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October 15, 2020

Governor's Office of Planning & Research

Oct 15 2020

STATE CLEARINGHOUSE

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Subject: Kudu Solar Farm by 69SV 8ME LLC (Project)
Notice of Preparation (NOP)
State Clearinghouse No.: 2020099017

Dear Ms. Candia:

The California Department of Fish and Wildlife (CDFW) received a NOP for an Environmental Impact Report (EIR) from Kern 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

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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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 may be required.

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.

Protected Furbearing Mammals: CDFW has jurisdiction over furbearing mammals pursuant to Title 14, California Code of Regulations, section 460, which states "Fisher, marten, river otter, desert kit fox and red fox may not be taken at any time". Therefore, CDFW cannot authorize their take.

Unlisted Species: Species of plants and animals need not be officially listed as Endangered (E), Rare (R) or Threatened (T) on any State or federal list pursuant to CESA and/or the federal Endangered Species Act (ESA) to be considered E, R, or T under CEQA. If a species can be shown to meet the criteria for a listing as E, R, or T under CESA and/or ESA as specified in the CEQA Guidelines (Cal. Code Regs. tit. 14, Chapter 3, § 15380), it should be fully considered in the environmental analysis for this Project.

Bird Protection: 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).

Water Pollution: Pursuant to Fish and Game Code section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species. It is possible that without mitigation measures implementation of the Project

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could result in pollution of Waters of the State from storm water runoff or construction-related erosion. Potential impacts to the wildlife resources that utilize the streams and wetlands include the following: increased sediment input from road or structure runoff; and toxic runoff associated with construction activities and Project implementation. The Regional Water Quality Control Board and United States Army Corps of Engineers also have jurisdiction regarding discharge and pollution to Waters of the State.

Cumulative Impacts: General impacts from Projects include habitat fragmentation, degradation, habitat loss, migration/movement corridor limitations, and mortality of individuals to multiple species' populations. Multiple solar energy projects as well as other projects (e.g., cannabis-related projects) have been proposed or are being constructed within or near California City with similar impacts to biological resources. CDFW recommends the Kern County consider all approved and future projects when determining impact significance to biological resources.

PROJECT DESCRIPTION SUMMARY

Proponent: 69SV 8ME LLC.

Objective: The primary Project objective of the Kudu Solar Farm Project by 69SV 8ME LLC is to construct a photovoltaic solar facility and energy storage system capable of producing up to 500 MW of alternating current power and 600 MW hours of storage capacity on approximately 1,955.13 acres of privately-owned land. The proposed project would be supported by a 230-kV gen-tie overhead and/or underground generation tie-line (gen-tie) from originating from the Eland substation and terminating at the Los Angeles Department of Water and Power's Barren Ridge Substation located approximately two miles to the northwest of the project site, or through an upgraded connection through Eland 1. The proposed project intends to share the Eland 1 Solar Project's gen-tie line and right of way, which will be accomplished by constructing the line conductor capable of supporting both projects. Construction of the gen-tie and substation will be done as part of the Eland 1 Solar Project, consistent with the conditions of approval outlined in that project's CUP(s). If the proposed project cannot share these facilities, a new gen tie line would be developed within one of the routes previously analyzed in the Eland 1 Solar Supplemental Environmental Impact Report (State Clearinghouse No. 2012011029). The proposed project's permanent facilities would include solar arrays and inverters, service roads, a power collection system, communication cables, overhead and underground electrical switchyards, project substations, energy storage system(s), and operations and maintenance (O&M) facilities.

The Project also includes the following land use changes:

- Kern County: Zone Change Case No. 14, Map No. 152 as follows:

