-1 is sufficient to mitigate potentially significant impacts to SJKF and avoid unauthorized take of the species. Passive relocation in particular, without obtaining prior take authorization

D-8

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from CDFW through acquisition of an Incidental Take Permit (ITP), would likely result in unauthorized take of the species. MM 3.5-1 also references the 1999 version of the USFWS document "Standardized Recommendations for Protection of the San Joaquin Kit Fox" (USFWS Protocol). CDFW recommends this portion of the measure be updated to reference the 2011 updated version of the USFWS Protocol. In addition to the recommendations identified above, CDFW recommends the following measures to protect against potentially significant impacts to SJKF: D-8 cont.

Recommended Mitigation Measure 1: SJKF Preconstruction Surveys D-9

CDFW recommends assessing presence/absence of SJKF by conducting focused den surveys for the species prior to the initiation of Project ground disturbance activities within the different phases of Project construction (as outlined in MM 3.5-1). CDFW recommends conducting these surveys no less than 14-days and no more than 30-days prior to beginning of ground and/or vegetation disturbing activities, and recommends the surveys be conducted in all portions of the Project site (not just areas that have not been disked in the past 12 months as identified in MM 3.5-1). CDFW recommends all survey timing and methodologies follow those in the 2011 version of the USFWS Protocol (USFWS 2011).

Recommended Mitigation Measure 2: SJKF Avoidance Buffer D-10

CDFW recommends implementing no-disturbance buffers, as described in the 2011 version of the USFWS Protocol (USFWS 2011), around potentially suitable or known SJKF den sites.

Recommended Mitigation Measure 3: SJKF Take Authorization D-11

If the no-disturbance buffers outlined in the USFWS Protocol for SJKF is not feasible, CDFW recommends that consultation with CDFW occur to discuss how to implement the Project and avoid take. If take cannot be avoided, acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is required to comply with CESA.

Swainson's Hawk

The DEIR notes that there is potential foraging and nesting habitat for Swainson's hawk (SWHA) within the Project site; multiple SWHA were detected during reconnaissance surveys within the Project site and vicinity. Additionally, one SWHA nest was detected within the Project site and two additional nests were detected outside the Project site but within ½-mile of the Project site during 2025 focused surveys. Currently, MM 3.5-2 is included to mitigate for potentially significant impacts to SWHA within and adjacent to the Project site and requires a qualified biologist to conduct SWHA preconstruction D-12

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surveys and implement of a ½-mile no-disturbance buffer for active SWHA nests. CDFW does not concur that implementation of MM 3.5-2 would be sufficient to mitigate for potential significant impacts to SWHA and avoid unauthorized take of the species. As three separate active SWHA nests were identified within the Project footprint and vicinity during 2025 surveys, consultation with CDFW is strongly recommended to discuss how to implement the Project and avoid take or to obtain take authorization through acquisition of an ITP. D-12 cont. D-13

In addition to the consultation recommendation above, CDFW also recommends MM 3.5-2 be modified to include the following:

Recommended Mitigation Measure 4: SWHA Surveys Prior to Construction

Depending on the time between the initial survey efforts conducted in support of the DEIR and Project construction (i.e., if Project construction is anticipated to begin during the 2026 nesting season or after), if Project-specific activities will take place during the SWHA nesting season (i.e., March 1 through September 15), CDFW recommends that the preconstruction surveys detailed in MM 3.5-2 be conducted within the Project site and a ½-mile buffer of the Project site following the entirety of survey methodology developed by the SWHA Technical Advisory Committee (SWHA TAC 2000) immediately prior to construction. D-14

Recommended Mitigation Measure 5: SWHA Avoidance Buffer

If Project-specific activities will take place during the SWHA nesting season (i.e., March 1 through September 15), and active SWHA nests are present, CDFW recommends a minimum ½-mile no-disturbance buffer be delineated and maintained around each nest, regardless of whether it was detected by surveys or observed incidentally. These buffers would remain in place until the breeding season has ended or until a qualified biologist has determined that the birds have fledged and are no longer reliant upon the nest or parental care for survival, to prevent nest abandonment and other take of SWHA as a result of Project activities. D-15

Recommended Mitigation Measure 6: SWHA Take Authorization

CDFW also recommends that in the event an active SWHA nest is detected, and implementation of a ½-mile no-disturbance buffer is not feasible, consultation with CDFW is warranted to discuss how to implement the Project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA. D-16

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Recommended Mitigation Measure 7: SWHA Foraging Habitat Mitigation

Finally, CDFW recommends compensation for the loss of SWHA foraging habitat as described in CDFW's "Staff Report Regarding Mitigation for Impacts to Swainson's Hawks" (CDFG 1994) to reduce impacts to foraging habitat to less than significant. The Staff Report recommends that mitigation for habitat loss occur within a minimum distance of 10 miles from known nest sites. CDFW has the following recommendations based on the Staff Report:

- For projects within 1 mile of an active nest tree, a minimum of 1 acre of habitat management (HM) land for each acre of development is advised.
- For projects within 5 miles of an active nest but greater than 1 mile, a minimum of ¾ acre of HM land for each acre of development is advised.
- For projects within 10 miles of an active nest tree but greater than 5 miles from an active nest tree, a minimum of ½ acre of HM land for each acre of development is advised.

D-17

Western Burrowing Owl

The California Fish and Game Commission (FGC) approved western burrowing owl (BUOW) as a candidate for potential listing as a protected species under CESA on October 10, 2024, and published these findings in the California Regulatory Notice Register (Notice Register) on October 25, 2024. As such, BUOW is now a candidate under CESA and receives the same legal protection afforded to an endangered or threatened species (Fish & G. Code, §§ 2074.2 & 2085).

The DEIR and included BUOW Survey Report provided in Appendix E indicate that the margins of the Project site and surrounding area contain suitable BUOW habitat and a number of BUOW were observed utilizing burrows within ditches along the boundary of the Project site. In addition to these observations, the Project site, while currently disturbed by agricultural activity, may have the potential for BUOW to occupy the site once agricultural activities have ceased. Currently the DEIR provides MM 3.5-1 to mitigate for potential impacts to BUOW. MM 3.5-1 includes BUOW surveys and avoidance and minimization measures, and states that inactive burrows would be excavated by hand, and active burrows would have a 75 meter and 50 meter no-disturbance buffer implemented during the breeding and non-breeding season, respectively.

D-18

CDFW does not concur that MM 3.5-1 is sufficient to mitigate for potential significant impacts to BUOW and prevent the unauthorized take of the species. In particular, implementation of the no-disturbance buffers and excavation measures outlined in MM 3.5-1 would have a strong likelihood to result in the unauthorized take of the species

D-19

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without take authorization through acquisition of an ITP. As BUOW were identified in several locations within the Project vicinity during 2024 and 2025 surveys, consultation with CDFW is strongly recommended to discuss how to implement the Project and avoid take or to obtain take authorization through acquisition of an ITP.

D-19 cont.

In addition to the consultation recommendation above, CDFW also recommends MM 3.5-1 be modified to include the following:

Recommended Mitigation Measure 8: BUOW Preconstruction Surveys

Depending on the time between the initial survey efforts conducted in support of the DEIR and Project construction, CDFW recommends that additional surveys, following the 2012 Staff Report on Burrowing Owl Mitigation (CDFG 2012) be repeated the survey season immediately prior to construction.

D-20

Recommended Mitigation Measure 9: BUOW Avoidance Buffer

Should a BUOW or known BUOW burrow (active or inactive) be detected, either during preconstruction surveys or construction activities, CDFW recommends that no-disturbance buffers, as outlined in the 2012 Staff Report on Burrowing Owl Mitigation (CDFG 2012), be implemented prior to and during any ground-disturbing activities. CDFW also recommends that these buffers be implemented for both wintering and breeding BUOW.

D-21

Recommended Mitigation Measure 10: BUOW Take Authorization

If a BUOW or known BUOW burrow (active or inactive) is detected, and the no-disturbance buffers outlined in the 2012 Staff Report on Burrowing Mitigation are not feasible, consultation with CDFW is warranted to discuss how to implement the Project and avoid take. If take cannot be avoided, take authorization through the acquisition of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b) is necessary to comply with CESA.

D-22

Editorial Comments and/or Suggestions

Battery Energy Storage System Evaluation: CDFW is familiar with the Moss Landing battery plant fire, which was a battery energy storage system (BESS) which had densely stacked batteries within a single warehouse building and which used lithium-ion batteries with Nickel Manganese Cobalt (NMC) chemistry, which are more prone to overheating and thermal runaway. Fires at NMC BESSs cannot be extinguished with water and thus an alternative onsite fire suppression system is critical.

D-23

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As such, the BESS systems proposed as part of the Project warrant a careful evaluation for potential fire-related impacts to biological resources within and surrounding the Project site. While newer BESS technologies have been made more readily available since construction of the Moss Landing BESS, current battery technologies can still have the potential for impacts to biological resources if overheating and thermal runaway were to occur. For example, Lithium-ion BESS fires can release an array of toxic chemicals into the air (Mylenbusch et al. 2023). In addition to potential human health concerns, these emissions may also impact air quality for nearby wildlife, and harmful particulate matter may settle into soils or waterways, possibly affecting soil-dwelling organisms, burrowing mammals, and aquatic life.

The proposed Project includes installation of an approximately 300 MW BESS on the Project site. Based on information in the DEIR, it appears the BESS configuration for the Project is likely to be constructed of self-contained energy storage modules (i.e., individual battery containers), which lessen the risk of widespread fire. In addition, there is new battery technology alternative to the NMC chemistry, such as Lithium Iron Phosphate (LFP) which uses more benign constituents and has better thermal stability and is less prone to overheating. Based on info on the DEIR, three battery technologies could be utilized for Project BESS construction including lithium ion, sodium sulphur, and vanadium-redox technology.

Given the above, CDFW recommends a thorough analysis of the BESS component of the Project to evaluate the potential impacts of a large and small BESS fires on biological resources within and surrounding the Project site. CDFW recommends the evaluation not only assess the risk to biological resources, but also detail the Project-specific measures that would be implemented to reduce the risk of fire, and to carefully consider BESS siting, battery/container spacing, battery chemistry, battery life and degradation, and the most appropriate fire protection/suppression system.

D-23 cont.

Nesting Birds: CDFW encourages that Project ground-disturbing activities occur during the bird non-nesting season; however, if ground-disturbing or vegetation-disturbing activities must occur during the nesting season (February 1st through September 15th), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Code sections as referenced above.

D-24

CDFW further recommends that a qualified biologist conduct a pre-construction survey for active nests no more than 10 days prior to the start of ground or vegetation disturbance to maximize the probability that nests that could potentially be impacted are detected. CDFW also recommends that surveys cover a sufficient area around the Project site to identify nests and determine their status. A sufficient area means any area potentially affected, either directly or indirectly, by the Project. In addition to direct impacts (i.e., nest destruction), noise, vibration, and movement of workers or equipment

D-25

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could also affect nests. CDFW recommends that a qualified biologist establish a behavioral baseline of all identified nests. Once Project activities begin, CDFW recommends having a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends halting the work causing that change and consulting with CDFW for additional avoidance and minimization measures. D-25 cont.

If continuous monitoring of identified nests by a qualified biologist is not feasible, CDFW recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species and a 500-foot no-disturbance buffer around active nests of non-listed raptors. These buffers are advised to remain in place until the breeding season has ended or until a qualified biologist has determined the birds have fledged and are no longer reliant upon the nest or on-site parental care for survival. Variance from these no-disturbance buffers is possible when there is a compelling biological or ecological reason to do so, such as when the Project site would be concealed from a nest site by topography. CDFW recommends that a qualified biologist advise and support any variance from these buffers and notify CDFW in advance of implementing a variance. D-26

CNDDB: Please note that the CNDDB is populated by records through voluntary submissions of species detections. As a result, species may be present in locations not depicted in the CNDDB but where there is suitable habitat features capable of supporting species. A lack of an occurrence record in the CNDDB does not mean a species is not present. To adequately assess any potential Project-related impacts to biological resources, surveys conducted by a qualified biologist during the appropriate survey period(s) using the appropriate protocol survey methodology are warranted to determine whether any special-status species are present at or near the Project site. D-27

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database, which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the CNDDB. The CNDDB field survey form can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Submitting-Data. The completed form can be mailed electronically to CNDDB at the following email address: CNDDB@wildlife.ca.gov. The types of information reported to CNDDB can be found at the following link: https://www.wildlife.ca.gov/Data/CNDDB/Plants-and-Animals. D-28

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FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089). D-29

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist Fresno County in identifying and mitigating Project impacts on biological resources. Please see the enclosed Mitigation Monitoring and Reporting Program (MMRP) table (Attachment 1) which corresponds with the recommended mitigation measures in this comment letter. D-30

If you have any questions, please contact Ren Cotter, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 767-0956 or by electronic mail at Ren.Cotter@wildlife.ca.gov.

Sincerely,

DocuSigned by:
Julie Vance
FA83F09FE08945A...

Julie A. Vance
Regional Manager

ATTACHMENT (MMRP)

ec: **State Clearinghouse**
Land Use and Climate Innovation
State.Clearinghouse@lci.ca.gov

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REFERENCES

California Department of Fish and Game. 1994. Staff report regarding mitigation for impacts to Swainson's hawks (*Buteo Swainsoni*) in the Central Valley of California. Sacramento, California, USA.

California Department of Fish and Game. 2012. Staff report on burrowing owl mitigation. Sacramento, California, USA.

Mylenbusch, I., K. Claffey, and B. Chu. Hazards of lithium-ion battery energy storage systems (BESS), mitigation strateies, minimum requirements, and best practices. Process Safety Progress, 2023:1–10.

Swainson's Hawk Technical Advisory Committee. 2000. Recommended timing and methodology for Swainson's hawk nesting surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee.

U. S. Fish and Wildlife Service. 2011. Standard Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance. U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Sacramento, California.

D-31

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Attachment 1

Docusign Envelope ID: 3CBD8702-49EC-40C2-A528-162041285F6F

Attachment 1

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM
(MMRP)

PROJECT: Heartland Solar Project by Heartland Solar 1, LLC

SCH No.: 2022100609

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
Before Disturbing Soil or Vegetation	
SJKF	
Recommended Mitigation Measure 1: SJKF Preconstruction Surveys	
Recommended Mitigation Measure 3: SJKF Take Authorization	
SWHA	
Recommended Mitigation Measure 4: SWHA Preconstruction Surveys	
Recommended Mitigation Measure 6: SWHA Take Authorization	
Recommended Mitigation Measure 7: SWHA Foraging Habitat Mitigation	
BUOW	
Recommended Mitigation Measure 8: BUOW Preconstruction Surveys	
Recommended Mitigation Measure 10: BUOW Take Authorization	
During Construction	
SJKF	
Recommended Mitigation Measure 2: SJKF Avoidance Buffer	
SWHA	
Recommended Mitigation Measure 5: SWHA Avoidance Buffer	
BUOW	
Recommended Mitigation Measure 9: BUOW Avoidance Buffers	

2.4.4 Letter D: California Department of Fish and Wildlife

D-1 The summary provided of the agency's role in the CEQA process for this Project is consistent with the description provided in Draft EIR Section 1.2, *Purpose of this Document and Its Use by Agencies*, which explains (page 1-2) that "agencies that have discretionary permitting authority over aspects of the Project or that have responsibility for resources held in trust for the people of the State of California (*responsible agencies* and *trustee agencies*, respectively) also may rely on this EIR in deciding whether to approve permits or issue other approvals for the Project." Draft EIR Section 2.6 specifically recognizes CDFW's authority in Table 2-4, *Permits and Approvals* (p. 2-22). The agency's authority under the Fish and Game Code also is described in Draft EIR Section 3.5.1.2, *Regulatory Setting*, regarding the California Endangered Species Act and other laws governing biological resources (page 3.5-12 et seq.).

D-2 This comment provides details that are consistent with information presented in the Draft EIR. The nesting bird-related provisions of Fish and Game Code Sections 3503, 3503.5, and 3513 are summarized in Draft EIR Section 3.5.1.2, *Regulatory Setting* (page 3.5-13).

D-3 CEQA Guidelines Section 15380(d) says, "A species not included in any listing identified in subdivision (c) shall nevertheless be considered to be endangered, rare or threatened, if the species can be shown to meet the criteria in subdivision (b)." The County is aware of and has considered this provision of the CEQA Guidelines.

D-4 See Response D-1, which acknowledges CDFW's role as a responsible agency for purposes of the CEQA process for this Project.

D-5 The summary of the Project provided in this comment is consistent with details provided in Draft EIR Chapter 2, *Project Description* (p. 2-1 et seq.). See, for example, Draft EIR Section 2.1, *Project Overview* (p. 2-1) and Section 2.2, *Location of the Project Site* (p. 2-1).

D-6 CDFW accurately describes the Project site as consisting of agricultural land surrounded by nonnative grassland, which lies within the geographic range of several special-status animal species. See the responses below, which address the general statement of concerns presented here in response to the additional detail provided in the associated comments.

D-7 This comment provides input consistent with information presented in the Draft EIR, including that potentially suitable habitat exists around the margins of the Project site for the San Joaquin kit fox (SJKF) and that there is a CNDDB occurrence 4.5 miles south of the Project site. The Draft EIR provides Mitigation Measure 3.5-1 to mitigate for impacts to this species. See Response C-5 and Chapter 3 of this Final EIR regarding proposed edits to Mitigation Measure 3.5-1.

D-8 Please see the response to comment C-5.

D-9 As indicated in Response C-5 and Chapter 3 of this Final EIR, the SJKF survey methodology required by Mitigation Measure 3.5-1 will follow USFWS's 2011 guidance: occurring between 14 and 30 days prior to ground-disturbing activity and in all portions of the Project site, not just

those which have not been disked in the past 12 months. See Response C-5 and Chapter 3 of this Final EIR regarding proposed edits to Mitigation Measure 3.5-1 that have been made consistent with this comment.

D-10 See Response C-5 and Chapter 3 of this Final EIR regarding proposed edits to Mitigation Measure 3.5-1 that have been made consistent with the suggestion in this comment that avoidance buffers be implemented as described in USFWS's 2011 guidance.

D-11 See Response C-5 and Chapter 3 of this Final EIR regarding proposed edits to Mitigation Measure 3.5-1 that have been made consistent with the suggestion in this comment.

D-12 CDFW's observation of potential foraging and nesting habitat for Swainson's hawk (SWHA) within the Project site is consistent with information provided in the Draft EIR, including that multiple SWHA and three nests were detected during reconnaissance surveys within (or within 0.5-mile of) the Project site. Regarding the protection of SWHA, see Mitigation Measure 3.5-3, *Protection of Nesting Birds, including Swainson's Hawk* (Draft EIR, pp. 3.5-25 and 3.5-26) and Response D-14, Response D-24, and Chapter 3 of the Final EIR for proposed revisions to Mitigation Measure 3.5-3.

D-13 The County acknowledges CDFW's comment. As explained on Draft EIR page 3.5-26 and based on evidence in the County's record on the project, the County has concluded the combined implementation of "Mitigation Measures 3.5-1, 3.5-2, and 3.5-3 would reduce impacts to a less-than-significant level because impacts on special-status species would be avoided, or minimized by surveys, monitoring and relocation if required; site workers would be trained to avoid biological resources and vehicle and construction site impacts would be curtailed; and nesting birds, including Swainson's hawk, would be avoided in season with suitable construction avoidance buffers." As acknowledged in Draft EIR Section ES.5 (p. ES-5) and Table ES-1, *Permits and Approvals* (p. ES-6), CDFW approval of an incidental take permit "may be required to construct, operate, maintain, and decommission some or all components of the Project." See Response C-5 (Mitigation Measure 3.5-1); Response C-7 (Mitigation Measure 3.5-2); Responses D-14, D-24 and D-25 (Mitigation Measure 3.5-3); and Chapter 3 of the Final EIR for proposed revisions to these mitigation measures.

