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August 6, 2024

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Subject: **Firebaugh CSG 1 Solar Project (Project)**
Mitigated Negative Declaration (MND)
State Clearinghouse No. 2024070349

Dear Jacob Aragon:

The California Department of Fish and Wildlife (CDFW) received a MND from Madera County 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 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.

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.

Jacob Aragon, Planner II
County of Madera Community and Economic Development Department
August 6, 2024
Page 2

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.

Fully Protected Species: CDFW has jurisdiction over fully protected species of birds, mammals, amphibians and reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Fully protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except as follows:

Take is for necessary scientific research,

Efforts to recover a fully protected, endangered, or threatened species, live capture, and relocation of a bird species for the protection of livestock, or

They are a covered species whose conservation and management is provided for in a Natural Community Conservation Plan (Fish & G. Code, §§ 3511, 4700, 5050, & 5515)

Additionally, specified types of infrastructure projects may be eligible for an Incidental Take Permit (ITP) for unavoidable impacts to fully protected species if certain conditions are met (see Fish & G. Code §2081.15). Project proponents should consult with CDFW early in the project planning process if an ITP may be pursued for the Project.

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, sections 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

Jacob Aragon, Planner II
County of Madera Community and Economic Development Department
August 6, 2024
Page 3

wildlife resources. CDFW provides recommendations to identify potential impacts and possible measures to avoid or reduce those impacts.

PROJECT DESCRIPTION SUMMARY

Proponent: Firebaugh CSG 1, LLC

Objective: The Project consists of a single-axis tracker, ground mounted photovoltaic (PV) community solar and battery energy storage facility with a capacity of approximately 6.68 megawatt (MW) direct current (DC)/5.00 MW alternate current (AC). Single-axis tracking technology will be utilized to allow the modules to efficiently track the sun throughout the day and maximize the efficiency of solar collection. The modules will be mounted on a steel racking system, which will be anchored into the ground using driven steel piers. The Project will also interconnect to the Pacific Gas and Electric (PG&E) pre-existing electrical distribution system just north of Firebaugh Blvd (Interconnection Site). Additionally, the Project will be equipped with battery energy storage technology that will allow on-site renewable energy generation to be stored and dispatched onto the grid when needed.

Location: The proposed Project is located on approximately 25 acres of an approximate 322-acre parcel situated 0.72 mile east of the intersection of Firebaugh Boulevard and Avenue 7 ½ [Assessor's Parcel Number (APN) 041-222- 005 and 042-082-006], in Madera County.

Timeframe: Unspecified.

COMMENTS AND RECOMMENDATIONS

CDFW offers the following comments and recommendations to assist Madera 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 CEQA document for this Project.

Aerial imagery of the Project boundary and its surroundings show the Project site contains agricultural lands consisting of fallow fields and row crops. Several agricultural ditches and private residences are also located within the Project Vicinity. Aerial imagery of the Interconnection Site, which the MND evaluates but specifically notes that activities at the Interconnection Site would not be part of the Project and would be conducted by PG&E, consists of annual grassland habitat. Based on a review of the MND, supporting Firebaugh CSG 1 Solar Biological Resources Assessment (BRA) document, California Natural Diversity Database (CNDDDB) records, and the surrounding habitat, there is the potential for the State and federally endangered Fresno kangaroo rat (*Dipodomys nitratooides exilis*); the State threatened Swainson's hawk (*Buteo*

Jacob Aragon, Planner II
County of Madera Community and Economic Development Department
August 6, 2024
Page 4

swainsoni); that State and federally endangered blunt-nosed leopard lizard (*Gambelia sila*); and the State species of special concern burrowing owl (*Athene cunicularia*), to be present within the Project site and Interconnection Site.

Project Site

The MND provides mitigation measures for several species to mitigate for Project impacts within the Project site, including measures for Swainson's hawk (SWHA). CDFW concurs with conducting pre-construction surveys for SWHA but recommends the additional measures described below. CDFW also recommends that the measures included in the MND, specifically for SWHA, be incorporated for PG&E's work at the Interconnection Site.

Swainson's Hawk

The Project site is within the known range of Swainson's hawk (SWHA) and multiple California Natural Diversity Database (CNDDDB) historical occurrences have been documented within five miles of the Project (CDFW 2024). SWHA are known to breed within the Central Valley of California and prefer to nest and forage in alfalfa, fallow fields, field crops, and grassland habitats with a sufficient source of small mammals (CDFG 1994). Based on aerial imagery and the information provided, the Project vicinity contains suitable habitat for SWHA foraging. In addition, there are trees and structures located adjacent to the Project area that may provide suitable nesting habitat.