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- From A-1 (Limited Agriculture) to A (Exclusive Agriculture) for approximately 164.76 acres;
 - From A-1 MH (Limited Agriculture, Mobile Home Combining) to A for approximately 2.39 acres;
 - From PL RS (Platted Lands, Residential Suburban Combining) to A for approximately 10.29 acres; and
 - From PL RS MH (Platted Lands, Residential Suburban Combining, Mobile Home Combining) to A for approximately 7.73 acres.
- Kern County: Issuance of Conditional Use Permit (CUP) No. 28, Map No. 152 to allow for the construction and operation, within the A (Exclusive Agriculture) pursuant to Section 19.12.030G of the Kern County Zoning Ordinance, of a 673.60-acre PV solar facility with a total project generating capacity, in both Kern County and California City, of up to 500 MW of alternating current power and 600 MW hours of storage capacity
 - Kern County: General Plan Amendment No. 10, Map No. 152 to the Circulation Element of the Kern County General Plan to remove road reservations on section and mid-section lines within the Kern County project boundaries.
 - City of California City as a Responsible Agency under CEQA: Issuance of a CUP to allow for the construction and operation of a solar facility, in the O/RA (Openspace/Residential Agriculture) zone, of a 1,281.53-acre PV solar facility with a total project generating capacity, in both Kern County and California City, of up to 500 MW of alternating current power and 600 MW hours of storage capacity (CUP 19-04). The project proponent has requested to remove the future section and mid-section lines for the portion of the project within the City of California City's jurisdiction. The City will determine during the CUP process (Sec. 9-2-2501 of the California City Municipal Code) which section lines will be preserved and which ones will be removed. If deemed necessary by the City of California City, the project proponent may request a zone change from O/RA to M-1 (Light Industrial) for the portion of the facility located in California City.

Location: The proposed Project site is located in portions of unincorporated Kern County and the City of California City, north of the California City Municipal Airport. The Project site is bisected north-south by Washburn Boulevard (which is also the Kern County/California City limit line) and east-west by Neuralia Road. State Route 14 is approximately one mile west of the Project site. Access to the site would be from Phillips Road, Gantt Road, Neuralia Road, Pioneer Road, Sage Street, or through the Eland 1 project site. The Project site is located within Township 31S, Range 37E, and portions of Sections 14, 15, 22, 23, 26,27, 28, 29, 30, 31, 32, 33, 34, 35 and Township 32S, Range 37E, and portions of Sections 1, 2, 3, 4, 9, 10, 11, 12.

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Timeframe: Unspecified

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the 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.

Aerial imagery of the Project boundary and its surroundings show the Project area consists of undeveloped land with native vegetation within Mojave desert habitat suitable for special-status species. Based on review of the Project description, review of California Natural Diversity Database (CNDDDB) records, knowledge of other Projects in close proximity to this Project area, and the surrounding habitat, several special-status species could potentially be impacted by Project activities.

Currently, the NOP acknowledges that there is potential for candidate, sensitive, or special-status plants and wildlife species to be present on site or in the proposed project vicinity and that the findings of field surveys for the presence of candidate, sensitive, or special-status plant and animal species will be included in the EIR prepared for this Project. Specifically, CDFW is concerned Project-related activities could potentially impact special-status species and habitats known to occur in the area including, but not limited to, the following: State and federally threatened desert tortoise (*Gopherus agassizii*) and the State threatened Mohave ground squirrel (*Xerospermophilus mohavensis*), State candidate for listing as threatened or endangered western Joshua tree (*Yucca brevifolia*), the protected furbearing mammal desert kit fox (*Vulpes macrotis macrotis*), the State species of special concern burrowing owl (*Athene cunicularia*), American badger (*Taxidea taxus*), Le Conte's thrasher (*Toxostoma lecontei*), and loggerhead shrike (*Lanius ludovicianus*), and California rare plant rank (CRPR) 1B.2 alkali mariposa-lily (*Calochortus striatus*), CRPR 1B.2 Barstow woolly sunflower (*Eriophyllum mohavense*), CRPR 1B.2 desert cymopterus (*Cymopterus deserticola*), CRPR 4.2 crowned muilla (*Muilla coronata*), CRPR 4.2 and white pygmy-poppy (*Canbya candida*) as well as impacts to birds and other non-listed plants and animals.

Please note that the CNDDDB is populated by, and records, 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 and features capable of supporting species. Therefore, a lack of an occurrence record in the CNDDDB is not tantamount to a negative species finding.

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As such, CDFW requests that the EIR fully identify potential impacts to biological resources, including the above-mentioned species. In order to adequately assess any potential impact to biological resources, focused biological surveys should be conducted by a qualified wildlife biologist/botanist during the appropriate survey period(s) in order to determine whether any special-status species and/or suitable habitat features may be present within the Project area. Properly conducted biological surveys, and the information assembled from them, are essential to identify any mitigation, minimization, and avoidance measures and/or the need for additional or protocol-level surveys, and to identify any Project-related impacts under CESA and other species of concern. CDFW recommends that the following be incorporated into the EIR.

I. Environmental Setting and Related Impact

Would the Project 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 CDFW or the United States Fish and Wildlife Service (USFWS)?

