



State of California – Natural Resources Agency
DEPARTMENT OF FISH AND WILDLIFE
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005
www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



November 19, 2024

Tiffany Ho
Merced County Community and Economic Development Department
2222 M Street
Merced, California 95340
(209) 385-7654
Tiffany.Ho@countyofmerced.com

Subject: **Zeta Solar Generation and Battery Energy Storage System Project
(Project)
Draft Environmental Impact Report (DEIR)
State Clearinghouse No. 2023070088**

Dear Tiffany Ho:

The California Department of Fish and Wildlife (CDFW) received a DEIR from Merced 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. While the comment period may have ended, CDFW respectfully requests that Merced County still consider our comments.

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

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.

Tiffany Ho
Merced County Community and Economic Development Department
November 19, 2024
Page 2

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.

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.

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).

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.

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.

PROJECT DESCRIPTION SUMMARY

Proponent: Longroad Development Company, LLC

Objective: The Project proposes to construct and operate a photovoltaic solar power generation facility with a battery energy storage system (BESS) that would generate up to approximately 75 megawatts (MW) of renewable electrical energy and include an energy storage capacity of up to 8 hours of 75 MW. The 650-acre Project also includes

Tiffany Ho
Merced County Community and Economic Development Department
November 19, 2024
Page 3

the construction of a 1,700-foot-long generation-tie line to deliver power from the Project to Pacific Gas and Electric's existing Mercy Springs Substation.

Location: The Project is located on privately-owned land in southwestern Merced County, approximately 9 miles south of Los Banos. The Project would occupy all or portions of three parcels identified by Merced County as Assessor Parcel Numbers (APNs) 090-130-018, 090-130-044, and 090-130-060. The gen-tie line would extend north through APN 088-180-063 to the point of interconnection in APN 090-103-059. Poleline Road abuts the southwestern Project site boundary. The California Aqueduct and U.S. Interstate 5 (I-5) run parallel to the southwest Project boundary about 300 feet and 800 feet to the west of the Project site, respectively. First Lift Canal Road lies along the western boundary of the Project site, and the eastern boundary abuts an unnamed dirt/gravel road.

Timeframe: Construction would occur over 2 years.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Merced 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 EIR.

Aerial imagery of the Project boundary and its surroundings show the area contains several natural and agricultural habitats including annual grassland, cultivated wheat, and fallow fields, which may have suitable habitat for special-status species. Based on a review of the Project description, California Natural Diversity Database (CNDDDB) records, the Biological Resources Assessment (BRA) included in the DEIR, and aerial imagery, several special-status species could potentially be impacted by Project activities.

Currently, the DEIR acknowledges that the Project area 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 for a number of special-status animal species. These species include, but are not limited to, the State threatened and federally endangered San Joaquin kit fox (*Vulpes macrotis mutica*), the State threatened Swainson's hawk (*Buteo swainsoni*), and the State candidate western burrowing owl (*Athene cunicularia hypugaea*) and Crotch's bumble bee (*Bombus crotchii*).

Tiffany Ho
Merced County Community and Economic Development Department
November 19, 2024
Page 4

San Joaquin Kit Fox

Mitigation Measure BIO-3 mitigates for potential impacts to San Joaquin kit fox (SJKF) and includes measures for pre-construction surveys and avoidance. Mitigation Measure BIO-3 states that, "If active, non-natal/pupping dens are found within the project site by the qualified biologist, an on-site passive relocation program will be implemented with prior concurrence from USFWS. This program will consist of excluding SJKFs from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for one week to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. This would be implemented only during non-breeding season for SJKF (September 1 to February 1). After the qualified biologist determines that the SJKFs have stopped using active dens within the project site, the dens will be excavated by hand with a shovel to prevent foxes from re-using them during construction." CDFW would like to note that implementation of this portion of Mitigation Measure BIO-3, which allows for the eviction of occupied SJKF dens via installation of one-way doors, is likely to result in the unauthorized take of SJKF and violate CESA. As such, in the event an active SJKF den is documented during pre-construction or construction activities, CDFW strongly recommends the following:

Recommended Mitigation Measure 1: SJKF Avoidance Buffer

CDFW recommends implementing no-disturbance buffers, as described in the U.S. Fish and Wildlife Service (USFWS) "Standardized Recommendations for Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance" (2011) (USFWS Protocol) around potentially suitable or known SJKF den sites. If the no-disturbance buffers outlined in the USFWS Protocol cannot be maintained, then consultation with CDFW is warranted to determine if the Project can avoid take or if take authorization is necessary as described below.