D-14 The County concurs with CDFW's recommendation that SWHA preconstruction surveys cover an area of 0.5-mile surrounding the Project site and adhere to CDFW methodology (SWHA TAC 2000). In response to this comment and comment D-24, Mitigation Measure 3.5-3 is updated as follows:

> **Mitigation Measure 3.5-3: Protection of Nesting Birds, including Swainson's Hawk**
>
> If construction is scheduled to commence outside of nesting season (September 16. to January 31<u>; September 16 to February 28 for Swainson's hawk</u>), no preconstruction surveys are required for nesting birds, including Swainson's hawk and other raptors. Trees that have documented usage by Swainson's hawks as nesting trees within the past 5 years shall not be removed.

During the breeding season (February 1 to ~~August 31~~September 15; March 1 to September 15 for Swainson's hawk), in order to avoid impacts to nesting birds in the Project site and immediate vicinity, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within the Project site where vegetation removal or ground disturbance is planned. The survey shall focus on potential nest sites and cover an area up to 0.~~2~~5-mile buffer around the site for Swainson's hawk, ~~300~~500 feet for common raptors, and ~~100~~250 feet for passerines in areas where access to neighboring properties is available or visible using a spotting scope or binoculars. Surveys shall be conducted no more than ~~14~~10 working days prior to construction activities. If construction is halted for ~~14~~10 working days or more, the area shall be re-surveyed prior to re-initiating work. Swainson's hawk surveys shall follow CDFW-approved methodology (SWHA TAC 2000).[5]

Surveys need not be conducted for the entire Project site at one time; they may be phased so that each work area is surveyed no more than ~~14~~10 working days prior to the start of construction in that area. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (~~300~~500 feet for common raptors; 0.~~2~~5 mile for Swainson's hawk; ~~100~~250 feet for passerines) shall be established around active nests and no construction within the buffer allowed until a qualified biologist has completed an assessment of the potential for current construction activities to impact the nest. ~~determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). Encroachment into these buffers for non-special-status species may occur at the discretion of a qualified biologist. Encroachment into these buffers for special-status species may occur in coordination or consultation with CDFW.~~ The assessment would consider the type of construction activities (e.g., noise levels and duration), the location of construction relative to the nest and pre-existing disturbance levels (e.g., construction activities in historically agricultural land versus activities in non-agricultural land), the visibility of construction activities from the nest location (e.g., topography or vegetation that could block line-of-sight to the nest), the number of construction personnel required to perform activities within the setback, and other existing disturbances in the area that are not related to construction activities of this project. Based on this assessment, the biologist will determine if construction activities can proceed and the level of nest monitoring required. When conducting the assessment, the biologist will consider the following levels of construction activity, with higher levels of activity requiring greater caution in determining setbacks:

- Light construction activity such as fence installation and limited vehicle access. Noise levels generated by these construction activities would likely be similar to existing ambient noise levels in closer proximity to the occupied nests.

- Moderate and/or isolated construction activity such as grading and construction of substation, substation-access road, inverter skids, and manual installation of solar panels. Noise levels generated by these construction activities would likely be similar to existing ambient noise levels beyond a moderate distance from the occupied nests.

- Heavy construction activity across a large area of the Project and/or using louder equipment such as concrete saws, or jackhammers. Noise levels for this type of activity will depend on location of the activities relative to the nest and allowing these activities within the 0.5-mile setback would require coordination with CDFW.

5 Swainson's Hawk Technical Advisory Committee. 2000. Recommended timing and methodology for Swainson's hawk nesting surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee.

> In the event the assessment determines that construction activities could occur closer than 0.5 miles to an active Swainson's hawk nest, in no event would construction activities occur within 500 feet of an active nest without coordination with CDFW. Full-time monitoring to evaluate the effects of construction activities on nesting Swainson's hawks would be required where activity occurs closer than 0.5 miles. The qualified biologist shall have the authority to stop work if it is determined that project construction is disturbing nesting activities. These buffers may need to increase depending on the sensitivity of the nesting Swainson's hawk to disturbances and at the discretion of the qualified biologist. No avoidance would be needed if construction occurs near a known Swainson's hawk nest outside of the Swainson's hawk nesting season. In the event take cannot be avoided, the proponent shall confer with CDFW on the need for an incidental take permit and will comply with any project-specific minimization and avoidance measures identified in the issued incidental take permit prior to the removal of active nest trees.

D-15 The County has updated Mitigation Measure 3.5-3 consistent with this comment to increase the buffer from 0.25 mile to 0.5 mile for active Swainson's hawk nests. This mitigation measure was updated to allow a qualified biologist to assess construction activities and reduce setbacks as appropriate (no construction within 500 feet without CDFW coordination). See Responses D-14, D-24, D-25, and Chapter 3 of the Final EIR for proposed revisions to Mitigation Measure 3.5-3.

D-16 See Response D-13 regarding Mitigation Measures 3.5-1, 3.5-2, and 3.5-3, consultation with CDFW, and the potential Project need for an incidental take permit.

D-17 See Response C-10 regarding the impact of the Project on Swainson's hawk foraging habitat. As analyzed in Section 3.5, *Biological Resources*, the Draft EIR concluded in the context of Impact 3.5-1 (p. 3.5-18 et seq.) that the impact would be less than significant. Similarly, the analysis of foraging habitat loss in the context of cumulative effects (Draft EIR, p. 3.5-30) concluded that the Project would contribute a less-than-significant cumulative impact to the regional population of Swainson's hawk from loss of foraging habitat due to solar projects in Fresno County. Thus, no change has been made to the EIR in response to this comment.

D-18 Information provided in this comment is consistent with information provided in the Draft EIR. See, for example, Draft EIR page ES-6 and Section 3.5-1.1 (p. 3.5-7), which discloses that western burrowing owl (BUOW) is a candidate species for listing and subject to legal protection under CESA, BUOW habitat is present on the boundary of the Project site, and that several BUOW were observed utilizing burrows during the non-breeding season. Mitigation Measure 3.5-1 includes BUOW surveys and avoidance measures including hand-excavation of inactive burrows and buffers of 75 and 50 meters for breeding and non-breeding seasons, respectively. See Response C-5 and Chapter 3 of this Final EIR regarding proposed edits to Mitigation Measure 3.5-1.

D-19 The County acknowledges CDFW's comment. As explained on Draft EIR page 3.5-26 and based on evidence in the County's record on the project, the County has concluded implementation of the combination of Mitigation Measures 3.5-1, 3.5-2, and 3.5-3 would reduce impacts on special-

status species to a less-than-significant level because impacts would be avoided or minimized by surveys, monitoring and relocation if required, site worker training to avoid biological resources and to curtail vehicle and construction site impacts, and seasonal avoidance of nesting birds with suitable construction avoidance buffers. Please also see the response to comment C-6, which describes revisions to Mitigation Measure 3.5-1 that would ensure no-disturbance buffers are appropriately sized to protect burrowing owls from take. BUOW survey results under Mitigation Measure 3.5-1 would be submitted to CDFW. As acknowledged in Draft EIR Section ES.5 (p. ES-5) and Table ES-1, *Permits and Approvals* (p. ES-6), CDFW approval of an incidental take permit "may be required to construct, operate, maintain, and decommission some or all components of the Project." Further, because the requested consultation and potential permitting for BUOW already would occur, no change was made to the EIR in response to this comment. See Response C-5 (Mitigation Measure 3.5-1); Response C-7 (Mitigation Measure 3.5-2); Responses D-14, D-24, and D-25 (Mitigation Measure 3.5-3); and Chapter 3 of the Final EIR for proposed revisions to these mitigation measures.

D-20 Regarding CDFW's recommendation that additional surveys for BUOW be completed the survey season immediately prior to construction, according to CDFG (2012) guidance and per Mitigation Measure 3.5-1, a qualified wildlife biologist shall conduct preconstruction surveys on the site and immediate vicinity to locate any active breeding or wintering burrowing owl burrows, no fewer than 14 days prior to initial ground-disturbing activities. The measure states that the survey methodology shall be consistent with the methods outlined in the Appendix D of the CDFG (2012) *Staff Report on Burrowing Owl Mitigation*, or latest appropriate guidance documents. Because these measures are already included in Mitigation Measure 3.5-1 (as revised above under Comment C-5), no change was made to the EIR in response to this comment.

D-21 Regarding CDFW's recommendation for implementation of the 2012 guidance buffers for active or inactive BUOW burrows, for both wintering and breeding BUOW, please see response C-6.

D-22 See Response D-19 regarding burrowing owl. See also, Comment C-5 regarding Mitigation Measure 3.5-1 and Responses D-21 and C-6 specifically regarding the recommended buffers.

D-23 This comment correctly notes that the Project proposes to include a battery energy storage system (ESS), which is described primarily in Draft Section 2.5.1.4 (p. 2-11). This section of the Draft EIR explains that the ESS would occupy an approximately 20-acre area and consist of self-contained energy storage modules that "would be placed in racks within prefabricated metal enclosures." The proposed location of the ESS is shown in Draft EIR Figure 2-2, *Project Site* (p. 2-4).

The County and other regulatory agencies share CDFW's awareness of recent ESS fires and related hazards within the state. In the context of Impact 3.10-2 (p. 3.10-18 et seq.), for example, the County evaluates whether the Project's proposed ESS would create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. The analysis considers the rarity, yet seriousness of ESS fires and summarizes information developed and conclusions reached by the California Energy Commission, U.S. Environmental Protection Agency, and local agencies

(Monterey and San Diego counties) about the ESS safety incidents that have occurred within the last 5 years. These specifics, in the context of the current regulatory environment, support a conclusion that the ESS as part of the project would have a less-than-significant impact related to reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. See, Draft EIR Section 3.10.1.3, *Regulatory Setting* (page 3.10-5 et seq.), which describes laws, regulations, plans, and policies regulating potential hazards associated with ESS development in California, including Public Utilities Code Section 761.3, which requires each ESS facility in the state to have an emergency response and evacuation plan that covers the premises of the battery ESS facility.

See also Draft EIR Section 3.20.1.3 (p. 3.20-4 et seq.), which summarizes Chapter 12 of the California Fire Code governing the installation, maintenance, repair, retrofitting, testing, commissioning, and decommissioning of energy systems, including ESSs. In addition to these statutory and regulatory controls, the following additional legal obligations would apply to the proposed ESS and be independently enforceable:

- Health and Safety Code Section 25504 streamlines hazardous materials reporting for businesses by stating that a compliant Emergency Response Business Plan prepared pursuant to Health and Safety Code Section 25505 suffices for Fire Code Hazardous Materials Management Plan (HMMP) requirements. This affects battery ESSs by reducing redundant reporting, focusing on improved access for first responders, and integrating with state systems for safety and emergency planning. Unified reporting helps local agencies access critical data in responding to fires or spills, and supports interagency coordination for overall safety.

- California Code of Regulations Title 19, Section 2731 requires businesses handling hazardous materials (such as may be included in an ESS) to develop and implement detailed Emergency Response Plans that cover training for safe handling, coordination with local responders, use of emergency gear, and specific procedures for managing releases, ensuring employees are trained initially and with refreshers to protect against hazards.

- California Code of Regulations Title 22, Section 66262.34 compliance also improves ESS safety by requiring proper labeling, containment, accumulation time limits, and contingency planning for hazardous battery components and waste; preventing leaks, fires, and exposure; and ensuring generators know what hazardous materials they have, how long they can store them, and have plans for emergencies. These provisions directly reduce risks to people and the environment during handling and storage of used or damaged batteries.

The Draft EIR also analyzes potential fire-related impacts of ESSs in Section 3.20 (Draft EIR, page 3.20-1 et seq.). In the context of Impact 3.20-2 (page 3.20-11 et seq.), the County concluded that the Heartland Solar Project (expressly including the ESS) would cause a less-than-significant impact relating to the exacerbation of wildfire risks.

Consistent with CEQA and the recommendation in this comment, the Draft EIR analyzes potential impacts of the Heartland Solar Project, expressly including the proposed ESS, on a resource-by-resource basis throughout Draft EIR Chapter 3, *Environmental Analysis* (page 3.1-1

et seq.). For example, impacts on air quality are evaluated in Draft EIR Section 3.4 (page 3.4-1 et seq.), impacts on biological resources are evaluated in Section 3.5 (page 3.5-1 et seq.), impacts on soils are evaluated in Section 3.8 (page 3.8-1 et seq.), and impacts on water quality are evaluated in Section 3.11 (page 3.11-1 et seq.). Based on the existing DEIR analysis summarized above, the County concludes that potential BESS-fire related impacts on biological resources were adequately analyzed. Impacts would be less-than-significant, and no EIR revisions are required.

D-24 The County concurs with CDFW's assessment that the Project is responsible for protecting nesting migratory birds. The Project applied a nesting season of February 1st through August 31 in the Draft EIR (Mitigation Measure 3.5-3) but has updated the season's end date to September 15 in accordance with this comment. Mitigation Measure 3.5-3 is revised as shown in response D-14 and in Chapter 3.

D-25 The County has updated Mitigation Measure 3.5-3 consistent with this comment to accommodate a survey window of 10 working days prior to start of work, rather than 14. Please see responses D-14 and D-24.

Regarding CDFW's recommendation to include baseline monitoring of all identified nests during Project activities to determine behavior changes resulting from the Project, continuous monitoring of each nest to identify baseline behaviors would not be feasible throughout construction because the surrounding area has numerous non-construction-related activities which may affect the nests. This can include vehicular traffic, non-Project vehicles parking in proximity to nesting trees, nests located near residences, and ongoing agricultural activities. These activities are anticipated to occur closer to nests than Project-related activities, and if effects occur, they could mistakenly be interpreted as Project-related when in fact they are not. In addition, the nests near the Project are largely located on adjacent private property, with limited views from public areas, and the majority of these views are adjacent to high-speed roads. These areas would not be safe for continuous monitoring. Thus, this change has not been made to Mitigation Measure 3.5-3.

D-26 The County has updated buffer distances in Mitigation Measure 3.5-3 consistent with this comment. Please see responses D-14 and D-24. As stated in the measure, encroachment within these buffers would be at the discretion of a qualified biologist. If the qualified biologist observes a nesting bird demonstrating disturbance behavior (e.g., flying off from the nest), these buffer distances could also be expanded, in coordination with CDFW.

D-27 The County concurs with this comment that a lack of records in CNDDB does not indicate that a species is not present. No change has been made to the Draft EIR in response to this comment.

D-28 The County understands the obligation to report special-status species and natural communities detected during Project surveys to CNDDB. Although this comment does not address the adequacy or accuracy of the Draft EIR, it has been included in the record where it is available for review and any appropriate action by the Project team.

D-29 The County is aware of the fee payment obligation incurred with the notice of determination filing and has included this comment in the record. However, since the information provided does

not bear on the adequacy or accuracy of the Draft EIR, no more detailed response to this comment is provided.

D-30 The County has included CDFW contact details for Ren Cotter and Julie Vance on the Project-specific mailing list. Future CEQA notices for the Project will be provided by email.

D-31 Multiple references suggested in this comment were relied upon in preparing the Draft EIR. See, for example, Draft EIR Section 3.5.5, *References* (p. 3.5-34), which lists CDFG 1994 and CDFG 2012 as identified in this comment.

San Joaquin Valley AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

November 6, 2025

Alyce Alvarez
Fresno County
Public Works and Planning
2220 Tulare Street
Fresno, CA 93721

Project: Draft Environmental Impact Report for Heartland Solar Project

District CEQA Reference No: 20251114

Dear Ms. Alvarez:

The San Joaquin Valley Air Pollution Control District (District) has reviewed the Draft Environmental Impact Report (DEIR) from Fresno County (County). Per the DEIR, the project consists of a renewable photovoltaic (PV) solar energy generation and battery energy storage system facilities to generate approximately 300 megawatts alternating current of solar PV energy and have capacity to store up to 300 megawatts of energy on 2,362 acres (Project). The Project will connect to the Tranquillity Switching Station, owned by Pacific Gas and Electric Company (PG&E), via an electrical generation-tie (gen-tie) line. The Project is located 6 miles southwest of the City of Mendota, 10 miles east of Interstate 5 (I-5), 0.5 miles north of W. Manning Ave, and 1.25 miles north of PG&E's Tranquillity Switching Station. E-1

The District offers the following comments at this time regarding the Project:

1) Project Related Emissions E-2

In Appendix A (CalEEMod Output Files) of the DEIR, the CalEEMod analysis for the Project assumed and relied on the use of Tier 3 and Tier 4 Final construction equipment for the Project's construction related emissions. The DEIR states the implementation of Tier 3 and Tier 4 Final engines are expected to result in lower emissions below statewide average PM10 exhaust emissions and concluded that the air quality impacts from construction emissions would have a less than significant impact on air quality. However, it is unclear how the use of the Tier 3 and Tier 4 Final engines would be enforced by the County to ensure a less than significant impact. Also, if Tier 3 and Tier 4 Final engines are not used during construction, the Project's construction related emissions may be underestimated.

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Therefore, the District recommends the County include a mechanism for enforcement such as a mitigation measure to ensure the Tier 3 and Tier 4 Final engines are implemented for the Project. E-2 cont.

2) Truck Routing

Truck routing involves the assessment of which roads Heavy Heavy-Duty (HHD) trucks take to and from their destination, and the emissions impact that the HHD trucks may have on residential communities and sensitive receptors.

The Project is expected to result in HHD truck trips from construction activities, as such, the District recommends the County evaluate HHD truck routing patterns for the Project, with the aim of limiting exposure of residential communities and sensitive receptors to emissions. This evaluation would consider the current truck routes, the quantity and type of each truck (e.g., Medium Heavy-Duty, HHD, etc.), the destination and origin of each trip, traffic volume correlation with the time of day or the day of the week, overall Vehicle Miles Traveled (VMT), and associated exhaust emissions. The truck routing evaluation would also identify alternative truck routes and their impacts on VMT and air quality. E-3

3) District Rules and Regulations

The District issues permits for many types of air pollution sources, and regulates some activities that do not require permits. A project subject to District rules and regulations would reduce its impacts on air quality through compliance with the District's regulatory framework. In general, a regulation is a collection of individual rules, each of which deals with a specific topic. As an example, Regulation II (Permits) includes District Rule 2010 (Permits Required), Rule 2201 (New and Modified Stationary Source Review), Rule 2520 (Federally Mandated Operating Permits), and several other rules pertaining to District permitting requirements and processes.

The list of rules below is neither exhaustive nor exclusive. Current District rules can be found online at: https://ww2.valleyair.org/rules-and-planning/current-district-rules-and-regulations. To identify other District rules or regulations that apply to future projects, or to obtain information about District permit requirements, the project proponents are strongly encouraged to contact the District's Small Business Assistance (SBA) Office at (559) 230-5888. E-4

3a) District Rules 2010 and 2201 - Air Quality Permitting for Stationary Sources

Stationary Source emissions include any building, structure, facility, or installation which emits or may emit any affected pollutant directly or as a fugitive emission. District Rule 2010 (Permits Required) requires operators of emission sources to obtain an Authority to Construct (ATC) and Permit to

Operate (PTO) from the District. District Rule 2201 (New and Modified Stationary Source Review) requires that new and modified stationary sources of emissions mitigate their emissions using Best Available Control Technology (BACT).

This Project may be subject to District Rule 2010 (Permits Required) and Rule 2201 (New and Modified Stationary Source Review) and may require District permits. Prior to construction, the Project proponent should submit to the District an application for an ATC. For further information or assistance, the project proponent may contact the District's SBA Office at (559) 230-5888.

E-4 cont.

3b) District Rule 9510 - Indirect Source Review (ISR)

The Project is subject to District Rule 9510 because it will receive a project-level discretionary approval from a public agency and will equal or exceed 9,000 square feet of space.

The purpose of District Rule 9510 is to reduce the growth in both NOx and PM emissions associated with development and transportation projects from mobile and area sources; specifically, the emissions associated with the construction and subsequent operation of development projects. The ISR Rule requires developers to mitigate their NOx and PM emissions by incorporating clean air design elements into their projects. Should the proposed development project clean air design elements be insufficient to meet the required emission reductions, developers must pay a fee that ultimately funds incentive projects to achieve off-site emissions reductions.