COMMENT 1: Desert Tortoise

Issue: Desert tortoise are known to occur in the Project area vicinity (CDFW 2020). Based on aerial imagery, the Project area contains desert scrub and desert wash habitat which is suitable habitat for desert tortoise. Desert tortoise are most common in desert scrub, desert wash, and Joshua tree habitats (CDFW 2018a). Desert tortoise may have the potential to be onsite and impacted by Project activities.

Specific impact: Without appropriate avoidance and minimization measures for desert tortoise, potentially significant impacts that may result from Project-related activities include loss of foraging habitat, habitat degradation and fragmentation, burrow destruction, and direct mortality.

Evidence impact is potentially significant: Human impacts to desert tortoise include habitat conversion to agriculture and urban lands, degradation of habitat by off-highway vehicles (OHV), intentional killing of tortoises, and killing by cars and OHV (Doak et al. 1994). Habitat conversion to agriculture results in the loss of habitat and may lead to an increase in the predator raven population, drawdown of water table, introduction of pesticides and other toxic chemicals, and the potential introduction of invasive plants (Boarman 2002). Project activities may result in the loss of potential desert tortoise habitat through conversion, may increase habitat fragmentation, and expand urbanization into the area.

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Recommended Potentially Feasible Mitigation Measures

To evaluate potential Project-related impacts to desert tortoise, CDFW recommends conducting the following evaluation of the Project area, including the following mitigation measures in the EIR, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 1: Desert Tortoise Surveys

CDFW recommends that a qualified biologist conduct surveys during the appropriate survey period following the protocol contained in "Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*)" (USFWS 2010) to determine the potential for desert tortoise to use the Project site and surrounding area. Survey results are advised to be submitted to both CDFW and the USFWS. Please note desert tortoise surveys are valid for one year and should be conducted within a year of the start of ground-disturbing activities.

Recommended Mitigation Measure 2: Desert Tortoise Avoidance and Take Authorization

If desert tortoise are found within the Project site during preconstruction surveys or construction activities, consultation with CDFW is advised to discuss how to implement the Project and avoid take; or if avoidance is not feasible, to acquire an ITP prior to any ground-disturbing activities, pursuant Fish and Game Code section 2081 subdivision (b). Alternatively, the applicant can assume presence and acquire an ITP prior to initiating Project implementation.

COMMENT 2: Mohave Ground Squirrel (MGS)

Issue: MGS are known to occur in the Project area vicinity (CDFW 2020). Potential habitat for MGS is land supporting desert shrub vegetation within or adjacent to the known geographic range of the species (CDFG 2003). Based on aerial imagery and information within the NOP, the Project area contains desert shrub habitat and is within the range of MGS (Leitner 2008, CDFW 2019). Because of the Project location and habitat onsite, MGS have the potential to be onsite and be impacted by Project activities.

Specific impact: Without appropriate avoidance and minimization measures for MGS, potential significant impacts associated with Project-related activities include burrow collapse, inadvertent entrapment, reduced reproductive success, and mortality of individuals.

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Evidence impact is potentially significant: Major threats to the MGS are drought, habitat destruction, habitat fragmentation, and habitat degradation (Gustafson 1993, CDFW 2019). MGS is restricted to a small geographic range and the greatest habitat loss has occurred near desert towns including California City (Gustafson 1993). Natural cycling is anticipated in MGS populations, therefore, the true indicators of the status of the species are the quantity, pattern of distribution, and quality of habitat (Gustafson 1993, CDFW 2019). Project activities may result in the loss of potential MGS habitat through conversion, may increase habitat fragmentation, and expand urbanization into the area.

Recommended Potentially Feasible Mitigation Measures

To evaluate potential Project-related impacts to MGS, CDFW recommends conducting the following evaluation of the Project area, including the following mitigation measures in the EIR, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 3: MGS Surveys

CDFW recommends that a qualified permitted biologist conduct protocol surveys for MGS following the methods described in the “Mohave Ground Squirrel Survey Guidelines” (CDFG 2003) during the appropriate survey season prior to Project implementation, including any vegetation- or ground-disturbing activities. Please note that guidelines indicate that a visual survey and up to three trapping sessions may need to be conducted (CDFG 2003). Results of the MGS surveys are advised to be submitted to the CDFW. Please note MGS surveys are valid for one year and should be conducted within a year of the start of ground-disturbing activities.