Mitigation measure BIO MM-2 states "Swainson's Hawk. Prior to initiation of project activities, a qualified biologist shall conduct protocol surveys for Swainson's hawk following the Swainson's Hawk Technical Advisory Committee's Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (TAC 2000). If project activities begin prior to the breeding season (March 1 – August 31) and are ongoing throughout the breeding season, Swainson's hawks are unlikely to initiate nesting within the Study Area due to elevated levels of noise and visual disturbance, and therefore protocol surveys would not be warranted. Alternatively, if construction is expected to begin during the breeding season, protocol-level surveys should be performed at a minimum in Period 2 (March 20 to April 5), and Period 3 (April 5 to April 20) to determine if nesting Swainson's hawks are present within 0.5-mile of the Study Area. Performing surveys during Period 1 (January 1 to March 20) would increase the chance of nest detections, as most nests are easily observed from relatively long distances when leaves are absent from trees, giving the surveyor the opportunity to identify potential nest sites, as well as becoming familiar with the Study Area. If active Swainson's hawk nests are detected during surveys in Period 2 and Period 3, monitoring of nests should occur in Period 4 (April 21-June 10) to maintain records on the status of the nests. During this time, Project activities should not be initiated until consultation with CDFW is sought to determine a proper strategy to avoid

Jacob Aragon, Planner II
County of Madera Community and Economic Development Department
August 6, 2024
Page 5

impacts to nesting Swainson's hawks, which would likely include avoidance in the form of no-work buffers or monitoring of active nests."

CDFW concurs with BIO MM-2 and recommends the following in the event an active SWHA nest is detected during surveys:

Recommended Mitigation Measure 1: 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.

Recommended Mitigation Measure 2: SWHA Take Authorization

CDFW also recommends that in the event an active SWHA nest is detected, and 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.

Interconnection Site

The MND mentions that construction within the Interconnection Site is separate from the Project analyzed by this document and will be undertaken at a future date by PG&E. As the Interconnection Site was analyzed within the MND, CDFW recommends that the following measures be incorporated for ground-disturbing activities associated with PG&E's work activities:

Fresno Kangaroo Rat

The Project Site and Interconnection Site are within the historic range of the Fresno kangaroo rat (FKR) and the species is known to occupy grassland habitats. While there are currently no known extant populations, recent surveys in FKR range have been limited and the status of FKR populations are unknown. Additionally, the Interconnection Site is located within some of the only remaining undeveloped land in the vicinity, which is otherwise intensively managed for agriculture. As the last known occurrence of FKR is located approximately 10 miles to the south (CDFW 2024), the MND notes that the Project vicinity is in a known wildlife corridor, and the Interconnection Site is located within some of the last remaining undeveloped land within the area, CDFW

Jacob Aragon, Planner II
County of Madera Community and Economic Development Department
August 6, 2024
Page 6

recommends the following if ground-disturbing activities are proposed in areas outside of the pre-existing PG&E-owned electrical distribution system:

Recommended Mitigation Measure 3: FKR Trapping Surveys and Consultation

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of ground-disturbing activities, to determine if the Interconnection Site or its immediate vicinity contains suitable habitat for FKR. If suitable habitat is present, CDFW recommends focused protocol-level trapping surveys be conducted by a qualified biologist, that is permitted to do so by both CDFW and U.S. Fish and Wildlife Service (USFWS), to determine if the Project area is occupied. CDFW advises that these surveys be conducted in accordance with USFWS's (2013) "*Survey Protocol for Determining Presence of San Joaquin Kangaroo Rats.*" CDFW recommends these surveys be conducted well in advance of ground-disturbing activities in order to determine if impacts to FKR could occur. If FKR is detected, immediate consultation with CDFW is warranted to discuss the Project.

Blunt-nosed Leopard Lizard

The Project Site and Interconnection Site are within the historic range of blunt-nosed leopard lizard (BNLL), the MND notes that there are multiple occurrences within the Project vicinity, and the species is known to occupy grassland habitats with the required habitat elements, such as small mammal burrows and open areas for basking. As there is the potential for BNLL within the vicinity of the Interconnection Site, CDFW recommends the following if ground-disturbing activities are proposed in areas outside of the pre-existing PG&E-owned electrical distribution system:

Recommended Mitigation Measure 4: BNLL Surveys and Consultation

CDFW recommends that surveys, following the "Approved Survey Methodology for the Blunt-nosed Leopard Lizard" (CDFW 2019) be conducted the survey season immediately prior to construction. BNLL detection during protocol level surveys warrants consultation with CDFW to discuss how to implement ground-disturbing activities and avoid take.