Per Section 5.0 of the ISR Rule, an Air Impact Assessment (AIA) application is required to be submitted no later than applying for project-level approval from a public agency. As of the date of this letter, the District has not received an AIA application for this Project. Please inform the project proponent to immediately submit an AIA application to the District to comply with District Rule 9510 so that proper mitigation and clean air design under ISR can be incorporated into the Project's design.

E-5

Information about how to comply with District Rule 9510 can be found online at: https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview

The AIA application form can be found online at: https://ww2.valleyair.org/permitting/indirect-source-review-rule-overview/forms-and-applications/

District staff is available to provide assistance and can be reached by phone at (559) 230-5900 or by email at ISR@valleyair.org.

3c) District Rule 4601 (Architectural Coatings)

The Project may be subject to District Rule 4601 since it may utilize architectural coatings. Architectural coatings are paints, varnishes, sealers, or stains that are applied to structures, portable buildings, pavements or curbs. The purpose of this rule is to limit VOC emissions from architectural coatings. In addition, this rule specifies architectural coatings storage, cleanup and labeling requirements. Additional information on how to comply with District Rule 4601 requirements can be found online at: https://ww2.valleyair.org/media/tkgjeusd/rule-4601.pdf

E-6

3d) District Regulation VIII (Fugitive PM10 Prohibitions)

The project proponent may be required to submit a Construction Notification Form or submit and receive approval of a Dust Control Plan prior to commencing any earthmoving activities as described in Regulation VIII, specifically Rule 8021 – *Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities.*

Should the project result in at least 1-acre in size, the project proponent shall provide written notification to the District at least 48 hours prior to the project proponents intent to commence any earthmoving activities pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). Also, should the project result in the disturbance of 5-acres or more, or will include moving, depositing, or relocating more than 2,500 cubic yards per day of bulk materials, the project proponent shall submit to the District a Dust Control Plan pursuant to District Rule 8021 (Construction, Demolition, Excavation, Extraction, and Other Earthmoving Activities). For additional information regarding the written notification or Dust Control Plan requirements, please contact District Compliance staff at (559) 230-5950.

E-7

The application for both the Construction Notification and Dust Control Plan can be found online at: https://ww2.valleyair.org/media/fm3jrbsq/dcp-form.docx

Information about District Regulation VIII can be found online at: https://ww2.valleyair.org/dustcontrol

3e) Other District Rules and Regulations

The Project may also be subject to the following District rules: Rule 4102 (Nuisance) and Rule 4641 (Cutback, Slow Cure, and Emulsified Asphalt, Paving and Maintenance Operations).

E-8

4) District Comment Letter

The District recommends that a copy of the District's comments be provided to the Project proponent. E-9

If you have any questions or require further information, please contact Ryan Grossman by e-mail at ryan.grossman@valleyair.org or by phone at (559) 230-6569. E-10

Sincerely,

Mark Montelongo
Director of Policy and Government Affairs

Daniel Martinez
Program Manager

2.4.5 Letter E: San Joaquin Valley Air Pollution Control District

E-1 This summary of the Project and its location is consistent with information provided in the Draft EIR. See Draft EIR Chapter 2, *Project Description* (p. 2-1 et seq.).

E-2 As described in the Draft EIR, the air quality modeling conducted for the Heartland Solar Project components and the PG&E gen-tie line included the assumptions that Tier 3 engines or better would be used for excavators, graders, and tractors/loaders/backhoes, and Tier 4 Final engines or better would be used for aerial lifts, air compressors, bore/drill rigs, cement and mortar mixers, concrete/industrial saws, cranes, forklifts, and generators (p. 3.4-24).

It was reasonable to assume Tier 3 and Tier 4 equipment would be used for project construction. New offroad diesel engines sold after 2008 were required to comply with Tier 3 standards, and Tier 4 standards apply to new offroad diesel engines sold after 2015. As described in the California Air Resources Board's *2022 CARB Construction, Industrial, Mining, and Oil Drilling Emissions Inventory*, the average age of offroad fleet equipment in California is between approximately 8 and 12 years, making it likely that construction equipment used on the project site would meet Tier 3 or Tier 4 standards. These parameters are consistent with the Project as proposed in Draft EIR Table 2-3, *Project Construction Equipment* (p. 3.4-24), with the clarification that the Tier 4 equipment identified in the table represents Tier 4 Final equipment (see clarifying note added to Draft EIR Table 2-3, p. 3.4-19, and shown below).

NOTE: Engine tier ratings shown as "4" represent Tier 4 Final engine ratings.

In addition, the Project would be required to comply with SJVAPCD Rule 9510 (ISR Compliance), which requires that exhaust emissions from construction equipment greater than 50 horsepower must be reduced to 20 percent below the statewide average nitrogen oxides (NOx) emissions and 45 percent below statewide average particulate matter greater than 10 microns in diameter (PM_{10}) exhaust emissions. The Project would be required to comply with these SJVAPCD Rule 9510 requirements, presumably through the use of the proposed construction equipment, which would be independently reviewed, approved, and enforced by SJVAPCD.

The emissions modeled for the PG&E upgrades at the existing Tranquillity Switching Station were based on the assumption that all construction equipment would include engines that represent the average engine tier specifications for the given equipment inventory and year (see air emissions CalEEMod model output provided in Draft EIR Appendix D, Section 5.2, *Off-Road Equipment*, Subsection 5.2.1, *Unmitigated*). Therefore, although the construction activities associated with the PG&E upgrades at the existing Tranquillity Switching Station may include the use of some equipment that have engines with tier specifications other than Tier 3 and Tier 4 Final, the associated emissions estimates presented Draft EIR Table 3.4-6, *Maximum Annual Construction Emissions* (p. 3.4-24), are not underestimated.

E-3 The impact of diesel exhaust emissions on sensitive receptors from overall construction activities would be less than significant as disclosed in Draft EIR Impacts 3.4-3 and 3.4-5 (page 3.4-29 et seq.). To specifically address Project-related truck emissions on roadways in the area, a truck routing assessment has been conducted as summarized below.

Heavy-heavy duty (HHD) and medium-heavy duty (MHD) truck trips on State Route 33 (SR 33) and W. Adams Avenue would be required during construction of the Project. See Draft EIR Figure 3.18-1, *Local Roadways* (p. 3.18-2), for the orientation of those highways related to the Project site. Trucks would approach the Project site from SR 33, then onto W. Adams Avenue and would be required to check in with the offload crew at the access point off W. Adams Avenue that is approximately 1,700 feet west of SR 33. All HHD and MHD trucks associated with the Project would be prohibited from traveling west of S. Ohio Avenue on W. Manning Avenue (Draft EIR, p. 3.18-1). Trips associated with the PG&E Components would be expected to travel along the same roadways.

SR 33 is a two-lane undivided highway that provides a connection between Interstate 5 and the City of Mendota. Dedicated turn lanes are generally provided from SR 33 to nearby intersections. According to the most recent data published by Caltrans, the average annual daily traffic (AADT) volume on SR 33 in the vicinity of the Project site is approximately 1,650 vehicles, with up to approximately 320 vehicles during the peak traffic hour (Draft EIR, p. 3.18-3). W. Adams Avenue is a two-lane undivided local roadway that provides a connection from the California Aqueduct (approximately 6.5 miles west of the Project site) to the intersection of W. Manning Avenue/James Road/South Calaveras Avenue. Peak hour volumes, which were collected for the Project in March 2023, are approximately 7 vehicles during the AM peak hour and 22 vehicles during the PM peak hour. The most recently available AADT on W. Adams Avenue in the vicinity of the Project site is approximately 187 vehicles (see Draft EIR, p. 3.18-3).

Based on the air emissions model output provided in Draft EIR Appendix D, daily one-way truck trips to/from the Project site would average up to 42 trips per day for the Heartland Solar Project and up to 8 trips per day for the PG&E Components. Approximately 64 percent of the trips would be by HHD trucks and 36 percent would be by MHD trucks. The average truck miles traveled per trip would be 20 for MHD trucks and 38 for HHD trucks. It is anticipated that the truck trips would be dispersed throughout the 13-hour workday and would therefore amount to approximately 4 one-way truck trips per hour.

The closest sensitive receptors to the Project site are residences along W. Adams Avenue, approximately 3,700 feet west and 2,000 feet east of the Project's designated truck route. Therefore, none of these sensitive receptors would be within 1,000 feet of HHD trucks or MHD trucks in route to or from the Project site. The truck routing assessment summarized above indicates that the associated truck emissions would be dispersed over time and space to the extent that they would not have a substantial negative effect on the residences along W. Adams Avenue, and so the identification of alternative truck routes is not necessary.

E-4 This summary of SJVAPCD rules and regulations is consistent with information provided in the Draft EIR, which summarizes SJVAPCD Rules and Regulations in Section 3.4.1.3 (page 3.4-7 et seq.). For example, page 3.4-10 explains that the "Project would be located within the jurisdiction of the SJVAPCD, which regulates air pollutant emissions for all sources throughout the Air Basin other than motor vehicles. The SJVAPCD administers permits governing stationary sources. In addition to administering permits, SJVAPCD enforces the following rules, regulations, and plans

that would apply to the Project….” More specifically, Rule 2201 is summarized on Draft EIR page 3.4-12.

E-5 This summary of SJVAPCD rules and regulations is consistent with information provided in the Draft EIR. For example, Rule 9510 is summarized on Draft EIR page 3.4-13.

E-6 This summary of SJVAPCD Rule 4601 is consistent with information provided on page 3.4-13 of the Draft EIR.

E-7 This summary of SJVAPCD Regulation VIII is consistent with information provided on page 3.4-13 of the Draft EIR.

E-8 District Rule 4102 is summarized on page 3.4-12 of the Draft EIR. District Rule 4641 is summarized on page 3.4-13 of the Draft EIR.

E-9 The SJVAPCD’s comment letter has been included in the Final EIR in its entirety and, as a result, is available to the Project proponent as well as decision-makers and others who may have an interest in the Project.

E-10 The SJVAPCD’s contact information on the Project’s mailing list has been supplemented to include Ryan Grossman’s contact details.

Westlands Water District

November 7, 2025

Ms. Alyce Alvarez, Planner
Development Services & Capital Projects Division
Fresno County Public Works and Planning
2220 Tulare Street, Sixth Floor
Fresno, CA 93721

SUBJECT: Comments Regarding Draft Environmental Impact Report (EIR) No. 7564 for the Heartland Solar Project

Dear Ms. Alvarez,

Westlands Water District (District) serves a dual role as both a water district and Groundwater Sustainability Agency (GSA) and is responsible for water management in the Heartland Solar Project (Project). Additionally, the District owns twenty-five (25) parcels that make up a portion of the Heartland Project site (EIR, p. 2-5). The EIR must be adequate for the District's use in evaluating the Project as a responsible agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21069). The District reviewed draft EIR No. 7564, State Clearinghouse (SCH) No. 2022100609, the proposal to construct, operate, maintain, and decommission the Project, which consists of renewable photovoltaic (PV) solar energy generation and battery energy storage system facilities. Proposed facilities would generate approximately 300 megawatts alternating current (MWAC) of solar PV energy and have capacity to store up to 300 MW of energy on approximately 2,362 acres comprising 30 Fresno County Assessor Parcel Numbers (APNs), some of which are currently owned by the District. The District offers the following comments.

F-1

F-2

Groundwater Availability and Use

The Project lands lie within the District boundary but will not be furnished water pursuant to the District's Regulations for the Allocation and Use of Agricultural Water and will not receive an allocation of groundwater pursuant to the Regulations for the Groundwater Allocation Program and Use of Groundwater in Within the Westside Subbasin.

F-3

Surface Water Availability and Use

The Applicant may be eligible to apply for and receive Municipal and Industrial (M&I) water services, and the land will continue to have access to the District's distribution

F-4

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system for land used for solar development operations. If the Applicant is eligible, the District's Article 19 Rules & Regulations provide that the District will make available up to five (5) acre-feet annually per 160 acres, for solar developments on land not participating in the "Continued Benefits to Modified Agricultural Land" provisions of the District's Article 2. The Applicant's operations will be bound by the Regulations, Terms, and Conditions established by the District for M&I use. Copies of these are provided for your information, and notable provisions include:

- The Applicant must comply with the District's Backflow Prevention guidelines for this connection to the District's water system.

- If there is not a delivery turnout on the property then the Applicant would be responsible for the development and construction of the pipeline to connect to the District's distribution system, including acquisition of easements, if required.

- The District and the Division of Drinking Water (DDW, formerly the California Department of Public Health) entered into a Compliance Agreement that restricts the District's ability to provide M&I service to nonresident facilities. The Applicant must request and receive an exemption from the Compliance Agreement's requirement that solar development be connected to a Public Water System or Domestic Well. The District expects that DDW will grant the exemption on the condition that the Applicant posts signs at all outlets where human contact may occur, indicating that the water delivered by the District is non-potable. The Applicant can provide copies of receipts for bottled water purchased from a State licensed provider as a supplement for potable water.

F-4 cont.

Decommissioning

The Project is scheduled for decommissioning after a useful life of up to 35 years. After removal of existing structures, the Project area will be restored to topographic conditions similar to pre-construction. The site will be chiseled and disked to loosen compacted soils. A rangeland of grasses and forage crops will be broadcasted on the property to revegetate the site. Revegetation will assist in preventing soil erosion and dust. If these and other criteria of the District's "Continued Benefits to Modified Agricultural Land" are met, any privately owned portions of Project land may maintain eligible cropland status and continue to receive an allocation of agricultural water.

F-5

Weed, Pest and Fire Risk Management

The District has owned most of the parcels proposed for use in the Project for over 20 years. During that time, the District maintained the property to minimize the potential for weeds, pests, and fires to be nuisances to neighboring properties. The District expects the Project to similarly be managed to minimize potential for these nuisances. The District reviewed the Applicant's Pest Management Plan (Plan) identifying the following: (1) mechanical and manual weed control methods including hand weeding, mowing and removal of above ground and below ground plant structure; (2) use of chemical

F-6

treatments involving pre- and / or post-emergent herbicides; (3) biological treatments including the use of plants and animals that parasitize, ingest, or out-compete weed species; (4) preferred ecological pest control practices on-site rather than chemical rodenticide control practices through removal of weeds, heavy mulch, and dense vegetation, making the habitat for rodents less suitable; (5) natural predator-prey techniques to manage rodent population; (6) rodent trapping if the predator- prey technique fail; (7) implementation and enforcement of strict trash policies; and (8) rodenticides use if other management techniques fail.

F-6 cont.

The District cautions that use of biological means to control weeds should not introduce species that will harm crops on neighboring parcels. The District further recommends maintaining vegetation at a height of 4" (inches) or less rather than relying on natural predation to control pests. The District has found through its experience that vigilance and consistency in vegetation management are key to preventing insect and rodent infestations. The Plan's proposal to employ trapping "for 3-6 months" to be "evaluated for success before other management options are considered" will also unreasonably hinder effective pest management in the event of an infestation. The approach is inconsistent with the District's substantial experience in preventing infestations and must be deleted from the Plan. The full toolbox of weed abatement and pest management practices must be available from the outset to adequately respond to the broad range of site-specific conditions that are reasonably foreseeable. In addition to the aforementioned weed and pest mitigation measures, the District will require the Applicant to enter into a Maintenance Covenant Agreement (Covenant) to further mitigate the impact on neighboring lands.

F-7

F-8

It is critical that the fire risk be mitigated by control or eradication of weeds or vegetation immediately surrounding the solar arrays and battery energy storage systems (BESS). The Applicant's Plan does not outline the use of herbicides at the perimeter between the fence and the panels to mitigate the spread of weed, pest, or fires impacting neighboring properties. The District recommends a minimum 100-foot vegetation-free buffer zone between the external project boundaries and the nearest solar arrays and other project structures. The Project's solar facilities must include 20-foot-wide perimeter and internal access driveways, which must be vegetation-free. The Project's BESS facilities must be surrounded by 10-foot-wide vegetation-free areas as required by the California Fire Code. To provide these buffers and fire breaks, the Applicant's Plan should require the use of non-selective soil sterilants or other herbicides that result in long-term inactivity or prevent vegetation in these areas to maintain defensible space. A section of the District's Covenant provides for additional fire mitigation measures that the Applicant will be required to implement.

F-9

District Facilities

Based on the Project Location Map provided, the project site is located near the District's distribution system Laterals 6L, 7L, and 8L. Prior to construction, please contact Underground Service Alert (811).

If Project features, including electrical collector lines and transmission facilities, cross the District's distribution system laterals, the Project owner shall contact the District to obtain the requirements for crossing a District lateral easement(s). No Project facilities shall be located in a manner that restricts the District's ability to access and perform maintenance on the water distribution system. F-10

The District previously provided a comment letter for the proposed project on November 22, 2022, a copy of which is attached, and may supplement the foregoing as more detailed Project information becomes available. F-11

Thank you for the opportunity to comment on this project. If you have any additional questions regarding the District's comments, please contact Valdemar Cerna at 559-241-6296. F-12

Sincerely,

Jose Gutierrez
Assistant General Manager

Enclosure

1. *Westlands Water District Comment Letter Regarding NOP No. 3630, November 22, 2022*
2. *Regulations Regarding the Application for and Use of Municipal and Industrial Water Within Westlands Water District*

2.4.6 Letter F: Westlands Water District

F-1 The information provided in this comment is consistent with information presented in the Draft EIR. See, for example, Section 3.11.1.3, *Regulatory Setting* (Draft EIR, page 3.11-7), which identifies WWD specifically in its role as groundwater sustainability agency.

F-2 The information provided in this comment is consistent with information presented in the Draft EIR. See Draft EIR Table 2-2, *Project Parcel Details* (p. 2-5). See also Draft EIR Table 2-4, *Permits and Approvals* (p. 2-22), which identifies WWD's potential role as a responsible agency. As noted in Draft EIR Section 1.2 (p. 1-2), responsible agencies are expected to use this EIR in their approval or permitting processes. The summary of Project components provided also is consistent with information presented in the Draft EIR. See generally Draft EIR Chapter 2, *Project Description* (p. 2-1 et seq.).

F-3 Information provided in this comment is inconsistent with information provided by WWD in its April 8, 2025 "will serve" letter, a copy of which in included as Appendix A to the Project's water supplement assessment (WSA), a copy of which is provided in Draft EIR Appendix L. Nonetheless, the statement in this comment that WWD would not furnish groundwater for Project purposes would not result in a shortage. As explained in the WSA additional sources of potential supply would be from local water brokers who could facilitate the sale of water from the existing supplies of other users and delivered by WWD Municipal and industrial infrastructure.

F-4 Information presented in this comment is consistent with information provided in the Draft EIR. In the context of Impact 3.11-2 (p. 3.11-14 et seq.), footnote 3 says, "Pursuant to WWD's letter of April 8, 2025, which is appended to the WSA, the Project is eligible to receive water through the WWD's municipal and industrial water supply and the land will continue to have access to the WWD distribution system, subject to M&I water regulations." Information about WWD's Article 19 Rules & Regulations also is provided in Draft EIR Appendix A, *Scoping Report*.

F-5 Information presented in this comment is consistent with information provided in Draft EIR Appendix B2, *Reclamation Plan*.

F-6 The Project includes a Pest Management Plan, a copy of which is included in Draft EIR Appendix B1. The comment summarizes the proposed methods outlined in the Pest Management Plan. These methods are consistent with the County's Solar Facility Guidelines, see Draft EIR Appendix I2, which are intended in part to balance clean energy goals while protecting against nuisance to neighboring lands. The County acknowledges that WWD, in its capacity as either a landowner or responsible agency, may require additional measures in one or more agreements it may have with the project applicant.