Recommended Mitigation Measure 2: SJKF Take Authorization

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

Recommended Mitigation Measure 3: SJKF Permeable Fencing

CDFW recommends that the Project site perimeter fencing be permeable for wildlife use, particularly for SJKF. As such, CDFW strongly recommends that the chain link fencing used to secure the perimeter of the Project be designed with 4–6-inch gaps

Tiffany Ho
Merced County Community and Economic Development Department
November 19, 2024
Page 5

to allow for the movement of wildlife, including SJKF, throughout the site once construction is complete.

Swainson's Hawk

The DEIR acknowledges the presence of suitable Swainson's hawk (SWHA) foraging habitat and the potential for the species to nest within ½-mile of the Project site, and a foraging pair was detected within the Project site during surveys in April 2023. In addition, there are trees and structures located within the vicinity of the Project site that may provide suitable nesting habitat.

Mitigation Measure BIO-4 is included to mitigate for impacts to SWHA and states: "Nesting bird surveys would only be required for construction and decommissioning activities, not during operation and maintenance activities. If construction work is scheduled to take place outside of the bird nesting season (September 16 through January 31), no action would be required to protect nesting birds. To avoid impacts on nesting birds within or near the project site during the bird nesting season (February 1 through August 31, or through September 15 for Swainson's hawk), the following measures will be implemented:

- A qualified wildlife biologist will conduct preconstruction surveys for nesting birds no more than 14 days prior to the beginning of ground disturbance (such as staging and vegetation clearing) related to construction and decommissioning activities. Surveys may be phased as construction is phased so that each work area is surveyed no more than 14 days prior to the start of construction in that area.
- If active nests are found during preconstruction surveys (or during construction by a construction crew), a suitable no-disturbance buffer will be established around the nests until it is determined that all young have fledged or until the recognized nesting season has ended (i.e., generally August 31 except Swainson's hawk which would be September 15). The size of any employed no-disturbance buffers will vary based on the species that is nesting (e.g., 200–300 feet for common raptors; 0.5 mile for Swainson's hawk; 50 feet for passerine species). For species that are not state or federally listed as threatened or endangered, encroachment into the no-disturbance buffer may occur at the discretion of a qualified biologist; however, for state and federally listed species, consultation with CDFW and/or USFWS will occur prior to encroachment into the no-disturbance buffers.
- If pre-construction surveys indicate that nests are inactive or potential habitat is unoccupied during the construction period, no further action is required. Shrubs, trees, and other vegetation within the construction site determined to be unoccupied by nesting birds or that are outside the no-disturbance buffer for active nests can be

Tiffany Ho
Merced County Community and Economic Development Department
November 19, 2024
Page 6

removed. Vegetation removal will be scheduled for outside of the nesting season, as feasible.”

CDFW concurs with the portion of the measure that discusses avoidance and the requirement to conduct preconstruction surveys for SWHA but recommends these surveys be conducted by a qualified biologist following the entire survey methodology developed by the SWHA Technical Advisory Committee (SWHA TAC 2000) within all areas of the Project site and ½-mile buffer containing suitable nesting habitat.

Burrowing Owl

The California Fish and Game Commission (FGC) approved 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 considered a candidate under CESA and receives the same legal protection afforded to an endangered or threatened species (Fish & G. Code, §§ 2074.2 & 2085).