Recommended Mitigation Measure 4: MGS Avoidance

If protocol surveys will not be conducted or if surveys detect MGS, in order to implement full avoidance for MGS, CDFW recommends a 50-foot no-disturbance buffer be employed around all burrows that could be used by MGS and that all suitable burrows and burrow complexes maintain habitat connectivity with suitable habitat features outside the Project site.

Recommended Mitigation Measure 5: MGS Take Authorization

If MGS are found within the Project site during protocol surveys, preconstruction surveys, or construction activities, consultation with CDFW is recommended to discuss how to implement the Project and avoid take, or if avoidance is not feasible, to acquire an ITP prior to any ground-disturbing activities, pursuant Fish and Game

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Code section 2081 subsection (b). Alternatively, the applicant can assume presence of MGS and acquire an ITP prior to initiating Project implementation.

COMMENT 3: Western Joshua Tree (WJT)

Issue: On September 22, 2020, the Fish and Game Commission determined that listing WJT as threatened or endangered under CESA may be warranted. Pursuant to Fish and Game Code section 2074.6, CDFW has initiated a status review report to inform the Commission's decision on whether listing of WJT, pursuant to CESA, is warranted. During the candidacy period, consistent with CEQA Guidelines section 15380, the status of the WJT as a candidate species under CESA (Fish & G. Code, § 2050 et seq.) qualifies it as an endangered, rare, or threatened species under CEQA. The Fish and Game Commission also adopted emergency regulations to authorize conditional take of western Joshua tree during its candidacy for some solar energy projects pursuant to Fish and Game Code section 2084. The NOP acknowledges the presence of WJT on the Project site, so the Project has the potential to impact this plant species.

Specific impact: Potentially significant impacts to WJT associated with proposed Project activities include inability to survive and reproduce and direct mortality.

Evidence impact is potentially significant: Major threats to the WJT are predation, invasive species, wildfires, climate change, and habitat loss related to human development and conversion. These threats are often related and can work synergistically and cumulatively to threaten the continued existence of WJT (DeFalco et al. 2010, Svenning and Sandel 2013, Esque et al. 2015). Human development includes large and small-scale renewable energy projects. While many of the impacts of these projects on WJT have been difficult to quantify, the USFWS (2018) has estimated renewable energy development alone has resulted in the loss of 1.2% of WJT habitat, or approximately 68,000 acres. Project activities may result in the loss of potential WJT habitat through conversion which can exacerbate the impacts to WJT from predation, invasive species, wildfires, drought, and climate change.

Recommended Potentially Feasible Mitigation Measures

To evaluate potential Project-related impacts to WJT, CDFW recommends conducting the following evaluation of the Project area, including the following mitigation measures in the EIR, and that these measures be made conditions of approval for the Project.

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Recommended Mitigation Measure 6: WJT Surveys

CDFW recommends that the Project site be surveyed by a qualified botanist or biologist to conduct a complete census of all WJT within the Project site.

Recommended Mitigation Measure 7: WJT Consultation and Take Authorization

Since WJT have already been documented to occur on the Project site, consultation with CDFW is warranted to determine appropriate avoidance, minimization, and mitigation measures and take authorization since the Kudu Solar by 69SV 8ME LLC Project was identified as one of the solar energy projects in the Special Order Relating to Take of Western Joshua Tree (*Yucca brevifolia*) During Candidacy Period (Cal. Code Regs. tit. 14, § 749.10, effective date pending).

COMMENT 4: Other Special-Status Plants

Issue: Special-status plant species have the potential to occur on the Project site, including the California rare plant ranked alkali mariposa-lily, Barstow woolly sunflower, desert cymopterus, crowned muilla, and white pygmy-poppy (CDFW 2020). Based on the Project site location, the Project has the potential to impact these plant species.

Specific impact: Potentially significant impacts to special-status plant species associated with proposed Project activities include inability to survive and reproduce and direct mortality.

Evidence impact is potentially significant: The plant species listed above occur in Mojave Desert scrub (CNPS 2020). As a result, these species have the potential to occur at the Project site. Habitat loss and degradation resulting from human development, urbanization, grazing, trampling, and hydrological alterations and water diversions that result in the lowering of the water table (CNPS 2020).

Recommended Potentially Feasible Mitigation Measures

To evaluate potential Project-related impacts to special-status plants, CDFW recommends conducting the following evaluation of the Project area, including the following mitigation measures in the EIR, and that these measures be made conditions of approval for the Project.