F-7 See Response F-6, which addresses weed control and avoidance of nuisance to neighboring properties. As discussed in the Draft EIR, the Project would implement a Pest Management Plan that is consistent with the 2017 County of Fresno Solar Facility Guidelines, and impacts related to pests would be less than significant. No further measures are required.

F-8 See Response F-6, which acknowledges that WWD may require additional measures in one or more agreements it may have with the project applicant.

F-9 See Response F-6 regarding vegetation control and WWD's authority as a landowner. As analyzed in the context of Impact 3.20-2 (Draft EIR, p. 3.20-11 et seq.), the Project (expressly including the ESS) would cause a less than significant impact relating to the potential exacerbation of wildfire risks due to a variety of factors, such as low fire risk in the region, limited vegetation, and regular maintenance such as mowing and/or weed abatement activities during operation. The Project also is subject to and will comply with the CBC and CFC requirements and design standards. No further measures are required. See also Response D-23 for additional information.

F-10 See Response F-2, which acknowledges these laterals. See Draft EIR Table 3.10-2, *State Laws and Regulations Related to Hazardous Materials Management* (p. 3.10-8), which explains that Sections 4216-4216.9 of the regulations "require an excavator to contact a regional notification center (e.g., Underground Services Alert or DigAlert) at least two days prior to excavation of any subsurface installations. Any utility provider seeking to begin a project that could damage underground infrastructure can call Underground Service Alert, the regional notification center for Southern California. Underground Service Alert will notify the utilities that may have buried lines within 1,000 feet of the project."

F-11 A copy of WWD's November 22, 2022 letter is included in Draft EIR Appendix A, *Scoping Report*.

F-12 WWD's contact information on the Project's mailing list has been supplemented to include these additional contact details.

CHAPTER 3
Revisions to the Draft EIR

3.1 Introduction

The following changes have been made to the previously published text of the draft environmental impact report (DEIR) for the Heartland Solar Project (Heartland Project), including infrastructure and other improvements to be constructed, owned, and operated by the Pacific Gas and Electric Company (PG&E) (PG&E Components). The Heartland Solar Project and the PG&E Components collectively are referred to in this document as the *Project*. Changes to the DEIR include minor corrections made to improve writing, clarity, grammar, and consistency; clarifications, additions, or deletions resulting from specific responses to comments; and changes to update information in the DEIR—the changes do not constitute "significant new information" requiring recirculation (see Public Resources Code Section 21092.1, CEQA Guidelines Section 15088.5). Text revisions are organized by the chapter and page number (provided on the left-hand side of the page, below) that appear in the DEIR. An explanation of the change, including identification of where it would be made, is provided. The specific additions and deletions use the following conventions:

- Text deleted from the DEIR is shown in ~~strike-out text~~.
- Text added to the DEIR is shown in underline text.

3.2 Text Changes to the Draft EIR

3.2.1 Executive Summary

Pages ES-12 and ES-13. In Table ES-2, *Summary of Impacts and Mitigation Measures*, the text of Mitigation Measure 3.5-1 has been revised as follows:

> **Mitigation Measure 3.5-1: Protection of San Joaquin Kit Fox, Burrowing Owl and American Badger During Construction**
>
> ***San Joaquin kit fox and American badger*:** Preconstruction surveys shall be conducted by a qualified biologist for the presence of San Joaquin kit fox and American badger ~~within~~ 14-to 30 days prior to commencement of construction activities pursuant to the USFWS (~~1999~~2011) *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance*. The surveys shall be conducted in areas of suitable habitat for San Joaquin kit fox and American badger. ~~Areas that have been disked or cultivated within 12 months prior to the start of ground-disturbing activities are not considered suitable.~~ Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur ~~within~~ 14-to-30 days prior to disturbance within active portions of the site. If no Known, P~~p~~otential, or Natal/pupping San Joaquin kit fox or American badger dens are identified (as those terms are defined in USFWS [2011]),

then no further mitigation is required. If potential dens are observed and avoidance is determined to be feasible (as defined in CEQA Guidelines Section 15364 consistent with the USFWS [~~1999~~2011] *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance*) by a qualified biologist in consultation with the Project owner and the County, buffer distances shall be established prior to construction activities.

If avoidance of the potential dens is not feasible, the following measures shall be implemented to avoid potential adverse effects to the San Joaquin kit fox or American badger:

- ~~If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent them from being used during construction.~~

- ~~If the qualified biologist determines that a potential non-natal den may be active, an on-site passive relocation program shall be implemented with prior approval from the USFWS and CDFW. This program shall consist of excluding San Joaquin kit foxes or badgers from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for 72 hours to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that the San Joaquin kit foxes or American badgers have stopped using active dens within the Project boundary, the dens shall be hand-excavated, as stated above for inactive dens.~~

- If the qualified biologist identifies known or natal/pupping dens occupied by San Joaquin kit fox, the Project owner shall initiate consultation with USFWS and CDFW to discuss how to avoid take or, if take avoidance is not feasible, to acquire an Incidental Take Permit (ITP) pursuant to federal Endangered Species Act Section 7 and California Fish and Game Code section 2081(b), prior to initiating or resuming ground-disturbing activities.

- If the qualified biologist identifies dens occupied by American badger, an on-site passive relocation program shall be implemented in coordination with CDFW. This program shall consist of excluding badgers from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for 72 hours to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that the badgers have stopped using active dens within the Project boundary, the dens shall be hand-excavated.

***Burrowing owl*:** The Project owner shall have burrowing owl surveys performed within 14 days before the initiation of equipment staging or ground-disturbing activities. A qualified wildlife biologist shall conduct preconstruction surveys on the site and immediate vicinity only in areas of the site with suitable burrowing habitat to locate any active breeding or wintering burrowing owl burrows, no fewer than 14 days prior to initial ground-disturbing activities (e.g., vegetation clearance, grading, tilling). Areas that have been plowed within 12 months prior to the start of ground-disturbing activities are not considered suitable habitat. The survey methodology shall be consistent with the methods outlined in the Appendix D of the CDFG (2012) *Staff Report on Burrowing Owl Mitigation*, or latest appropriate guidance documents, with regard to transect spacing, weather conditions, and time of day requirements. If the work activity halts for a period of 14 days or more, the survey would need to be conducted again prior to the continuation of site activities. Copies of the survey results shall be submitted to CDFW and the Fresno County Department of Public Works and Planning.

- If inactive (unoccupied) burrowing owl burrows are detected any time of the year, the burrows may be excavated by hand with a shovel or covered (i.e., with sandbags) to prevent burrowing owls from re-using them during construction. The burrow's inactive status will be determined by the approved biologist through monitoring prior to burrow excavation.

- If active (occupied) burrowing owl burrows are detected, no ground-disturbing activities, such as vegetation clearance, grading, or other construction activities, shall be permitted within a no-disturbance buffer around the burrow. The size of any employed no-disturbance buffers will be in accordance with the recommended restricted activity dates and setback distances by level of disturbance for burrowing owls outlined in the CDFG (2008) *Guidance for Burrowing Owl Conservation:*

– 75 meters (250 feet) from occupied burrows during breeding season, and

– 50 meters (160 feet) from occupied burrows during non-breeding season.

- Occupied burrowing owl burrows shall be regularly monitored by a qualified biologist or biological monitor throughout project construction. Depending on the level of disturbance and its duration, visual and auditory screening, and similar, a larger or smaller buffer may be established by a qualified biologist in coordination with CDFW based on the visibility and sensitivity responses of each individual burrowing owl.

- If active burrowing owl avoidance is infeasible, then the project owner shall consult with CDFW regarding potential for project activities to result in take of burrowing owl and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ITP issued for the project by CDFW authorizing take of the species.

Pages ES-13 and ES-14. In Table ES-2, *Summary of Impacts and Mitigation Measures*, the text of Mitigation Measure 3.5-2 has been revised as follows:

Mitigation Measure 3.5-2: Worker Environmental Awareness Program Training and Best Management Practices for Biological Resources

During construction, operation and maintenance, and decommissioning of the facility, the Project owner and/or contractor shall implement the following general avoidance and protective measures to protect San Joaquin kit fox and other special-status wildlife species:

- Prior to the issuance of grading or building permits and for the duration of construction activities, the Project owner, or its contractor, shall implement a Worker Environmental Awareness Program (WEAP) to train construction personnel how to recognize and protect biological resources on the Project site. The WEAP training shall include a review of the special-status species and other sensitive biological resources that could exist in the Project area, the locations of sensitive biological resources and their legal status and protections, and measures to be implemented for avoidance of these sensitive resources, highlighting San Joaquin kit fox, Swainson's hawk, burrowing owl, and loggerhead shrike.

- The Project owner shall limit the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or

flagging prior to construction to avoid special-status species where feasible. Construction-related activities, vehicles, and equipment outside of the impact zone shall be avoided. These areas shall be flagged and disturbance activities, vehicles, and equipment shall be confined to these flagged areas.

- To prevent inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches with a 2-foot or greater depth shall be covered with plywood or similar materials at the close of each working day, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected by the approved biological monitor for trapped animals. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If a listed species is trapped, the USFWS and/or CDFW shall be contacted immediately.
- All construction pipes, culverts, or similar structures with a 4-inch or greater diameter that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for special-status wildlife or nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved until a qualified biologist has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated by the biologist.
- Vehicles and equipment parked on the site shall have the ground beneath the vehicle or equipment inspected for the presence of wildlife prior to moving.
- Vehicular traffic shall use existing routes of travel. Cross-country vehicle and equipment use outside of the Project properties shall be prohibited.
- A speed limit of 20 miles per hour shall be enforced within all construction areas in daylight; in the event night work is required, the enforced speed limit shall be 10 miles per hour.
- A long-term trash abatement program shall be established for construction, operation, and decommissioning and submitted to the County. Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to wildlife such as common raven (*Corvus corax*), coyote (*Canis latrans*), and feral dogs.
- Workers shall be prohibited from bringing pets and firearms to the Project site and from feeding wildlife in the vicinity.
- Intentional killing or collection of any wildlife species shall be prohibited.

Pages ES-14 and ES-15. In Table ES-2, *Summary of Impacts and Mitigation Measures*, the text of Mitigation Measure 3.5-3 has been revised as follows:

Mitigation Measure 3.5-3: Protection of Nesting Birds, including Swainson's Hawk

If construction is scheduled to commence outside of nesting season (September ~~1~~16 to January 31; September 16 to February 28 for Swainson's hawk), no preconstruction surveys are required for nesting birds, including Swainson's hawk and other raptors. Trees that have documented usage by Swainson's hawks as nesting trees within the past 5 years shall not be removed.

During the breeding season (February 1 to ~~August 31~~September 15; March 1 to September 15 for Swainson's hawk), in order to avoid impacts to nesting birds in the Project site and immediate vicinity, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within the Project site where vegetation removal or ground disturbance is planned. The survey shall focus on potential nest sites and cover an area up to 0.~~2~~5mile buffer around the site for Swainson's hawk, ~~300~~500 feet for common raptors, and ~~100~~250 feet for passerines in areas where access to neighboring properties is available or visible using a spotting scope or binoculars. Surveys shall be conducted no more than ~~14~~ 10 working days prior to construction activities. If construction is halted for ~~14~~ 10 working days or more, the area shall be re-surveyed prior to re-initiating work. Swainson's hawk surveys shall follow CDFW-approved methodology (SWHA TAC 2000).[1]

Surveys need not be conducted for the entire Project site at one time; they may be phased so that each work area is surveyed no more than ~~14~~10 working days prior to the start of construction in that area. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (~~300~~500 feet for common raptors; 0.~~2~~5 mile for Swainson's hawk; ~~100~~250 feet for passerines) shall be established around active nests and no construction within the buffer allowed until a qualified biologist has completed an assessment of the potential for current construction activities to impact the nest. ~~determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). Encroachment into these buffers for non-special-status species may occur at the discretion of a qualified biologist. Encroachment into these buffers for special-status species may occur in coordination or consultation with CDFW.~~ The assessment would consider the type of construction activities (e.g., noise levels and duration), the location of construction relative to the nest and pre-existing disturbance levels (e.g., construction activities in historically agricultural land versus activities in non-agricultural land), the visibility of construction activities from the nest location (e.g., topography or vegetation that could block line-of-sight to the nest), the number of construction personnel required to perform activities within the setback, and other existing disturbances in the area that are not related to construction activities of this project. Based on this assessment, the biologist will determine if construction activities can proceed and the level of nest monitoring required. When conducting the assessment, the biologist will consider the following levels of construction activity, with higher levels of activity requiring greater caution in determining setbacks:

- Light construction activity such as fence installation and limited vehicle access. Noise levels generated by these construction activities would likely be similar to existing ambient noise levels in closer proximity to the occupied nests.

- Moderate and/or isolated construction activity such as grading and construction of substation, substation-access road, inverter skids, and manual installation of solar panels. Noise levels generated by these construction activities would likely be similar to existing ambient noise levels beyond a moderate distance from the occupied nests.

- Heavy construction activity across a large area of the Project and/or using louder equipment such as concrete saws, or jackhammers. Noise levels for this type of activity

[1] Swainson's Hawk Technical Advisory Committee. 2000. Recommended timing and methodology for Swainson's hawk nesting surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee.

will depend on location of the activities relative to the nest and allowing these activities within the 0.5-mile setback would require coordination with CDFW.

In the event the assessment determines that construction activities could occur closer than 0.5 miles to an active Swainson's hawk nest, in no event would construction activities occur within 500 feet of an active nest without coordination with CDFW. Full-time monitoring to evaluate the effects of construction activities on nesting Swainson's hawks would be required where activity occurs closer than 0.5 miles. The qualified biologist shall have the authority to stop work if it is determined that project construction is disturbing nesting activities. These buffers may need to increase depending on the sensitivity of the nesting Swainson's hawk to disturbances and at the discretion of the qualified biologist. No avoidance would be needed if construction occurs near a known Swainson's hawk nest outside of the Swainson's hawk nesting season. In the event take cannot be avoided, the proponent shall confer with CDFW on the need for an incidental take permit and will comply with any specific-specific minimization and avoidance measures identified in the issued incidental take permit prior to the removal of active nest trees.

Page ES-25. In Table ES-2, *Summary of Impacts and Mitigation Measures*, the text of Mitigation Measure 3.18-1 has been revised as follows:

Mitigation Measure 3.18-1: Construction and Decommissioning Traffic Management Plan

Prior to the issuance of construction or building permits and the issuance of decommissioning authorizations, the Project owner and/or its construction contractor shall prepare and submit a Traffic Management Plan to the Fresno County Public Works Department and the California Department of Transportation, District 6, as appropriate, for approval. Review of the Traffic Management Plan (from a County standpoint) will be conducted by Fresno County Road Maintenance and Operations Division. The Traffic Management Plan must be prepared in accordance with both the California Department of Transportation Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following elements:

- Temporary Traffic Control plan that addresses traffic safety and control through the work zone, including during temporary lane closures (if needed) to accommodate materials delivery, transmission line stringing activities, or any other utility connections;
- Identify the timing of deliveries of heavy equipment and building materials;
- Requirement for designated construction staff to be assigned as flaggers to direct traffic into and/or through temporary traffic control zones, as needed;
- Requirement to place temporary signage, lighting, and traffic control devices, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic;
- Ensure access for emergency vehicles to the Project site;
- Access to adjacent properties shall be maintained;
- Specify both construction/decommissioning-related vehicle travel and oversize load haul routes, minimizing construction/decommissioning traffic during the AM and PM peak hour, distributing construction/decommissioning traffic flow across alternative routes to

access the Project site, and avoiding residential neighborhoods to the maximum extent feasible.

- Requirement to obtain all necessary permits for the work within the road right of way or use of oversized/overweight vehicles that would utilize County-maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the Fresno County Divisions of Public Works and Planning.
- Applicant shall coordinate with Fresno County to assess potential impacts to County roads from Project-related activities. If any County roads are demonstrably damaged as a result of the Project, the Applicant shall work with Fresno County to determine appropriate repairs, which may include paving, slurry-sealing, or reconstruction, as required by state and/or County standards.

3.2.2 Chapter 1, Introduction

No changes have been made to Draft EIR Chapter 1, *Introduction*.

3.2.3 Chapter 2, Project Description

Several WWD parcel mergers occurred in November 2025 after the initial environmental review. The Assessor's Parcel Numbers (APNs) proposed for project use reflect current parcel numbers. Although the APNs may differ from those included in the EIR, the change in parcel numbering has no effect on the Project footprint, configuration, or its environmental review. For accuracy, Table 2-2 in the Draft EIR Chapter 2, *Project Description* is updated to reflect the WWD parcel mergers that occurred in November 2025, as shown below.

TABLE 2-2
PROJECT PARCEL DETAILS

Parcel Number	Current Owner	Zoning	Non-Irrigation Covenant	Project Component
~~028-060-32~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
~~028-060-33~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
028-140-38	WWD	AE-20	No	Heartland Solar Project
028-140-41	WWD	AE-20	No	Heartland Solar Project
~~028-060-41~~	~~WWD~~	~~AE-20~~	~~Yes~~	~~Heartland Solar Project~~
028-060-84	WWD	AE-20	Yes	Heartland Solar Project
028-060-70	Luna Valley Land Holdings LLC	AE-20	No	Heartland Solar Project (offsite/gen-tie)
028-101-15	Luna Valley Land Holdings LLC	AE-20	No	Heartland Solar Project (offsite/gen-tie)
028-101-69	Luna Valley Land Holdings LLC	AE-20	No	Heartland Solar Project (offsite/gen-tie)
028-101-81	PG&E	AE-20	No	PG&E Components (offsite)

Parcel Number	Current Owner	Zoning	Non-Irrigation Covenant	Project Component
028-101-82	RE Tranquillity Landco LLC	AE-20	No	Heartland Solar Project and PG&E Components (offsite/gen-tie and Tranquillity Substation)
~~028-140-23~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
~~028-140-32~~	~~WWD~~	~~AE-20~~	~~Yes~~	~~Heartland Solar Project~~
~~028-140-36~~	~~WWD~~	~~AE-20~~	~~Yes~~	~~Heartland Solar Project~~
~~028-140-37~~	~~WWD~~	~~AE-20~~	~~Yes~~	~~Heartland Solar Project~~
~~028-160-16~~	~~WWD~~	~~AE-20~~	~~Yes~~	~~Heartland Solar Project~~
~~028-160-17~~	~~WWD~~	~~AE-20~~	~~Yes~~	~~Heartland Solar Project~~
~~028-160-19~~	~~WWD~~	~~AE-20~~	~~Yes~~	~~Heartland Solar Project~~
~~028-160-20~~	~~WWD~~	~~AE-20~~	~~Yes~~	~~Heartland Solar Project~~
~~028-160-22~~	~~WWD~~	~~AE-20~~	~~Yes~~	~~Heartland Solar Project~~
028-160-23	WWD	AE-20	Yes	Heartland Solar Project
~~028-170-17~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
~~028-170-18~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
~~028-170-41~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
~~028-170-42~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
~~028-170-43~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
~~028-170-44~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
~~028-170-45~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
~~028-170-46~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
~~028-170-47~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
~~028-170-48~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
~~028-170-60~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
~~028-170-61~~	~~WWD~~	~~AE-20~~	~~No~~	~~Heartland Solar Project~~
028-170-77	WWD	AE-20	No	Heartland Solar Project

NOTES: AE-20 = Exclusive Agricultural District (20-acre minimum parcel size); WWD = Westlands Water District
SOURCE: Fresno County, Heartland Solar 1, LLC 2024

3.2.4 Section 3.1, Environmental Analysis of Project Impacts

No changes have been made to Draft EIR Section 3.1, *Environmental Analysis of Project Impacts*.

3.2.5 Section 3.2, Aesthetics

No changes have been made to Draft EIR Section 3.2, *Aesthetics*.

3.2.6 Section 3.3, Agriculture and Forestry Resources

Page 3.3-12. To direct the reader to the agricultural land use consistency analysis provided in **Appendix I1**, the following cross reference has been added to discussion under Impact 3.3-1 in Section 3.3, *Agriculture and Forestry Resources*.