Burrowing Owl

The Project Site and Interconnection Site are within the historic range of burrowing owl (BUOW), the MND notes there are multiple occurrences within the Project vicinity, and the species is known to occupy grassland and agricultural habitats. As there is the potential for BUOW within the vicinity of the Interconnection Site, CDFW recommends the following:

Jacob Aragon, Planner II
 County of Madera Community and Economic Development Department
 August 6, 2024
 Page 7

Recommended Mitigation Measure 5: BUOW Surveys Prior to Construction

CDFW recommends that surveys, following the “Burrowing Owl Survey Protocol and Mitigation Guidelines” (CBOC 1993) and CDFW’s “Staff Report on Burrowing Owl Mitigation” (CDFG 2012) be conducted the survey season immediately prior to construction.

Recommended Mitigation Measure 6: BUOW Avoidance Buffer

Should a BUOW be detected, CDFW recommends that no-disturbance buffers, as outlined in the “Staff Report on Burrowing Owl Mitigation” (CDFG 2012), be implemented prior to and during any ground-disturbing activities. Specifically, CDFW’s Staff Report recommends that impacts to occupied burrows be avoided in accordance with the following table unless a qualified biologist approved by CDFW verifies through non-invasive methods that either: 1) the birds have not begun egg laying and incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival.

Location	Time of Year	Level of Disturbance		
		Low	Med	High
Nesting sites	April 1-Aug 15	200 m*	500 m	500 m
Nesting sites	Aug 16-Oct 15	200 m	200 m	500 m
Nesting sites	Oct 16-Mar 31	50 m	100 m	500 m

* meters (m)

Recommended Mitigation Measure 7: BUOW Consultation

If BUOW are found within these recommended buffers and avoidance is not possible, consultation with the CDFW is recommended for guidance on the development of mitigation measures such as take avoidance, minimization, and mitigation.

Editorial Comments and/or Suggestions

California Natural Diversity Database: Please note that the CNDDDB is populated by records through voluntary submissions of species detections. As a result, species may be present in locations not depicted in the CNDDDB but where there is suitable habitat features capable of supporting species. A lack of an occurrence record in the CNDDDB does not mean a species is not present. In order 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 in order to determine whether or not any special status species are present at or near the Project site.

Jacob Aragon, Planner II
County of Madera Community and Economic Development Department
August 6, 2024
Page 8

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.

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>.

Jacob Aragon, Planner II
County of Madera Community and Economic Development Department
August 6, 2024
Page 9

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 Project to assist Madera County in identifying and mitigating the Project's 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:

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For Julie A. Vance
Regional Manager

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Jacob Aragon, Planner II
County of Madera Community and Economic Development Department
August 6, 2024
Page 10

LITERATURE CITED

- 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. 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.
- California Department of Fish and Wildlife. 2019. Approved survey methodology for the blunt-nosed leopard lizard. Sacramento, California, USA.
- California Department of Fish and Wildlife. 2024. Biogeographic information and observation system (BIOS). <https://www.wildlife.ca.gov/Data/BIOS>. Accessed 8 July 2024.
- U.S. Fish and Wildlife Service. 2013. Survey protocol for determining presence of San Joaquin kangaroo rats. U.S. Fish and Wildlife Service, Sacramento Fish and Wildlife Office, Sacramento, California.

<p>Attachment 1</p> <p>CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE</p> <p>RECOMMENDED MITIGATION MONITORING AND REPORTING PROGRAM (MMRP)</p> <p>PROJECT: Firebaugh CSG 1 Solar Project</p> <p>SCH No. 2024070349</p>	
RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
SWHA	
Recommended Mitigation Measure 2: SWHA take authorization	
FKR	
Recommended Mitigation Measure 3: FKR Trapping Surveys and Consultation	
BNLL	
Recommended Mitigation Measure 4: BNLL Surveys and Consultation	
BUOW	
Recommended Mitigation Measure 5: BUOW Surveys Prior to Construction	

Recommended Mitigation Measure 6: BUOW Consultation	
<i>During Construction</i>	
SWHA	
Recommended Mitigation Measure 1: SWHA avoidance buffer	
BUOW	
Recommended Mitigation Measure 7: BUOW avoidance buffer	