The Project site contains a number of suitable small-mammal burrows and there were multiple occurrences of BUOW during the 2021 and 2022 field surveys conducted in support of the DEIR. BUOW typically inhabit open grasslands containing small mammal burrows, a requisite habitat feature used for nesting and cover. BUOW may also attempt to use “man-made burrows” such as pipes or culverts.

The DEIR provides Mitigation Measure BIO-5 to mitigate for potential impacts to burrowing owl (BUOW) and states that, “A qualified biologist will conduct a preconstruction survey for burrowing owls within 330 feet of the project site in areas with suitable burrowing habitat to locate any occupied burrows (e.g., active breeding burrows or wintering burrows) no more than 14 days prior to the beginning of ground equipment staging or ground-disturbing activities. No burrowing owl surveys would be required during operation and maintenance activities. If, at the commencement of project construction, burrowing owl is present and listed as candidate, threatened, or endangered under CESA, then the lead biologist will consult with CDFW to determine if an incidental take permit is needed for the project, unless avoidance is feasible. To protect burrowing owls, the following conditions will be met prior to construction within each successive work area:

- Surveys will include the project site and areas within 330 feet of the project site. Inaccessible areas outside of the project site can be surveyed using binoculars or spotting scopes from the project edge or from public roads. The survey methodology will be consistent with the methods outlined in the CDFW (2012) Staff Report on Burrowing Owl Mitigation.

Tiffany Ho
Merced County Community and Economic Development Department
November 19, 2024
Page 7

- If inactive (unoccupied) burrowing owl burrows are detected any time of the year, the burrows may be excavated with a shovel to prevent burrowing owls from re-using them during construction. The burrows 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, will be permitted within a no-disturbance buffer around the burrow. The size of any employed no-disturbance buffers will be 330 feet from the active burrow if during the breeding season (February 1 to August 31) and 165 feet from the active burrow if during the nonbreeding (winter) season, unless otherwise authorized by a qualified biologist as described below.
- Depending on the level of disturbance, a smaller buffer may be established by a qualified biologist based on the visibility and sensitivity responses of each individual burrowing owl.
- If burrow avoidance is infeasible during the nonbreeding season or during the breeding season where resident owls have not yet begun egg laying or incubation, or where the juvenile burrowing owls are foraging independently and capable of independent survival, a qualified biologist will implement a passive relocation program in accordance with the CDFW (2012) Staff Report on Burrowing Owl Mitigation. Exclusion would involve installation of one-way doors at burrow entrances after the qualified biologist has determined that the burrow is not an active nest or that juvenile burrowing owls are not dependent on the burrow. After the authorized biologist has determined through monitoring that the burrows are unoccupied, the burrows may be excavated with a shovel to prevent burrowing owls from re-using them during construction.”

As BUOW is now considered a candidate under CESA, CDFW recommends Mitigation Measure BIO-5 be adjusted to include the following:

Recommended Mitigation Measure 4: BUOW Preconstruction Surveys

Depending on the time between the initial survey efforts conducted in support of the Draft EIR and Project construction, CDFW recommends that additional surveys, following the “Burrowing Owl Survey Protocol and Mitigation Guidelines” (CBOC 1993) and CDFW’s “Staff Report on Burrowing Owl Mitigation” (CDFG 2012) be repeated the survey season immediately prior to construction.

Recommended Mitigation Measure 5: BUOW Avoidance Buffer

Should a BUOW or known BUOW den (active or inactive) be detected, either during preconstruction surveys or construction activities, CDFW recommends that no-

Tiffany Ho
Merced County Community and Economic Development Department
November 19, 2024
Page 8

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.

Recommended Mitigation Measure 6: BUOW Consultation

If a BUOW or known BUOW den (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.

Crotch's Bumble Bee

The Project site is within the known geographic range of Crotch's bumble bee (CBB) and the DEIR notes that the Project site contains a mix of native and non-native grasses as well as small mammal burrows, making it suitable for both foraging and nesting. Currently, measures to protect CBB are proposed as part of Mitigation Measure BIO-3 including preconstruction surveys, avoidance buffers, and consultation with CDFW regarding potential take of the species. CDFW concurs with portions of Mitigation Measure BIO-3 but recommends the CBB surveys be conducted during the blooming period immediately prior to construction, following the full protocol outlined in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023) guidance document.