As discussed under significance criterion a), the Heartland Solar Project would not convert any Farmland to non-agricultural use. In addition, the Project would limit impacts to adjacent agricultural land uses by maintaining a buffer between the proposed energy-related uses and adjacent agricultural operations and implementing a reclamation plan to return the site to a state of readiness for agricultural use after Project decommissioning, in accordance with General Plan Policy LU-A.13 and the Fresno County Solar Facility Guidelines (see Appendix B2, *Preliminary Closure, Decommissioning, and Reclamation Plan*, Appendix I1, *Consistency with Fresno County General Plan* and Appendix I2, *Consistency with Fresno County's Solar Facility Guidelines*).

3.2.7 Section 3.4, Air Quality

Page 3.4-19. The following clarifying note has been added to Table 2-3, *Project Construction Equipment*:

Note: Engine tier ratings shown as "4" represent Tier 4 Final engine ratings.

3.2.8 Section 3.5, Biological Resources

Pages 3.5-22 and 3.5-23. The text of Mitigation Measure 3.5-1 has been revised as follows:

Mitigation Measure 3.5-1: Protection of San Joaquin Kit Fox, Burrowing Owl and American Badger During Construction

***San Joaquin kit fox and American badger*:** Preconstruction surveys shall be conducted by a qualified biologist for the presence of San Joaquin kit fox and American badger ~~within~~ 14-to 30 days prior to commencement of construction activities pursuant to the USFWS (~~1999~~2011) *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance*. The surveys shall be conducted in areas of suitable habitat for San Joaquin kit fox and American badger. ~~Areas that have been disked or cultivated within 12 months prior to the start of ground-disturbing activities are not considered suitable.~~ Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur ~~within~~ 14-to-30 days prior to disturbance within active portions of the site. If no Known, P~~p~~otential, or Natal/pupping San Joaquin kit fox or American badger dens are identified (as those terms are defined in USFWS [2011]), then no further mitigation is required. If ~~potential~~ such dens are observed and avoidance is determined to be feasible (as defined in CEQA Guidelines Section 15364 consistent with the USFWS [~~1999~~2011] *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance*) by a qualified biologist in consultation with the Project owner and the County, buffer distances shall be established prior to construction activities.

If avoidance of the potential dens is not feasible, the following measures shall be implemented to avoid potential adverse effects to the San Joaquin kit fox or American badger:

- ~~If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent them from being used during construction.~~
- ~~If the qualified biologist determines that a potential non-natal den may be active, , an on-site passive relocation program shall be implemented with prior approval from~~ the

~~USFWS and CDFW. This program shall consist of excluding San Joaquin kit foxes or badgers from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for 72 hours to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that the San Joaquin kit foxes or American badgers have stopped using active dens within the Project boundary, the dens shall be hand-excavated, as stated above for inactive dens.~~

- If the qualified biologist identifies known or natal/pupping dens occupied by San Joaquin kit fox, the Project owner shall initiate consultation with USFWS and CDFW to discuss how to avoid take or, if take avoidance is not feasible, to acquire an Incidental Take Permit (ITP) pursuant to federal Endangered Species Act Section 7 and California Fish and Game Code section 2081(b), prior to initiating or resuming ground-disturbing activities.

- If the qualified biologist identifies dens occupied by American badger, an on-site passive relocation program shall be implemented in coordination with CDFW. This program shall consist of excluding badgers from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for 72 hours to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that the badgers have stopped using active dens within the Project boundary, the dens shall be hand-excavated.

***Burrowing owl*:** The Project owner shall have burrowing owl surveys performed within 14 days before the initiation of equipment staging or ground-disturbing activities. A qualified wildlife biologist shall conduct preconstruction surveys on the site and immediate vicinity only in areas of the site with suitable burrowing habitat to locate any active breeding or wintering burrowing owl burrows, no fewer than 14 days prior to initial ground-disturbing activities (e.g., vegetation clearance, grading, tilling). Areas that have been plowed within 12 months prior to the start of ground-disturbing activities are not considered suitable habitat. The survey methodology shall be consistent with the methods outlined in the Appendix D of the CDFG (2012) *Staff Report on Burrowing Owl Mitigation*, or latest appropriate guidance documents, with regard to transect spacing, weather conditions, and time of day requirements. If the work activity halts for a period of 14 days or more, the survey would need to be conducted again prior to the continuation of site activities. Copies of the survey results shall be submitted to CDFW and the Fresno County Department of Public Works and Planning.

- If inactive (unoccupied) burrowing owl burrows are detected any time of the year, the burrows may be excavated by hand with a shovel or covered (i.e., with sandbags) to prevent burrowing owls from re-using them during construction. The burrow's inactive status will be determined by the approved biologist through monitoring prior to burrow excavation.

- If active (occupied) burrowing owl burrows are detected, no ground-disturbing activities, such as vegetation clearance, grading, or other construction activities, shall be permitted within a no-disturbance buffer around the burrow. The size of any employed no-disturbance buffers will be in accordance with the recommended restricted activity dates and setback distances by level of disturbance for burrowing owls outlined in the CDFG (2008) *Guidance for Burrowing Owl Conservation:*

  – 75 meters (250 feet) from occupied burrows during breeding season, and

  - 50 meters (160 feet) from occupied burrows during non-breeding season.

- Occupied burrowing owl burrows shall be regularly monitored by a qualified biologist or biological monitor throughout project construction. Depending on the level of disturbance and its duration, visual and auditory screening, and similar, a larger or smaller buffer may be established by a qualified biologist in coordination with CDFW based on the visibility and sensitivity responses of each individual burrowing owl.
- If active burrowing owl avoidance is infeasible, then the project owner shall consult with CDFW regarding potential for project activities to result in take of burrowing owl and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ITP issued for the project by CDFW authorizing take of the species.

Pages 3.5-24 and 3.5-25. The text of Mitigation Measure 3.5-2 has been revised as follows:

Mitigation Measure 3.5-2: Worker Environmental Awareness Program Training and Best Management Practices for Biological Resources

During construction, operation and maintenance, and decommissioning of the facility, the Project owner and/or contractor shall implement the following general avoidance and protective measures to protect San Joaquin kit fox and other special-status wildlife species:

- Prior to the issuance of grading or building permits and for the duration of construction activities, the Project owner, or its contractor, shall implement a Worker Environmental Awareness Program (WEAP) to train construction personnel how to recognize and protect biological resources on the Project site. The WEAP training shall include a review of the special-status species and other sensitive biological resources that could exist in the Project area, the locations of sensitive biological resources and their legal status and protections, and measures to be implemented for avoidance of these sensitive resources, highlighting San Joaquin kit fox, Swainson's hawk, burrowing owl, and loggerhead shrike.
- The Project owner shall limit the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid special-status species where feasible. Construction-related activities, vehicles, and equipment outside of the impact zone shall be avoided. These areas shall be flagged and disturbance activities, vehicles, and equipment shall be confined to these flagged areas.
- To prevent inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches with a 2-foot or greater depth shall be covered with plywood or similar materials at the close of each working day, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected by the approved biological monitor for trapped animals. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If a listed species is trapped, the USFWS and/or CDFW shall be contacted immediately.
- All construction pipes, culverts, or similar structures with a 4-inch or greater diameter that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for special-status wildlife or nesting birds before the pipe is subsequently

buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved until a qualified biologist has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated by the biologist.

- Vehicles and equipment parked on the site shall have the ground beneath the vehicle or equipment inspected for the presence of wildlife prior to moving.
- Vehicular traffic shall use existing routes of travel. Cross-country vehicle and equipment use outside of the Project properties shall be prohibited.
- A speed limit of 20 miles per hour shall be enforced within all construction areas in daylight; in the event night work is required, the enforced speed limit shall be 10 miles per hour.
- A long-term trash abatement program shall be established for construction, operation, and decommissioning and submitted to the County. Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to wildlife such as common raven (*Corvus corax*), coyote (*Canis latrans*), and feral dogs.
- Workers shall be prohibited from bringing pets and firearms to the Project site and from feeding wildlife in the vicinity.
- Intentional killing or collection of any wildlife species shall be prohibited.

Pages 3.5-25 and 3.5-26. The text of Mitigation Measure 3.5-3 has been revised as follows:

Mitigation Measure 3.5-3: Protection of Nesting Birds, including Swainson's Hawk

If construction is scheduled to commence outside of nesting season (September ~~1~~16 to January 31; September 16 to February 28 for Swainson's hawk), no preconstruction surveys are required for nesting birds, including Swainson's hawk and other raptors. Trees that have documented usage by Swainson's hawks as nesting trees within the past 5 years shall not be removed.

During the breeding season (February 1 to ~~August 31~~September 15; March 1 to September 15 for Swainson's hawk), in order to avoid impacts to nesting birds in the Project site and immediate vicinity, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within the Project site where vegetation removal or ground disturbance is planned. The survey shall focus on potential nest sites and cover an area up to 0.~~2~~5-mile buffer around the site for Swainson's hawk, ~~300~~500 feet for common raptors, and ~~100~~250 feet for passerines in areas where access to neighboring properties is available or visible using a spotting scope or binoculars. Surveys shall be conducted no more than ~~14~~ 10 working days prior to construction activities. If construction is halted for ~~14~~ 10 working days or more, the area shall be re-surveyed prior to re-initiating work. Swainson's hawk surveys shall follow CDFW-approved methodology (SWHA TAC 2000).[2]

Surveys need not be conducted for the entire Project site at one time; they may be phased so that each work area is surveyed no more than ~~14~~10 working days prior to the start of construction in that area. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (~~300~~500 feet for common

[2] Swainson's Hawk Technical Advisory Committee. 2000. Recommended timing and methodology for Swainson's hawk nesting surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee.

raptors; 0.~~2~~5 mile for Swainson's hawk; ~~100~~250 feet for passerines) shall be established around active nests and no construction within the buffer allowed until a qualified biologist has completed an assessment of the potential for current construction activities to impact the nest. ~~determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). Encroachment into these buffers for non-special-status species may occur at the discretion of a qualified biologist. Encroachment into these buffers for special-status species may occur in coordination or consultation with CDFW~~. The assessment would consider the type of construction activities (e.g., noise levels and duration), the location of construction relative to the nest and pre-existing disturbance levels (e.g., construction activities in historically agricultural land versus activities in non-agricultural land), the visibility of construction activities from the nest location (e.g., topography or vegetation that could block line-of-sight to the nest), the number of construction personnel required to perform activities within the setback, and other existing disturbances in the area that are not related to construction activities of this project. Based on this assessment, the biologist will determine if construction activities can proceed and the level of nest monitoring required. When conducting the assessment, the biologist will consider the following levels of construction activity, with higher levels of activity requiring greater caution in determining setbacks:

- Light construction activity such as fence installation and limited vehicle access. Noise levels generated by these construction activities would likely be similar to existing ambient noise levels in closer proximity to the occupied nests.

- Moderate and/or isolated construction activity such as grading and construction of substation, substation-access road, inverter skids, and manual installation of solar panels. Noise levels generated by these construction activities would likely be similar to existing ambient noise levels beyond a moderate distance from the occupied nests.

- Heavy construction activity across a large area of the Project and/or using louder equipment such as concrete saws, or jackhammers. Noise levels for this type of activity will depend on location of the activities relative to the nest and allowing these activities within the 0.5-mile setback would require coordination with CDFW.

In the event the assessment determines that construction activities could occur closer than 0.5 miles to an active Swainson's hawk nest, in no event would construction activities occur within 500 feet of an active nest without coordination with CDFW. Full-time monitoring to evaluate the effects of construction activities on nesting Swainson's hawks would be required where activity occurs closer than 0.5 miles. The qualified biologist shall have the authority to stop work if it is determined that project construction is disturbing nesting activities. These buffers may need to increase depending on the sensitivity of the nesting Swainson's hawk to disturbances and at the discretion of the qualified biologist. No avoidance would be needed if construction occurs near a known Swainson's hawk nest outside of the Swainson's hawk nesting season. In the event take cannot be avoided, the proponent shall confer with CDFW on the need for an incidental take permit and will comply with any specific-specific minimization and avoidance measures identified in the issued incidental take permit prior to the removal of active nest trees.

Page 3.5-35. Section 3.5.5, *References*, has been updated as follows:

Swainson's Hawk Technical Advisory Committee. 2000. Recommended timing and methodology for Swainson's hawk nesting surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee.

USFWS (U.S. Fish and Wildlife Service). 2011 ~~1999~~. *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance*. Sacramento Fish and Wildlife Office, Sacramento, CA. January.

3.2.9 Section 3.6, Cultural Resources and Tribal Cultural Resources

No changes have been made to Draft EIR Section 3.6, *Cultural Resources and Tribal Cultural Resources*.

3.2.10 Section 3.7, Energy

No changes have been made to Draft EIR Section 3.7, *Energy*.

3.2.11 Section 3.8, Geology, Soils, and Paleontological Resources

No changes have been made to Draft EIR Section 3.7, *Energy*.

3.2.12 Section 3.9, Greenhouse Gas Emissions

No changes have been made to Draft EIR Section 3.9, *Greenhouse Gas Emissions*.

3.2.13 Section 3.10, Hazards and Hazardous Materials

No changes have been made to Draft EIR Section 3.10, *Hazards and Hazardous Materials*.

3.2.14 Section 3.11, Hydrology and Water Quality

No changes have been made to Draft EIR Section 3.11, *Hydrology and Water Quality*.

3.2.15 Section 3.12, Land Use and Planning

No changes have been made to Draft EIR Section 3.12, *Land Use and Planning*.

3.2.16 Section 3.13, Mineral Resources

No changes have been made to DEIR Section 3.13, *Mineral Resources*.

3.2.17 Section 3.14, Noise and Acoustics

No changes have been made to Draft EIR Section 3.14, *Noise and Acoustics*.

3.2.18 Section 3.15, Population and Housing

No changes have been made to Draft EIR Section 3.15, *Population and Housing*.

3.2.19 Section 3.16, Public Services

No changes have been made to Draft EIR Section 3.16, *Public Services*.

3.2.20 Section 3.17, Recreation

No changes have been made to Draft EIR Section 3.17, *Recreation*.

3.2.21 Section 3.18, Transportation

Page 3.18-13. Section 3.18, *Transportation* the text of Mitigation Measure 3.18-1 has been revised as follows:

Mitigation Measure 3.18-1: Construction and Decommissioning Traffic Management Plan

Prior to the issuance of construction or building permits and the issuance of decommissioning authorizations, the Project owner and/or its construction contractor shall prepare and submit a Traffic Management Plan to the Fresno County Public Works Department and the California Department of Transportation, District 6, as appropriate, for approval. Review of the Traffic Management Plan (from a County standpoint) will be conducted by Fresno County Road Maintenance and Operations Division. The Traffic Management Plan must be prepared in accordance with both the California Department of Transportation Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following elements:

- Temporary Traffic Control plan that addresses traffic safety and control through the work zone, including during temporary lane closures (if needed) to accommodate materials delivery, transmission line stringing activities, or any other utility connections;
- Identify the timing of deliveries of heavy equipment and building materials;
- Requirement for designated construction staff to be assigned as flaggers to direct traffic into and/or through temporary traffic control zones, as needed;
- Requirement to place temporary signage, lighting, and traffic control devices, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic;
- Ensure access for emergency vehicles to the Project site;
- Access to adjacent properties shall be maintained;
- Specify both construction/decommissioning-related vehicle travel and oversize load haul routes, minimizing construction/decommissioning traffic during the AM and PM peak hour, distributing construction/decommissioning traffic flow across alternative routes to access the Project site, and avoiding residential neighborhoods to the maximum extent feasible.
- Requirement to obtain all necessary permits for the work within the road right of way or use of oversized/overweight vehicles that would utilize County-maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the Fresno County Divisions of Public Works and Planning.
- Applicant shall coordinate with Fresno County to assess potential impacts to County roads from Project-related activities. If any County roads are demonstrably damaged as a

result of the Project, the Applicant shall work with Fresno County to determine appropriate repairs, which may include paving, slurry-sealing, or reconstruction, as required by state and/or County standards.

3.2.22 Section 3.19, Utilities and Service Systems

No changes have been made to Draft EIR Section 3.19, *Utilities and Service Systems*.

3.2.23 Section 3.20, Wildfire

No changes have been made to Draft EIR Section 3.20, *Wildfire*.

3.2.24 Chapter 4, Alternatives

No changes have been made to Draft EIR Chapter 4, *Alternatives*.

3.2.25 Chapter 5, Other CEQA Considerations

No changes have been made to Draft EIR Chapter 5, *Other CEQA Considerations*.

3.2.26 Chapter 6, Report Preparation

No changes have been made to Draft EIR Chapter 6, *Report Preparation*.

3.2.27 Appendices

No changes have been made to the Draft EIR Appendices.

Appendix A
Public Notices

Notice of Completion & Environmental Document Transmittal

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

SCH # 2022100609

Project Title: Heartland Solar Project

Lead Agency: Fresno County | Contact Person: Alyce Alvarez

Mailing Address: 2220 Tulare Street, Suite B Annex | Phone: (559) 600-9669

City: Fresno | Zip: 93721 | County: Fresno

Project Location: County: Fresno | City/Nearest Community: Tranquility

Cross Streets: SR 33, S. Ohio Ave, W. American Ave, S. San Bernardino Ave, Los Angeles Ave. | Zip Code: 93640

Longitude/Latitude (degrees, minutes and seconds): 36 ° 36 ′ 52.98 ″ N / 120 ° 24 ′ 12.47 ″ W | Total Acres: 2,362

Assessor's Parcel No.: See attached | Section: various | Twp.: 15 South | Range: 14 East | Base: Mt. Diablo

Within 2 Miles: State Hwy #: SR 33 | Waterways: none

Airports: none | Railways: none | Schools: none

Document Type:

CEQA: ☐ NOP ☐ Early Cons ☐ Neg Dec ☐ Mit Neg Dec ☒ Draft EIR ☐ Supplement/Subsequent EIR (Prior SCH No.) ☐ Other:

NEPA: ☐ NOI ☐ EA ☐ Draft EIS ☐ FONSI

Other: ☐ Joint Document ☐ Final Document ☐ Other:

Local Action Type:

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

Development Type:

☐ Residential: Units ____ Acres ____
☐ Office: Sq.ft. ____ Acres ____ Employees ____
☐ Commercial: Sq.ft. ____ Acres ____ Employees ____
☐ Industrial: Sq.ft. ____ Acres ____ Employees ____
☐ Educational:
☐ Recreational:
☐ Water Facilities: Type ____ MGD ____
☐ Transportation: Type
☐ Mining: Mineral
☒ Power: Type Solar PV MW 300
☐ Waste Treatment: Type ____ MGD ____
☐ Hazardous Waste: Type
☐ Other:

Project Issues Discussed in Document:

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

Present Land Use/Zoning/General Plan Designation:

Dry farm/AE-20/ Agricultural

Project Description: *(please use a separate page if necessary)*

The Heartland Solar Project consists of renewable photovoltaic (PV) solar energy generation and energy storage system facilities and interconnection to the regional energy grid. Proposed solar facilities would generate approximately 300 megawatts alternating current (MWAC) of solar PV energy and have capacity to store up to 300 MW of energy on approximately 2,362 acres of private land in western Fresno County. These facilities would interconnect to the regional electrical grid via an electrical generation-tie (gen-tie) line between the solar facility and the existing Tranquillity Switching Station, which is located approximately 1.25 miles south of the solar and energy storage facility site. The project would also require other necessary infrastructure work to support interconnection and upgrades within the existing Tranquillity Switching Station, owned and operated by Pacific Gas and Electric Company (PG&E).

Note: The State Clearinghouse will assign identification numbers for all new projects. If a SCH number already exists for a project (e.g. Notice of Preparation or previous draft document) please fill in.

Reviewing Agencies Checklist

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

____	Air Resources Board	____	Office of Historic Preservation
____	Boating & Waterways, Department of	____	Office of Public School Construction
____	California Emergency Management Agency	X	Parks & Recreation, Department of
X	California Highway Patrol	____	Pesticide Regulation, Department of
X	Caltrans District # 6	X	Public Utilities Commission
____	Caltrans Division of Aeronautics	X	Regional WQCB # 5
____	Caltrans Planning	____	Resources Agency
____	Central Valley Flood Protection Board	____	Resources Recycling and Recovery, Department of
____	Coachella Valley Mtns. Conservancy	____	S.F. Bay Conservation & Development Comm.
____	Coastal Commission	____	San Gabriel & Lower L.A. Rivers & Mtns. Conservancy
____	Colorado River Board	____	San Joaquin River Conservancy
X	Conservation, Department of	____	Santa Monica Mtns. Conservancy
____	Corrections, Department of	____	State Lands Commission
____	Delta Protection Commission	____	SWRCB: Clean Water Grants
____	Education, Department of	____	SWRCB: Water Quality
X	Energy Commission	____	SWRCB: Water Rights
X	Fish & Game Region # 8	____	Tahoe Regional Planning Agency
____	Food & Agriculture, Department of	X	Toxic Substances Control, Department of
X	Forestry and Fire Protection, Department of	____	Water Resources, Department of
____	General Services, Department of		
____	Health Services, Department of	____	Other:
____	Housing & Community Development	____	Other:
X	Native American Heritage Commission		

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

Starting Date September 24, 2025 Ending Date November 7, 2025

Lead Agency (Complete if applicable):

Consulting Firm: Environmental Science Associates
Address: 1731 Technology Drive, Suite 880
City/State/Zip: San Jose, CA 95110
Contact: Janna Scott
Phone: (408) 660-4008

Applicant: Heartland Solar 1, LLC
Address: 100 California Street; Suite 650
City/State/Zip: San Francisco, CA 94111
Phone: (760) 717-5574

Signature of Lead Agency Representative: Alyce Alvarez **Date:** 9/18/2025

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

Notice of Completion Attachment

Heartland Solar Project (Fresno County EIR 7564)

The Heartland Solar Project would be located within Sections 1, 2, 12, 13, 23 and 24, Township 15 South, Range 14 East, Mount Diablo Base and Meridian on the following Fresno County Assessor's parcels:

028-060-32, 028-060-33, 028-140-38, 028-060-41, 028-060-70, 028-101-15, 028-101-69, 028-101-81, 028-101-82, 028-140-23, 028-140-32, 028-140-36, 028-140-37, 028-160-16, 028-160-17, 028-160-19, 028-160-20, 028-160-22, 028-170-17, 028-170-18, 028-170-41, 028-170-42, 028-170-43, 028-170-44, 028-170-45, 028-170-46, 028-170-47, 028-170-48, 028-170-60, 028-170-61

THE BUSINESS JOURNAL
FRESNO | KINGS | MADERA | TULARE
P.O. Box 126
Fresno, CA 93707
Telephone (559) 490-3400

(Space Below for use of County Clerk only)

IN THE COUNTY OF FRESNO, STATE OF CALIFORNIA

NOTICE OF AVAILABILITY: DRAFT ENVIRONMENTAL IMPACT REPORT FOR HEARTLAND SOLAR PROJECT

STATE CLEARINGHOUSE NO. 2022100609; FRESNO COUNTY EIR 7564

MISC. NOTICE

STATE OF CALIFORNIA

COUNTY OF FRESNO

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of **THE BUSINESS JOURNAL** published in the city of Fresno, County of Fresno, State of California, Monday, Wednesday, Friday, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Fresno, State of California, under the date of March 4, 1911, in Action No.14315; that the notice of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

SEPTEMBER 24, 2025

.....

.....

I declare under penalty of perjury that the foregoing is true and correct and that this declaration was executed at Fresno, California,

SEPTEMBER 24, 2025

ON .....

.....

45-day comment period for the Draft EIR begins September 24, 2025 and ends November 7, 2025 at 5:00 p.m.

.....

DECLARATION OF PUBLICATION
(2015.5 C.C.P.)

NOTICE OF AVAILABILITY: DRAFT ENVIRONMENTAL IMPACT REPORT FOR HEARTLAND SOLAR PROJECT STATE CLEARINGHOUSE NO. 2022100609; FRESNO COUNTY EIR 7564

LEAD AGENCY: Fresno County

PROJECT TITLE: Draft Environmental Impact Report (EIR) for the Heartland Solar Project

PROJECT LOCATION: The Project site is in western Fresno County, approximately 6 miles southwest of the City of Mendota, 10 miles east of Interstate 5 (I-5), to the east of S. San Bernardino and Los Angeles avenues, south of W. American Avenue, west of State Route 33 (SR 33, also called S. Derrick Avenue), 0.5 mile north of W. Manning Avenue, and 1.25 miles north of the PG&E's Tranquillity Switching Station. The Heartland Project Site is approximately 2,362 acres and encompasses the following Fresno County Assessor Parcel Numbers: 028-060-32 028-060-33 028-140-38 028-060-41 028-060-70 028-101-15 028-101-69 028-101-81 028-101-82 028-140-23 028-140-32 028-140-36 028-140-37 028-160-16 028-160-17 028-160-19 028-160-20 028-160-22 028-170-17 028-170-18 028-170-41 028-170-42 028-170-43 028-170-44 028-170-45 028-170-46 028-170-47 028-170-48 028-170-60 028-170-61

PROJECT DESCRIPTION: The Heartland Solar Project consists of renewable photovoltaic (PV) solar energy generation and energy storage system facilities and interconnection to the regional energy grid. Proposed solar facilities would generate approximately 300 megawatts alternating current (MWAC) of solar PV energy and have capacity to store up to 300 MW of energy on approximately 2,362 acres of private land in western Fresno County. These facilities would interconnect to the regional electrical grid via an electrical generation-tie (gen-tie) line between the solar facility and the existing Tranquillity Switching Station, which is located approximately 1.25 miles south of the solar and energy storage facility site. The project would also require other necessary infrastructure work to support interconnection and upgrades within the existing Tranquillity Switching Station, owned and operated by Pacific Gas and Electric Company (PG&E).

SIGNIFICANT ENVIRONMENTAL EFFECTS: The County of Fresno has prepared a Draft EIR analyzing the Project's potential environmental effects. The Project would have a less-than-significant impact (with or without mitigation measures) regarding: Aesthetics; Agriculture and Forestry Resources; Air Quality; Biological Resources; Cultural and Tribal Cultural Resources; Energy; Geology, Soils, and Paleontological Resources; Greenhouse Gas Emissions; Hazards and Hazardous Materials; Hydrology and Water Quality; Noise and Acoustics; Transportation; Utilities and Service Systems; and Wildfire. No impact would result related to Land Use and Planning, Mineral Resources, Population and Housing, Public Services, or Recreation.

PUBLIC REVIEW: A 45-day comment period for the Draft EIR begins September 24, 2025 and ends November 7, 2025 at 5:00 p.m. No public meeting is planned during the public review period. Written comments should reference EIR 7564, Heartland Solar Project. Include your name, address, and phone number or email address so we may contact you for clarification, if necessary. Send written comments to:

Fresno County Department of Public Works and Planning
Development Services and Capital Projects Division
ATTN: Alyce Alvarez, Planner
2220 Tulare Street, Suite B Annex
Fresno, CA 93721
Email: alyalvarez@FresnoCountyCA.gov

AVAILABILITY OF THE DRAFT EIR: Copies of the Draft EIR are available for review at the following locations and in electronic format on Fresno County's website as noted below:

Fresno County Public Works and Planning Department, 2220 Tulare Street; Suite B Annex, Fresno, CA 93721Fresno County Main Library, Reference Department, 2420 Mariposa Street, Fresno.Mendota Branch Library, 1246 Belmont Ave. Mendota, CA 93640.Fresno County website: https://www.fresnocountyca.gov/Departments/Public-Works-and-Planning/divisions-of-public-works-and-planning/development-services-division/planning-and-land-use/environmental-impact-reports/eir-7564-heartland-solar

09/24/2025

Website Technical Issue

Apple's latest system release is causing our website content to take an extended time to load on Apple devices. If possible, please use an Android device or an alternative desktop browser until this issue is resolved.

Click Here For Fire Evacuation Information (https://www.arcgis.com/apps/webappviewer/index.html?id=e7d6006a016a444db8b210ac4d2eb5cf#widgets_NearMe_Widget_31_panel)

EIR 7564 Heartland Solar

Unclassified Conditional Use Permit Application No. 3630

(PDF, 177KB) (/files/sharedassets/county/v/1/vision-files/files/68533-cup3630lm.pdf)



- Location Map (PDF, 177KB) (/files/sharedassets/county/v/1/vision-files/files/68533-cup3630lm.pdf)
- Notice of Project Modification (PDF, 116KB) (/files/sharedassets/county/v/1/public-works-and-planning/development-services/environmental-impact-reports/heartland_informational_2024_1216.pdf)

Environmental Documents

- Notice of Preparation (PDF, 322KB) (/files/sharedassets/county/v/1/vision-files/files/70290-heartland_nop_2022_1024.pdf)
- Notice of Availability (PDF, 115KB) (/files/sharedassets/county/v/1/public-works-and-planning/development-services/environmental-impact-reports/7564-heartland/heartland-draft-noa.pdf)
- Draft EIR (PDF, 19MB) (/files/sharedassets/county/v/1/public-works-and-planning/development-services/environmental-impact-reports/7564-heartland/heartland_solar_pubdraft_eir_sept2025.pdf)
- Draft EIR Appendices (PDF, 156MB) (/files/sharedassets/county/v/1/public-works-and-planning/development-services/environmental-impact-reports/7564-heartland/eir-7564-heartland-appendices.pdf)

Public Scoping Meeting

The CEQA process encourages comments and questions from the public throughout the planning process. Consistent with the California Public Resources Code and Section 15083(c)(1), (2)(A) to (D) of the CEQA Guidelines, a Public Scoping Meeting will be held to solicit public and agency comments on the Scope and content of the Draft EIR. Oral and/or written comments also may be presented at the Public Scoping Meeting. The Public Scoping Meeting will be held online on a future date. Notices will be sent to surrounding property owners. If you wish to be included in future notices please submit your request to Jeremy Shaw.

Please send your written comments to:

Attn: Alyce Alvarez
Fresno County Department of Public Works and Planning
Development Services and Capital Projects Division
2220 Tulare Street, Sixth Floor
Fresno, CA 93721
Phone: (559) 600-9669 Fax: (559) 600-4200
Email: alyalvarez@fresnocountyca.gov (mailto:alyalvarez@fresnocountyca.gov)

From: [redacted]
To:
Cc: Alyce Alvarez (alyalvarez@fresnocountyca.gov)
Subject: Notice of Availability Heartland Solar EIR 7564
Date: Wednesday, September 24, 2025 12:36:27 PM
Attachments: Heartland NOA.pdf

Greetings,
You are receiving this email because you have provided your email to the County of Fresno for the purpose of receiving notices about the CEQA process for the Heartland Solar Project. This message is to notify you that the Draft Environmental Impact Report (EIR) for the project is now available for public review. The Draft EIR may be accessed in electronic form on the County's website via this link: EIR 7564 Heartland Solar - County of Fresno. Details about how to access and provide comments on the Draft EIR are included in the attached Notice of Availability. Thank you for your interest and consideration.

Best regards,

Alyce Alvarez, Planner
County of Fresno, Department of Public Works and Planning
Development Services and Capital Projects Division
Phone: 559-600-4207
Fax : 559-600-4200
alyalvarez@fresnocountyca.gov

County of Fresno

DEPARTMENT OF PUBLIC WORKS AND PLANNING
STEVEN E. WHITE, DIRECTOR

NOTICE OF AVAILABILITY:
DRAFT ENVIRONMENTAL IMPACT REPORT FOR HEARTLAND SOLAR PROJECT
STATE CLEARINGHOUSE NO. 2022100609; FRESNO COUNTY EIR 7564

LEAD AGENCY: Fresno County
PROJECT TITLE: Draft Environmental Impact Report (EIR) for the Heartland Solar Project

PROJECT LOCATION: The Project site is in western Fresno County, approximately 6 miles southwest of the City of Mendota, 10 miles east of Interstate 5 (I-5), to the east of S. San Bernardino and Los Angeles avenues, south of W. American Avenue, west of State Route 33 (SR 33, also called S. Derrick Avenue), 0.5 mile north of W. Manning Avenue, and 1.25 miles north of the PG&E's Tranquillity Switching Station. The Heartland Project Site is approximately 2,362 acres and encompasses the following Fresno County Assessor Parcel Numbers:

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028-060-41	028-140-23	028-160-19	028-170-42	028-170-48
028-060-70	028-140-32	028-160-20	028-170-43	028-170-60
028-101-15	028-140-36	028-160-22	028-170-44	028-170-61

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DEVELOPMENT SERVICES AND CAPITAL PROJECTS DIVISION
2220 Tulare Street, Sixth Floor / Fresno, California 93721 / Phone (559) 600-4497 / 600-4022 / 600-4540 / FAX 600-4200
The County of Fresno is an Equal Employment Opportunity Employer

PUBLIC REVIEW: A 45-day comment period for the Draft EIR begins September 24, 2025 and ends November 7, 2025 at 5:00 p.m. No public meeting is planned during the public review period. Written comments should reference EIR 7564, Heartland Solar Project. Include your name, address, and phone number or email address so we may contact you for clarification, if necessary. Send written comments to:

Fresno County Department of Public Works and Planning
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- Fresno County Main Library, Reference Department, 2420 Mariposa Street, Fresno.
- Mendota Branch Library, 1246 Belmont Ave. Mendota, CA 93640.
- Fresno County website: https://www.fresnocountyca.gov/Departments/Public-Works-and-Planning/divisions-of-public-works-and-planning/development-services-division/planning-and-land-use/environmental-impact-reports/eir-7564-heartland-solar

Appendix B
Recipients of the Final EIR

Heartland Solar Project-specific Distribution List EIR 7564

Delivery Method	Agencies, Tribes, Other Stakeholders	Contact
Project-specific recipients		
Email-only	Fresno County	Tawanda Mtunga
Email-only	Fresno County	Alyce Alvarez
Email-only	Fresno County	Jeremy Shaw
Email-only	Fresno County	Joseph Potthast
Email-only	Environmental Science Associates	Selena Whitney
Email-only	Environmental Science Associates	Maria Hensel
Email-only	VRPA Technologies, Inc.	Georgiena M. Vivian
Email-only	VRPA Technologies, Inc.	Erik O. Ruehr, P.E., T.E., PTOE
Email-only	VRPA Technologies, Inc.	Jeff Stine
Email-only	Clearway Energy	Deandra Cass
Email-only	Clearway Energy	Aarty Joshi
Email-only	Clearway Energy	Max Sugihara
Email-only	Clearway Energy	Sarah Linden
Email-only	Pacific Gas & Electric Company	Hesham Alaini
Email-only	Pacific Gas & Electric Company	Elizabeth Prichard
Possible responsible agencies, trustee agencies, or potentially affected Federal agencies		
Certified	California Department of Conservation, Division of Land Resource Protection	Dennis O'Bryant
	California Department of Conservation, Geologic Energy Management Division	
	California Department of Conservation, Geologic Energy Management Division	Jeff Kimber
Certified	California Department of Fish & Wildlife, Region 8	Craig Bailey
Certified	California Department of Fish & Wildlife	Jeremy Pohlman
	California Department of Fish & Wildlife	Ren Cotter, Environmental Scientist
	California Department of Fish & Wildlife, Region 4	Julie A. Vance, Regional Manager
Certified	California Department of Forestry and Fire Protection, Fresno-Kings Unit	
Certified	California Department of Transportation, District 6	Dave Padilla, Branch Chief, Transporta
	California Department of Transportation, District 6	Keyomi Jones, Associate Transportatio
Certified	California Energy Commission	Terry O'Brien
Certified	California Environmental Protection Agency, Department of Toxic Substance Control	Dave Kereazis
Certified	California Highway Patrol	Eric Walker, Captain
Certified	California Native American Heritage Commission	Katy Sanchez
Certified	California Public Utilities Commission	Mary Jo Borak
Certified	California Regional Water Quality Control Board, Region 5	Dale Harvey
Certified	San Joaquin Valley Air Pollution Control District	Arnaud Marjollet, Director of Permit Se
Certified	Southern San Joaquin Valley Archaeological Info Center	Celeste Thompson
Certified	State Office of Historic Preservation, Department of Parks & Recreation	Lucinda Woodward
Certified	United States Department of the Interior, Fish & Wildlife Services - Endangered Species Div.	Matthew Nelson
Native American Tribes		
Post	Dumna Wo Wah	Chris Acree
Post	Dumna Wo Wah Government	Robert Ledger, Tribal Chairman
Post	Picayune Rancheria of the Chukchansi Indians	Heather Airey - Cultural Resources Dir
Post	Santa Rosa Rancheria Tachi Yokut Tribe	Ruben Barrios, Tribal Chairman, c/o Cu
Post	Table Mountain Rancheria	Robert Pennell, Tribal Cultural Resourc
Other agencies		
Post	Central Valley Flood Protection Board	Leslie Gallagher
Post	City of Firebaugh	Ben Gallegos, City Manager
Post	City of Kerman, Community Development Department	Jesus R. Orozco
Post	City of Mendota, Planning and Community Development	Cristian Gonzalez
Post	City of San Joaquin	Lupe Estrada
Post	Consolidated Mosquito Abatement District	
Post	County of Madera, Community and Economic Development - Planning	Jamie Bax, Deputy Director
Post	Fresno Council of Governments	Tory Boren
Post	Fresno County Fire Protection District/ CAL FIRE	Larry E. Brown, Senior Fire Inspector
Post	Fresno Metropolitan Flood Control District	Frank Fowler
Post	Golden Plains Unified School District	Martin Macias, Superintendent
Post	James Irrigation District	
Post	Kings Basin Water Authority	
Post	Kings River Conservation District	Paul Peschel, General Manager
Post	Mendota Unified School District	Dr. Paul Lopez, Superinendent
Post	NAVFACSW INTERGOVERNMENTAL BRANCH	
Post	State Lands Commission	Alexandra Borack, Assistant Chief,
Post	State of California Reclamation Board	
Post	Tranquillity Irrigation District	Liz Reeves
Post	Tranquillity Resource Conservation District	Danny Wade
Post	United State Department of Agriculture, Natural Resources Conservation Service	David Durnham
Post	United States Army Corp of Engineers, Sacramento District	Kathy Norton
Post	United States Environmental Protection Agency Region 9	Dawn Richmond
Post	Westlands Water District	Russ Freeman
Post	Westlands Water District GSA	Kiti Buelna Campbell
Post	Westlands Water District	Brent Dragomanovich, Associate Reso
Post	Westlands Water District	Stephen Farmer, Chief Administrative (
	Westlands Water District	Jose Gutierrez, Assistant General Man
	Westlands Water District	Valdemar Cerna
Post	Westside Resources Conservation District	
Other stakeholders and special interests		
Post	Adams Broadwell Joseph & Cardozo	Sheila Sannadan, Maya Smith
Post	Laborers Intl Union of N. America, Local Union 294	
Post	Lozeau Drury, LLP	R. Drury, M. Lozeau, T. Rettinghouse,
Post	DOWNEY BRAND LLP	
Post		Maggie Coulter
Post	Defenders of Wildlife, California Program Office	Sophia Markowska, Senior California F

Appendix C

Mitigation Monitoring and Reporting Program

APPENDIX C
Mitigation Monitoring and Reporting Program

Introduction

The California Environmental Quality Act (CEQA) requires that a Lead Agency establish a program to monitor and report on mitigation measures adopted as part of the environmental review process to avoid or reduce the severity and magnitude of potentially significant environmental impacts associated with project implementation. CEQA (Public Resources Code Section 21081.6[a][1]) requires that a mitigation monitoring and reporting program (MMRP) be adopted at the time that the agency determines to carry out a project for which an EIR has been prepared, to ensure that mitigation measures identified in the EIR are fully implemented.