Mitigation Measure BIO-3 also states: "If establishment of a no-disturbance buffer is feasible, construction activities will not occur within the buffer until a qualified biologist determines that the colony is no longer active (i.e., no Crotch's bumble bees are seen flying in or out of the nest for three consecutive days, indicating the colony has completed its nesting season and the next season's queens have dispersed from the colony). Once the nest has been determined to be inactive, construction activities within the no-disturbance buffer(s) will be allowed to resume." CDFW does not concur that this portion of the measure would be sufficient to mitigate for potential impacts to CBB and recommends that the Project proponent consult with CDFW for any detection of CBB prior to or during Project implementation to discuss how to avoid take. Additionally, CDFW recommends the following:

Recommended Mitigation Measure 7: CBB Take Authorization

If CBB is identified during surveys, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, take authorization

Tiffany Ho
Merced County Community and Economic Development Department
November 19, 2024
Page 9

prior to any ground disturbing activities would be warranted. Take authorization would occur through issuance of an ITP by CDFW, pursuant to Fish and Game Code section 2081(b).

Editorial Comments and/or Suggestions

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.

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 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.

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.

Federally Listed Species: CDFW recommends consulting with USFWS regarding potential impacts to federally listed species including but not limited to SJKF. Take under the Federal Endangered Species Act (FESA) is more broadly defined than CESA; take under FESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral

Tiffany Ho
Merced County Community and Economic Development Department
November 19, 2024
Page 10

patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with FESA is advised well in advance of any Project activities.

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 CNDDDB. The CNDDDB field survey form can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Submitting-Data>. The completed form can be mailed electronically to CNDDDB at the following email address: CNDDDB@wildlife.ca.gov. The types of information reported to CNDDDB can be found at the following link: <https://www.wildlife.ca.gov/Data/CNDDDB/Plants-and-Animals>.

FILING FEES

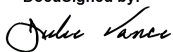
The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order 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).

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist Merced County in identifying and mitigating Project impacts on biological resources.

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:

FA83F09FE08945A...

Julie A. Vance
Regional Manager

Tiffany Ho
Merced County Community and Economic Development Department
November 19, 2024
Page 11

cc: State Clearinghouse
Governor's Office of Planning and Research
State.Clearinghouse@opr.ca.gov

Tiffany Ho
Merced County Community and Economic Development Department
November 19, 2024
Page 12

REFERENCES

- California Burrowing Owl Consortium. 1993. Burrowing owl survey protocol and mitigation guidelines. Pages 171-177 *in* Lincer, J. and K. Steenhof (editors). 1993. The burrowing owl, its biology and management. Raptor Research Report Number 9.
- California Department of Fish and Game. 2012. Staff report on burrowing owl mitigation. Sacramento, California, USA.
- California Department of Fish and Wildlife. 2023. Survey considerations for California endangered species act candidate bumble bee species. Sacramento, California, USA.
- Swainson's hawk technical advisory committee (SWHA TAC). 2000. Recommended timing and methodology for Swainson's hawk nesting surveys in the central valley of California. 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.

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

PROJECT: Zeta Solar Generation and BESS Project

SCH No.: 2023070088

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
SJKF	
Recommended Mitigation Measure 2: SJKF take authorization	
BUOW	
Recommended Mitigation Measure 4: BUOW preconstruction surveys	
Recommended Mitigation Measure 6: BUOW consultation	
CBB	
Recommended Mitigation Measure 7: CBB take authorization	
<i>During Construction</i>	
SJKF	
Recommended Mitigation Measure 1: SJKF avoidance buffer	
Recommended Mitigation Measure 3: SJKF permeable fencing	
BUOW	
Recommended Mitigation Measure 5: BUOW avoidance buffer	