This document describes a preliminary MMRP for ensuring the effective implementation of the mitigation measures that are identified in EIR No. 7564 for Fresno County's approval of unclassified conditional use permit application (CUP No. 3630) to construct, operate, maintain, and decommission a photovoltaic solar electricity generating facility and battery energy storage system (the "Heartland Solar Project") in an unincorporated area of Fresno County. Mitigation measures recommended for the Heartland Solar Project are presented in **Table 1**, *Heartland Solar Project Mitigation Measures*.

This document also describes a preliminary MMRP for ensuring the effective implementation of the construction measures (CMs) and general avoidance and minimization measures (AMMs) proposed by the Pacific Gas and Electric Company (PG&E) that are identified in EIR No. 7564 for construction and operation of an approximately 1,000 foot generation-tie line, telecommunication facilities, and upgrades to the existing Tranquillity Switching Station to facilitate interconnection to the Heartland Solar Project. The applicable CMs and AMMs proposed as part of the PG&E Project are presented in **Table 2**, *PG&E Construction Measures and General Avoidance and Minimization Measures*. As lead agency for purposes of CEQA and in furtherance of its role in analyzing the impacts of the Project as a whole (i.e., the Heartland Solar Project together with the PG&E Project) Fresno County analyzed the environmental impacts of the PG&E Project even though the County does not have jurisdiction to authorize the PG&E Project: PG&E actions and the PG&E Project Components analyzed in EIR No. 7564 are subject to approval and oversight by the California Public Utilities Commission (CPUC), which served as a responsible agency for purposes of EIR No. 7564.

This MMRP is a working guide to facilitate not only the implementation of mitigation measures for the Project, but also the monitoring, compliance, and reporting activities of the County and any monitors it may designate. The Heartland Solar Project owner, its successors and designated operators, and/or its contractors (such as third-party consultants) would be responsible for implementation of any mitigation measures and other commitments governing the construction, operation, maintenance, and

decommissioning of the Project. The County would act as the lead agency for monitoring compliance with all mitigation measures required by the EIR for the Project. All approvals and permits obtained by the Project owner would be submitted to the County for mitigation compliance prior to commencing the activity for which the permits and approvals were obtained. The Fresno County Department of Public Works and Planning is responsible for the overall administration of the program and for assisting any other relevant County departments and project managers in their oversight and reporting responsibilities.

TABLE C-1
HEARTLAND SOLAR PROJECT MITIGATION MEASURES

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
Biological Resources				
Impact 3.5-1: The Heartland Solar Project would 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 Wildlife or U.S. Fish and Wildlife Service.	**Mitigation Measure 3.5-1: Protection of San Joaquin Kit Fox, Burrowing Owl and American Badger During Construction.** ***San Joaquin kit fox and American badger***: Preconstruction surveys shall be conducted by a qualified biologist for the presence of San Joaquin kit fox and American badger 14 to 30 days prior to commencement of construction activities pursuant to the U.S. Fish and Wildlife Service (USFWS) (2011) *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance*. The surveys shall be conducted in areas of suitable habitat for San Joaquin kit fox and American badger. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur 14 to 30 days prior to disturbance within active portions of the site. If no Known, Potential, or Natal/pupping San Joaquin kit fox or American badger dens are identified (as those terms are defined in USFWS [2011]), then no further mitigation is required. If potential dens are observed and avoidance is determined to be feasible (as defined in CEQA Guidelines Section 15364 consistent with the USFWS [2011] *Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance*) by a qualified biologist in consultation with the Project owner and the County, buffer distances shall be established prior to construction activities. If avoidance of the potential dens is not feasible, the following measures shall be implemented to avoid potential adverse effects to the San Joaquin kit fox or American badger: • If the qualified biologist identifies known or natal/pupping dens occupied by San Joaquin kit fox, the Project owner shall initiate consultation with USFWS and CDFW to discuss how to avoid take or, if take avoidance is not feasible, to acquire an Incidental Take Permit (ITP) pursuant to federal Endangered Species Act Section 7 and California Fish and Game Code section 2081(b), prior to initiating or resuming ground-disturbing activities. • If the qualified biologist identifies dens occupied by American badger, an on-site passive relocation program shall be implemented in coordination with CDFW. This program shall consist of excluding badgers from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for 72 hours to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that the badgers have stopped using active dens within the Project boundary, the dens shall be hand-excavated.	Project owner or its designee	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	Prior to and during construction and decommissioning as defined in the measures

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing

	Burrowing owl: The Project owner shall have burrowing owl surveys performed within 14 days before the initiation of equipment staging or ground-disturbing activities. A qualified wildlife biologist shall conduct pre-construction surveys on the site and immediate vicinity only in areas of the site with suitable burrowing habitat to locate any active breeding or wintering burrowing owl burrows, no fewer than 14 days prior to initial ground-disturbing activities (e.g., vegetation clearance, grading, tilling). Areas that have been plowed within 12 months prior to the start of ground-disturbing activities are not considered suitable habitat. The survey methodology shall be consistent with the methods outlined in the Appendix D of the California Department of Fish and Game (CDFG; 2012) *Staff Report on Burrowing Owl Mitigation*, or latest appropriate guidance documents, with regard to transect spacing, weather conditions, and time of day requirements. If the work activity halts for a period of 14 days or more, the survey would need to be conducted again prior to the continuation of site activities. Copies of the survey results shall be submitted to CDFW and the Fresno County Department of Public Works and Planning.
	• If inactive (unoccupied) burrowing owl burrows are detected any time of the year, the burrows may be excavated by hand with a shovel or covered (i.e., with sandbags) to prevent burrowing owls from re-using them during construction. The burrow's inactive status will be determined by the approved biologist through monitoring prior to burrow excavation.
	• If active (occupied) burrowing owl burrows are detected, no ground-disturbing activities, such as vegetation clearance, grading, or other construction activities, shall be permitted within a no-disturbance buffer around the burrow. The size of any employed no-disturbance buffers will be in accordance with the recommended restricted activity dates and setback distances by level of disturbance for burrowing owls outlined in the CDFG (2008) *Guidance for Burrowing Owl Conservation:*
	  o 75 meters (250 feet) from occupied burrows during breeding season, and
	  o 50 meters (160 feet) from occupied burrows during non-breeding season.
	• Occupied burrowing owl burrows shall be regularly monitored by a qualified biologist or biological monitor throughout project construction. Depending on the level of disturbance and its duration, visual and auditory screening, and similar, a larger or smaller buffer may be established by a qualified biologist in coordination with CDFW based on the visibility and sensitivity responses of each individual burrowing owl.
	• If active burrowing owl avoidance is infeasible, then the project owner shall consult with CDFW regarding potential for project activities to result in take of burrowing owl and shall comply with all avoidance, minimization, and compensatory mitigation requirements set forth in any ITP issued for the project by CDFW authorizing take of the species.			

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
	Mitigation Measure 3.5-2: Worker Environmental Awareness Program Training and Best Management Practices for Biological Resources During construction, operation and maintenance, and decommissioning of the facility, the Project owner and/or contractor shall implement the following general avoidance and protective measures to protect San Joaquin kit fox and other special-status wildlife species: • Prior to the issuance of grading or building permits and for the duration of construction activities, the Project owner, or its contractor, shall implement a Worker Environmental Awareness Program (WEAP) to train construction personnel how to recognize and protect biological resources on the Project site. The WEAP training shall include a review of the special-status species and other sensitive biological resources that could exist in the Project area, the locations of sensitive biological resources and their legal status and protections, and measures to be implemented for avoidance of these sensitive resources, highlighting San Joaquin kit fox, Swainson's hawk, burrowing owl, and loggerhead shrike. • The Project owner shall limit the areas of disturbance. Parking areas, new roads, staging, storage, excavation, and disposal site locations shall be confined to the smallest areas possible. All proposed impact areas, including solar fields, staging areas, access routes, and disposal or temporary placement of spoils, shall be delineated with stakes and/or flagging prior to construction to avoid special-status species where feasible. Construction-related activities, vehicles, and equipment outside of the impact zone shall be avoided. These areas shall be flagged, and disturbance activities, vehicles, and equipment shall be confined to these flagged areas. • To prevent inadvertent entrapment of wildlife during construction, all excavated, steep-walled holes or trenches with a 2-foot or greater depth shall be covered with plywood or similar materials at the close of each working day or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected by the approved biological monitor for trapped animals. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If a listed species is trapped, the USFWS and/or CDFW shall be contacted immediately. • All construction pipes, culverts, or similar structures with a 4-inch or greater diameter that are stored at a construction site for one or more overnight periods shall be thoroughly inspected for special-status wildlife or nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved until a qualified biologist has been consulted and the animal has either moved from the structure on its own accord or until the animal has been captured and relocated by the biologist.	Project owner or its designee	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	WEAP training to be developed and implemented prior to issuance of grading/building permits and repeated to train new construction personnel during construction and decommissioning as defined in the measures

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
	• Vehicles and equipment parked on the site shall have the ground beneath the vehicle or equipment inspected for the presence of wildlife prior to moving. • Vehicular traffic shall use existing routes of travel. Cross-country vehicle and equipment use outside of the Project properties shall be prohibited. • A speed limit of 20 miles per hour shall be enforced within all construction areas in daylight; in the event night work is required, the enforced speed limit shall be 10 miles per hour. • A long-term trash abatement program shall be established for construction, operation, and decommissioning and submitted to the County. Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to wildlife such as common raven (*Corvus corax*), coyote (*Canis latrans*), and feral dogs. • Workers shall be prohibited from bringing pets and firearms to the Project site and from feeding wildlife in the vicinity. Intentional killing or collection of any wildlife species shall be prohibited.			
	Mitigation Measure 3.5-3: Protection of Nesting Birds, including Swainson's Hawk If construction is scheduled to commence outside of nesting season (September 16 to January 31; September 16 to February 28 for Swainson's hawk), no preconstruction surveys or additional measures are required for nesting birds, including Swainson's hawk and other raptors. Trees that have documented usage by Swainson's hawks as nesting trees within the past 5 years shall not be removed. During the breeding season (February 1 to September 15; March 1 to September 15 for Swainson's hawk), in order to avoid impacts to nesting birds in the Project site and immediate vicinity, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within the Project site where vegetation removal or ground disturbance is planned. The survey shall focus on potential nest sites and cover an area up to 0.5-mile buffer around the site for Swainson's hawk, 500 feet for common raptors, and 250 feet for passerines in areas where access to neighboring properties is available or visible using a spotting scope or binoculars. Surveys shall be conducted no more than 10 working days prior to construction activities. If construction is halted for 10 working days or more, the area shall be re-surveyed prior to re-initiating work. Swainson's hawk surveys shall follow CDFW-approved methodology (SWHA TAC 2000).[1]	Project owner or its (qualified wildlife biologist) designee	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	Surveys to be conducted no more than 10 working days prior to construction and re surveyed (if construction is halted for 10 working days or more) prior to re-initiating work; implement measures; during construction phase as defined in the measures

[1] Swainson's Hawk Technical Advisory Committee. 2000. Recommended timing and methodology for Swainson's hawk nesting surveys in California's Central Valley. Swainson's Hawk Technical Advisory Committee.

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
	Surveys need not be conducted for the entire Project site at one time; they may be phased so that each work area is surveyed no more than 10 working days prior to the start of construction in that area. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (500 feet for common raptors; 0.5 mile for Swainson's hawk; 250 feet for passerines) shall be established around active nests and no construction within the buffer allowed until a qualified biologist has completed an assessment of the potential for current construction activities to impact the nest. The assessment would consider the type of construction activities (e.g., noise levels and duration), the location of construction relative to the nest and pre-existing disturbance levels (e.g., construction activities in historically agricultural land versus activities in non-agricultural land), the visibility of construction activities from the nest location (e.g., topography or vegetation that could block line-of-sight to the nest), the number of construction personnel required to perform activities within the setback, and other existing disturbances in the area that are not related to construction activities of this project. Based on this assessment, the biologist will determine if construction activities can proceed and the level of nest monitoring required. When conducting the assessment, the biologist will consider the following levels of construction activity, with higher levels of activity requiring greater caution in determining setbacks: • Light construction activity such as fence installation and limited vehicle access. Noise levels generated by these construction activities would likely be similar to existing ambient noise levels in closer proximity to the occupied nests. • Moderate and/or isolated construction activity such as grading and construction of substation, substation-access road, inverter skids, and manual installation of solar panels. Noise levels generated by these construction activities would likely be similar to existing ambient noise levels beyond a moderate distance from the occupied nests. • Heavy construction activity across a large area of the Project and/or using louder equipment such as concrete saws, or jackhammers. Noise levels for this type of activity will depend on location of the activities relative to the nest and allowing these activities within the 0.5-mile setback would require coordination with CDFW. In the event the assessment determines that construction activities could occur closer than 0.5 miles to an active Swainson's hawk nest, in no event would construction activities occur within 500 feet of an active nest without coordination with CDFW. Full-time monitoring to evaluate the effects of construction activities on nesting Swainson's hawks would be required where activity occurs closer than 0.5 miles. The qualified biologist shall have the authority to stop work if it is determined that project construction is disturbing nesting activities. These buffers may need to increase depending on the sensitivity of the nesting Swainson's hawk to disturbances and at the discretion of the qualified biologist. No avoidance would be needed if			

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
	construction occurs near a known Swainson's hawk nest outside of the Swainson's hawk nesting season. In the event take cannot be avoided, the proponent shall confer with CDFW on the need for an incidental take permit and will comply with any specific-specific minimization and avoidance measures identified in the issued incidental take permit prior to the removal of active nest trees.			
Impact 3.5-3: The Heartland Solar Project could conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	**Mitigation:** Implement Mitigation Measures 3.5-1, 3.5-2, and 3.5-3 (described under impact 3.5-1 above)	See Mitigation Measures listed under Impact 3.5-1		
Impact 3.5-1c: The Heartland Solar Project would make an incremental contribution to cumulative effects on 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 Wildlife or U.S. Fish and Wildlife Service.	**Mitigation:** Implement Mitigation Measures 3.5-1, 3.5-2, and 3.5-3 (described under impact 3.5-1 above)	See Mitigation Measures listed under Impact 3.5-1		
Impact 3.5-3c: The Heartland Solar Project could cause or conflict with a significant cumulative effect due to a conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.	**Mitigation**: Implement Mitigation Measures 3.5-1, 3.5-2, and 3.5-3 (described under impact 3.5-1 above)	See Mitigation Measures listed under Impact 3.5-1		
Cultural Resources				
Impact 3.6-1: Ground disturbing activities associated with the Heartland Solar Project could cause a substantial adverse change in the significance of a newly-discovered historical or archaeological resource, as defined in CEQA Guidelines section 15064.5.	**Mitigation Measure 3.6-1: Cultural Resources Awareness Training** The Project owner shall retain a Secretary of Interior qualified Project Archaeologist(s) to carry out all mitigation measures related to archaeological and historical resources during construction of their respective project components. Prior to the start of any ground-disturbing activities, the Project owner shall ensure that the qualified archaeologist(s) has prepared and conducted a Cultural Resources Awareness Training for all construction personnel working on the Project. A Native American-designated representative will be invited to attend and provide a Tribal perspective regarding tribal cultural resources for the training. The lead archaeologist will present the initial briefing of the cultural resources sensitivity training at the construction orientation program given to all personnel working on the proposed Project. The Project proponent/operator shall ensure all new employees or onsite workers who have not participated in earlier cultural resources sensitivity training will receive the training prior to working on	Project owner or its designee	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	Prior to and during construction and decommissioning as defined in mitigation measures

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
	the construction site. A copy of the cultural resources sensitivity training guide/materials shall be kept onsite and available for all personnel to review and be familiar with as necessary. The training shall include: • An overview of applicable laws and penalties pertaining to disturbing or collecting cultural resources. • A brief discussion of the prehistoric and historic regional context and archaeological sensitivity of the area, and potential cultural resources that could be encountered during ground disturbing activities to facilitate worker recognition. • Instruction that workers will halt construction in the event of a cultural resource inadvertent discovery (see **Mitigation Measure 3.6-2**), and notification procedures of Project personnel (i.e., Project Archaeologist, and others as appropriate including the Pacific Gas and Electric Company (PG&E) Cultural Resource Specialist if the resource is located within the PG&E scope components). • Roles and responsibilities of the Project Archaeologist and Archaeological and Tribal Monitors (see **Mitigation Measure 3.6-2**). A sign-in sheet shall be completed, retained by the Project construction contractor for the duration of Project construction to demonstrate attendance at the awareness training, and provided to the County upon the completion of Project construction (as appropriate).			
	Mitigation Measure 3.6-2: Inadvertent Discovery of Cultural Resources In the event archaeological materials are encountered during Project activities, the Project construction contractor shall immediately cease any ground disturbing activities within 100 feet of the find. The Project Archaeologist, in coordination with the Native American-designated representative from the Santa Rosa Rancheria Tachi-Yokut Tribe and the PG&E Cultural Resource Specialist (as appropriate), shall evaluate the significance of the resources for California Register of Historical Resources eligibility and recommend appropriate treatment measures to the County and the Project owner. Per CEQA Guidelines section 15126.4(b)(3)(C), if it is demonstrated that resources cannot be avoided, the Project Archaeologist shall, in coordination with a Native American-designated representative from the Santa Rosa Rancheria Tachi-Yokut Tribe and the PG&E Cultural Resource Specialist (as appropriate) develop additional treatment measures in consultation with the County, which may include data recovery or other appropriate measures. The County shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are pre-contact, tribal cultural resources, or Native American in nature. The Project Archaeologist shall prepare a report documenting evaluation and/or additional treatment of the resource. A copy of the report shall be provided to the County and to the Southern San Joaquin Valley Information Center. Construction can recommence based on direction of the Project Archaeologist with the County's agreement.	Project owner or its designee (designated Cultural Resource Specialist)	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	During construction in the event of an inadvertent discovery, as defined by the measure

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
Impact 3.6-2: Ground disturbing activities associated with the Heartland Solar Project could result in damage to previously unidentified human remains.	**Mitigation Measure 3.6-3: Inadvertent Discovery of Human Remains** Existing regulations, Health and Safety Code Section 7050.5, require that if human remains are uncovered during Project activities, the Project construction contractor shall immediately halt work within 100 feet of the find, immediately contact the Fresno County Coroner (559) 600-3400, and protect the area and ensure the area is not further disturbed. If the County Coroner determines that the remains are Native American in origin, the Native American Heritage Commission (NAHC) will be notified, in accordance with Health and Safety Code section 7050.5(c), and Public Resources Code section 5097.98 (as amended). The NAHC shall designate a Most Likely Descendant (MLD) for the remains per Public Resources Code section 5097.98, and in accordance to generally accepted cultural or archaeological standards or practices, the landowner shall ensure that the immediate vicinity of the Native American human remains, is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the MLD regarding their recommendation for the disposition of the remains, taking into account the possibility of multiple human remains.	Project owner or its designee	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	During construction in the event human remains are discovered
Impact 3.6-3: Ground disturbing activities associated with the Heartland Solar Project could cause a substantial adverse change to previously unknown archaeological resources that are also tribal cultural resources, as defined in Public Resources Code section 21074(a).	**Mitigation Measure 3.6-4:** In addition to implementing **Mitigation Measures 3.6-1**, **3.6-2**, and **3.6-3**, the Project owner shall retain a Secretary of the Interior-qualified Project Archaeologist to prepare and implement a Cultural Resource Monitoring Plan (Plan) and coordinate and schedule archaeological monitoring during Project construction. Multiple plans and/or archaeologists may be required to coordinate monitoring for all project components. Each plan will be submitted to the County for review and approval. Each plan will include a requirement for monitoring, as determined by the Project Archaeologist, of initial Project ground-disturbing activities of previously undisturbed soils by a qualified archaeologist and a Native American-designated monitor, if participating. Each plan will include (but not be limited to) the following components: • The identification and qualifications of person(s) responsible for conducting monitoring activities, including a request to the Native American Tribe for a Native American-designated monitor; • The identification of person(s) responsible for overseeing and directing the monitors; • Monitoring protocols and procedures and the required format and content of monitoring logs; • The schedule for submittal of monitoring logs and identification of person(s) responsible for review and approval of monitoring logs; • A protocol for notifications in the event cultural resources are encountered, as well as methods of dealing with the encountered resources (e.g., collection, identification, curation); • Methods to ensure the security of cultural resources sites; and	Secretary of the Interior-qualified Project Archaeologist	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	Prior to and during construction as defined by the measure

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
	• A protocol for notifying local authorities (i.e., Sheriff, Police) should site looting and other illegal activities occur during construction. • Identify protocols and procedures for a final monitoring report that summarizes the duration of monitoring activities, all daily monitoring logs, any inadvertent discoveries, and associated reporting. This report will be submitted to the County and, once finalized, to the Southern San Joaquin Valley Information Center. During the course of the monitoring, the Project Archaeologist may adjust the frequency, from continuous to intermittent, of the monitoring based on the conditions and professional judgment regarding the potential to impact resources, with consideration of the judgement of the tribal monitor.			
Impact 3.6-1c: Heartland Solar Project-related ground disturbance would not cause or contribute to a significant cumulative effect due to substantial adverse change in the significance of a newly-discovered historical or archaeological resource, as defined in CEQA Guidelines section 15064.5.	**Mitigation:** Implement Mitigation Measures 3.6-1: Cultural Resources Awareness Training.	See Mitigation Measures 3.6-1 (under Impact 3.6-1).		
Impact 3.6-2c: Heartland Solar Project-related ground disturbance would not cause or contribute to a significant cumulative effect due to the disturbance of or damage to human remains.	**Mitigation:** Implement Mitigation Measures 3.6-3: Inadvertent Discovery of Human Remains.	See Mitigation Measures 3.6-3 (under Impact 3.6-3).		
Impact 3.6-3c: Ground disturbing activities associated with the Heartland Solar Project would not cause or contribute to a significant cumulative effect due to a substantial adverse change to previously unknown archaeological resources that are also tribal cultural resources.	**Mitigation:** Implement Mitigation Measures 3.6-1, 3.6-2, 3.6-3, and 3.6-4.	See Mitigation Measures 3.6-1 (under Impact 3.6-1).		

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
Geology, Soils, and Paleontological Resources				
Impact 3.8-6: The Heartland Solar Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**Mitigation Measure 3.8-6: Unanticipated Fossil Discovery** Prior to any ground disturbing activities, the Project owner shall develop and implement a Paleontological Worker Education and Awareness Program. If paleontological resources are discovered during ground-disturbing activities (e.g., during Project construction or decommissioning), all earthwork or other types of ground disturbance within 50 feet of the find shall stop immediately until a qualified professional paleontologist meeting the standards of the SVP can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the paleontologist may record the find and allow work to continue or recommend salvage and recovery of the fossil. The paleontologist may also propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. If treatment and salvage is required, recommendations will be consistent with the standards of the SVP that are current as of the discovery and with currently-accepted scientific practice. The current standards of the SVP are set forth in the SVP's 2010 *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*, as prepared by the SVP's Impact Mitigation Guidelines Revision Committee. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may also include preparation of a report for publication describing the finds.	Project owner or its designee	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	Prior to and during construction and decommissioning involving ground disturbance. Worker education and awareness training to occur before excavation; training to be repeated for new personnel during the construction phase, as needed.
Impact 3.8-6c: The Heartland Solar Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.	**Mitigation:** Implement Mitigation Measure 3.8-6.	See Mitigation Measures 3.8-6 (under Impact 3.8-6).		
Hazards and Hazardous Materials				
Impact 3.10-1: The Heartland Solar Project could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment pursuant to removal of illegal dump sites.	**Mitigation Measure 3.10-1: Site Management Plan** The contractor conducting the cleanup of the illegal dump sites shall develop and implement a site management plan (SMP) for the management of waste, hazardous materials, and affected soil before any ground-disturbing activity. The SMP shall describe measures for (i) removal of waste, hazardous materials, and contaminated soil (ii) characterization of the soil underlying the waste and hazardous materials to verify all contaminated materials have been removed per regulatory standards, and (iii) off-site disposal of waste, hazardous materials, and soil in compliance with all applicable regulations. The SMP shall include the following, at a minimum: • Site description, including the waste and hazardous materials that may be encountered.	Project owner or its designee	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	Submit SMP prior to issuance of grading/construction permits and implement measures during construction

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
	• Roles and responsibilities of on-site workers, supervisors, and the regulatory agency. • Training for site workers focused on the recognition of and response to encountering waste and hazardous materials. • Notification requirements in the event of discovery of unknown contamination. • Protocols for the materials (waste, hazardous materials, and soil) testing, handling, removing, transporting, and disposing of removed materials in a safe, appropriate, and lawful manner. • Reporting requirement to the overseeing regulatory agency, if any contamination is found that requires agency oversight, documenting that site activities were conducted in accordance with the SMP. The SMP shall be submitted to the lead agency for review before the start of cleanup activities and as a condition of the grading and/or construction permit(s). The contract specifications shall mandate full compliance with all applicable federal, State, and local regulations related to the identification, transportation, and disposal of hazardous materials.			
Hydrology and Water Quality				
Impact 3.11-1: The Heartland Solar Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality.	**Mitigation Measure 3.11-1: Stormwater Pollution Prevention Plan** Prior to the issuance of a grading permit, the Project proponent/operator shall submit to the County a Stormwater Pollution Prevention Plan (SWPPP) complying with requirements of the Construction Stormwater General Permit. The SWPPP shall be designed to minimize runoff and shall specify best management practices to prevent all construction pollutants from contacting stormwater, with the intent of keeping sediment or any other pollutants from moving offsite and into receiving waters. The requirements of the SWPPP shall be incorporated into design specifications and construction contracts. Recommended best management practices to be incorporated in the SWPPP may include, but would not be limited to, the following: a. Minimization of vegetation removal; b. Implementing sediment controls, including silt fences a necessary; c. Installation of a stabilized construction entrance/exit and stabilization of disturbed areas; d. Properly containing and disposing of hazardous materials used for construction onsite; e. Properly covering stockpiled soils to prevent wind erosion; f. Proper protections and containment for fueling and maintenance of equipment and vehicles; and g. Appropriate disposal of demolition debris, concrete and soil, and aggressively controlling litter.	Project owner or its designee	Fresno County Department of Public Works and Planning, Development Services Division, and/or its designee.	Submit SWPPP prior to issuance of grading permit and implement its measures and during construction and decommissioning

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
	h. Cleanup of silt and mud on adjacent street due to construction activity. i. Checking all lined and unlined ditches after each rainfall. j. Install additional erosion control measures as may be required due to uncompleted grading operations or unforeseen circumstances which may arise.			
Impact 3.11-3: The Heartland Solar Project would not 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: i) Results in substantial erosion or siltation on- or off-site; ii) substantially increases the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; iii) creates or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provides substantial additional sources of polluted runoff; or iv) impedes or redirects flood flows.	**Mitigation:** Implement Mitigation Measure 3.11-1.	See Mitigation Measures 3.11-1 (under Impact 3.11-1).		
Impact 3.11-4: The Heartland Solar Project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan.	**Mitigation:** Implement Mitigation Measure 3.11-1.	See Mitigation Measures 3.11-1 (under Impact 3.11-1).		
Impact 3.11-1c: The Heartland Solar Project would not result in a cumulatively considerable contribution to any significant cumulative effect due to violation of any water quality standards or waste discharge requirements or other substantial degradation of surface or groundwater quality.	**Mitigation:** Implement Mitigation Measure 3.11-1.	See Mitigation Measures 3.11-1 (under Impact 3.11-1).		

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
Impact 3.11-3c: The Heartland Solar Project would not cause or contribute to a significant cumulative effect due to substantial alteration of existing drainage patterns in a manner that: i) Results in substantial erosion or siltation on- or off-site; ii) substantially increases the rate or amount of surface runoff in a manner which would result in flooding on- or offsite; iii) creates or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provides substantial additional sources of polluted runoff; or iv) impedes or redirects flood flows.	**Mitigation:** Implement Mitigation Measure 3.11-1.	See Mitigation Measures 3.11-1 (under Impact 3.11-1).		
Impact 3.11-4c: The Heartland Solar Project would not cause or contribute to a significant cumulative effect due to a conflict with or obstruction of the implementation of the basin plan or GSP.	**Mitigation:** Implement Mitigation Measure 3.11-1.	See Mitigation Measures 3.11-1 (under Impact 3.11-1).		
Noise and Acoustics				
Impact 3.14-1: Construction and decommissioning of the Heartland Solar Project during nighttime hours could generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the Project site in excess of standards established in the local general plan or noise ordinance.	**Mitigation Measure 3.14-1: Noise Reduction for Nighttime Construction and Decommissioning Activities** Prior to issuance of construction permits for the Project, the Project owner shall submit to the County for approval a Construction Noise Reduction Plan to be implemented by all contractors as a condition of contract. Contents of the Plan should include at a minimum: • Maintain all construction tools and equipment in good operating order according to manufacturers' specifications; • Limit use of major excavating, pile driving, earth-moving machinery, and pneumatic tools to daytime hours; • Equip any internal combustion engine used for any purpose on the job or related to the job with a properly operating muffler that is free from rust, holes, and leaks; • For construction devices that utilize internal combustion engines, ensure the engine's housing doors are kept closed, and install noise-insulating material mounted on the engine housing consistent with manufacturers' guidelines, if possible;	Project owner or its designee	Fresno County Department of Public Works and Planning, Development Services Division, Department of Public Health, and/or its designee.	Submit Construction Noise Reduction Plan to County prior to issuance of construction permits; implement plan during construction and decommissioning

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
	• Limit possible evening and nighttime shift work to the southern (i.e., Areas 8a and 8b) and/or northern (i.e., Areas 1 through 3) portions of the Project site conducting low noise activities such as welding, wire pulling, and other similar activities, together with appropriate material handling equipment; and • Utilize a Complaint Resolution Procedure to address any noise complaints received from residents.			
Transportation				
Impact 3.18-1: The Heartland Solar Project could conflict with a program, plan, ordinance, or policy addressing the circulation system, including roadway facilities.	**Mitigation Measure 3.18-1: Construction and Decommissioning Traffic Management Plan** Prior to the issuance of construction or building permits and the issuance of decommissioning authorizations, the Project owner and/or its construction contractor shall prepare and submit a Traffic Management Plan to the Fresno County Public Works Department and the California Department of Transportation, District 6, as appropriate, for approval. Review of the Traffic Management Plan (from a County standpoint) will be conducted by Fresno County Road Maintenance and Operations Division. The Traffic Management Plan must be prepared in accordance with both the California Department of Transportation Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following elements: • Temporary Traffic Control plan that addresses traffic safety and control through the work zone, including during temporary lane closures (if needed) to accommodate materials delivery, transmission line stringing activities, or any other utility connections; • Identify the timing of deliveries of heavy equipment and building materials; • Requirement for designated construction staff to be assigned as flaggers to direct traffic into and/or through temporary traffic control zones, as needed; • Requirement to place temporary signage, lighting, and traffic control devices, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction traffic; • Ensure access for emergency vehicles to the Project site; • Access to adjacent properties shall be maintained; • Specify both construction/decommissioning-related vehicle travel and oversize load haul routes, minimizing construction/decommissioning traffic during the AM and PM peak hour, distributing construction/decommissioning traffic flow across alternative routes to access the Project site, and avoiding residential neighborhoods to the maximum extent feasible.	Project owner or its designee	Fresno County Department of Public Works and Planning, Development Services Division, Road Maintenance and Operations Division, and/or its designee.	Submit Traffic Management Plan to County prior to issuance of construction permits or decommissioning authorizations; implement plan during construction and decommissioning

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
	• Requirement to obtain all necessary permits for the work within the road right of way or use of oversized/overweight vehicles that would utilize County-maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the Fresno County Divisions of Public Works and Planning. • Applicant shall coordinate with Fresno County to assess potential impacts to County roads from Project-related activities. If any County roads are demonstrably damaged as a result of the Project, the Applicant shall work with Fresno County to determine appropriate repairs, which may include paving, slurry-sealing, or reconstruction, as required by state and/or County standards.			
Impact 3.18-4: The Heartland Solar Project could result in inadequate emergency access.	**Mitigation:** Implement Mitigation Measure 3.18-1: Construction and Decommissioning Traffic Plan	See Mitigation Measures 3.18-1 (under Impact 3.18-1).		
Impact 3.18-1c: The Heartland Solar Project could cause a cumulatively considerable contribution to a significant cumulative effect due to a conflict with a program, plan, ordinance, or policy addressing the circulation system, including roadway facilities.	**Mitigation:** Implement Mitigation Measure 3.18-1: Construction and Decommissioning Traffic Plan	See Mitigation Measures 3.18-1 (under Impact 3.18-1).		
Impact 3.18-4c: The Heartland Solar Project could cause or contribute to a significant cumulative effect due to inadequate emergency access.	**Mitigation:** Implement Mitigation Measure 3.18-1: Construction and Decommissioning Traffic Plan	See Mitigation Measures 3.18-1 (under Impact 3.18-1).		
Utilities and Service Systems				
Impact 3.19-2: The Heartland Solar Project could result in the construction of new or expanded stormwater drainage that would cause significant environmental effects	**Mitigation:** Implement Mitigation Measure 3.11-1: Stormwater Pollution Prevention Plan	See Mitigation Measures 3.11-1 (under Impact 3.11-1).		
Wildfire				
Impact 3.20-1: The Heartland Solar Project would not substantially impair an adopted emergency response plan or emergency evacuation plan.	**Mitigation:** Implement Mitigation Measure 3.18-1: Construction and Decommissioning Traffic Plan	See Mitigation Measures 3.18-1 (under Impact 3.18-1).		

Impact	Mitigation Measure	Implementation Responsibility	Monitoring Responsibility	Timing
Impact 3.20-1c: The Heartland Solar Project would not cause or contribute to a significant cumulative effect due to substantial impairment of an adopted emergency response plan or emergency evacuation plan.	**Mitigation:** Implement Mitigation Measure 3.18-1: Construction and Decommissioning Traffic Plan	See Mitigation Measures 3.18-1 (under Impact 3.18-1).		

TABLE C-2
PG&E PROJECT CONSTRUCTION MEASURES AND GENERAL AVOIDANCE AND MINIMIZATION MEASURES

Resource Area	Construction Measure and General Avoidance and Minimization Measure	Implementation Responsibility	Monitoring Responsibility	Timing
Biological Resources	**CM BIO-1:** Conductors and ground wires would be spaced sufficiently apart so that raptors cannot contact two conductors or one conductor and a ground wire causing electrocution (Avian Power Line Interaction Committee [APLIC] 2006), or raptor protection would be installed.	PG&E or its designee	PG&E or its designated monitor	During all phases of construction
Biological Resources	**CM BIO-2:** Appropriate methods to reduce the risks of avian collisions would be incorporated into the project's design (APLIC 2012).	PG&E or its designee	PG&E or its designated monitor	Prior to construction
Biological Resources	**CM BIO-3:** If feasible, applicants would avoid construction during the migratory bird nesting or breeding season. When it is not feasible to avoid construction during the nesting or breeding season, applicant would perform a survey in the area where the work is to occur. This survey would be performed to determine the presence or absence of nesting birds. If an active nest (i.e., containing eggs or young) is identified, then a suitable construction buffer would be implemented by a qualified biologist to ensure that the nesting or breeding activities are not substantially adversely affected. If the nesting or breeding activities are being conducted by a federal- or state-listed species, the applicant would consult with the USFWS and CDFW as necessary. Monitoring of the nest would continue until the birds have fledged or construction is no longer occurring on the site. If an inactive nest is identified, then careful nest removal under the supervision and direction of qualified biologists would occur	PG&E and its designated contractor	PG&E or its designated monitor	During all phases of construction
Biological Resources	**CM BIO-4:** If a raptor nest is observed during pre-construction surveys, a qualified biologist would determine if it is active. If the nest is determined to be active, then the biological monitor would monitor the nest to ensure that nesting or breeding activities are not substantially adversely affected. If the biological monitor determines that activities associated with the Project are disturbing or disrupting nesting or breeding activities, then the monitor would make recommendations to reduce noise or disturbance in the vicinity of the nest and the applicant would implement them.	PG&E and its designated contractor	PG&E or its designated monitor	During all phases of construction
Biological Resources	**AMM BIO-1**: Speed of vehicles during construction and operation and maintenance activities would be limited to 15 mph. In addition, construction and maintenance employees would be advised that care should be exercised when commuting to and from the project area to reduce accidents and animal road mortality.	PG&E and its designated contractors	PG&E or its designated monitor	During construction, operation and maintenance
Biological Resources	**AMM BIO-2:** Conductors and ground wires would be spaced sufficiently apart so that raptors cannot contact two conductors or one conductor and a ground wire causing electrocution (Avian Power Line Interaction Committee [APLIC] 2006), or raptor protection would be installed subject to PG&E consent for application of such measures to distribution lines and other relevant components.	PG&E and its designated contractors	PG&E or its designated monitor	During construction, operation and maintenance
Biological Resources	**AMM BIO-3:** Appropriate methods to reduce the risks of avian collisions would be incorporated into the project's design (APLIC 2012), subject to PG&E consent for application of such measures to distribution lines and other relevant components.	PG&E and its designated contractors	PG&E or its designated monitor	During design and operation

Resource Area	Construction Measure and General Avoidance and Minimization Measure	Implementation Responsibility	Monitoring Responsibility	Timing
Biological Resources	**AMM BIO-4:** If feasible, applicants would avoid construction during the migratory bird nesting or breeding season. When it is not feasible to avoid construction during the nesting or breeding season, applicants would perform a survey in the area where the work is to occur. This survey would be performed to determine the presence or absence of nesting birds. If an active nest (i.e., containing eggs or young) is identified, then a suitable construction buffer would be implemented to ensure that the nesting or breeding activities are not substantially adversely affected. If the nesting or breeding activities are being conducted by a federal- or state-listed species, the applicant would consult with the USFWS and CDFW as necessary. Monitoring of the nest would continue until the birds have fledged or construction is no longer occurring on the site. If an inactive nest is identified, then careful nest removal under the supervision and direction of qualified biologists would occur.	PG&E and its designated contractors	PG&E or its designated qualified monitor	Survey to be performed prior to construction, as applicable; implement buffers and monitor during construction
Biological Resources	**AMM BIO-5:** If a raptor nest is observed during pre-construction surveys, a qualified biologist would determine if it is active. If the nest is determined to be active, then the biological monitor would monitor the nest to ensure that nesting or breeding activities are not substantially adversely affected. If the biological monitor determines that activities associated with the Project are disturbing or disrupting nesting or breeding activities, then the monitor would make recommendations to reduce noise or disturbance in the vicinity of the nest and the applicant would implement them.	PG&E and its designated contractors	PG&E or its designated qualified monitor	During construction, operation and maintenance
Biological Resources	**AMM BIO-6:** All excavated holes or trenches that are not filled at the end of a workday would be covered, or a wildlife escape ramp would be installed to prevent the inadvertent entrapment of wildlife species.	PG&E and its designated contractors	PG&E or its designated monitor	During construction, operation and maintenance
Biological Resources	**AMM BIO-7:** The use of outdoor lighting during construction and operation and maintenance activities would be minimized.	PG&E and its designated contractors	PG&E or its designated monitor	During construction, operation and maintenance
Biological Resources	**AMM BIO-8:** A WEAP would be implemented to educate all construction and operation and maintenance workers on site-specific biological and non-biological resources and proper work practices to avoid harming wildlife during construction or operation and maintenance activities.	PG&E and its designated contractors	PG&E or its designated qualified monitor	Provide WEAP training prior to and implement its measures during construction, operation, and maintenance activities.