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Recommended Mitigation Measure 8: Special-Status Plant Surveys

CDFW recommends that the Project site be surveyed for special-status plants by a qualified botanist following the “*Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*” (CDFW 2018b). This protocol, which is intended to maximize detectability, includes identification of reference populations to facilitate the likelihood of field investigations occurring during the appropriate floristic period. In the absence of protocol-level surveys being performed, additional surveys may be necessary.

Recommended Mitigation Measure 9: Special-Status Plant Avoidance

Further, CDFW recommends special-status plant species be avoided whenever possible by delineation and observation of a no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special-status plant species. If buffers cannot be maintained, then consultation with CDFW is warranted to determine appropriate minimization and mitigation measures for impacts to special-status plant species.

Recommended Mitigation Measure 10: Listed Plant Species Take Authorization

If a State-listed plant species is identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take. If take cannot be avoided, take authorization is warranted. Take authorization would occur through issuance of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b).

COMMENT 5: Burrowing Owl (BUOW)

Issue: BUOW are known to occur in the Project area vicinity (CDFW 2020). BUOW inhabit deserts and scrublands characterized by low-growing vegetation containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover. The Project area appears to contain suitable habitat based on aerial imagery. Therefore, there is potential for BUOW to occupy or colonize the Project area and may be impacted by Project activities.

Specific impact: Without appropriate avoidance and minimization measures for BUOW, potential significant impacts associated with subsequent activities and land conversion include habitat loss, burrow collapse, inadvertent entrapment, nest abandonment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

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Evidence impact is potentially significant: BUOW rely on burrow habitat year-round for their survival and reproduction. Habitat loss and degradation are considered the greatest threats to BUOW in California (Gervais et al. 2008). The Project and surrounding area contain undeveloped land; therefore, subsequent ground-disturbing activities associated with the Project have the potential to significantly impact local BUOW populations. In addition, and as described in CDFW's "Staff Report on Burrowing Owl Mitigation" (CDFG 2012), excluding and/or evicting BUOW from their burrows is considered a potentially significant impact under CEQA.

Recommended Potentially Feasible Mitigation Measures

To evaluate potential Project-related impacts to burrowing owl, CDFW recommends conducting the following evaluation of the Project area, including the following mitigation measures in the EIR, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 11: BUOW Surveys

CDFW recommends assessing presence/absence of BUOW by having a qualified biologist conduct surveys following the California Burrowing Owl Consortium's (CBOC) "*Burrowing Owl Survey Protocol and Mitigation Guidelines*" (CBOC 1993) and CDFW's "*Staff Report on Burrowing Owl Mitigation*" (CDFG 2012). CDFW advises that surveys include a 500-foot buffer around the Project site. Please note the guidelines suggest three or more surveys be conducted during the peak breeding season (April 15 to July 15) to determine presence (CDFG 2012).

Recommended Mitigation Measure 12: BUOW Avoidance

CDFW recommends implementing no-disturbance buffers, as outlined in the "*Staff Report on Burrowing Owl Mitigation*" (CDFG 2012), prior to and during any ground-disturbing activities associated with Project implementation. 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.

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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

Recommended Mitigation Measure 13: BUOW Passive Relocation and Mitigation

If BUOW are found to occupy the Project site and avoidance is not possible, it is important to note that according to the Staff Report (CDFG 2012), exclusion is not a take avoidance, minimization, or mitigation method and is considered a potentially significant impact under CEQA. However, if necessary, CDFW recommends that burrow exclusion be conducted by qualified biologists and only during the non-breeding season, before breeding behavior is exhibited and after the burrow is confirmed empty through non-invasive methods, such as surveillance. CDFW recommends replacement of occupied burrows with artificial burrows at a ratio of 1 burrow collapsed to 1 artificial burrow constructed (1:1) as mitigation for the potentially significant impact of evicting BUOW. BUOW may attempt to colonize or re-colonize an area that will be impacted; thus, CDFW recommends ongoing surveillance of the Project site during Project activities, at a rate that is sufficient to detect BUOW if they return.

COMMENT 6: American Badger (AMBA)

Issue: AMBA have the potential to occur in and near the Project site (CDFW 2020). AMBA occupy sparsely vegetated land cover with dry, friable soils to excavate dens, which they use for cover, and that support fossorial rodent prey populations (i.e. ground squirrels, pocket gophers, etc.) (Zeiner et. al 1990). The Project area may support these requisite habitat features. Therefore, the Project has the potential to impact American badger.

Impact: Without appropriate avoidance and minimization measures for AMBA, potential significant impacts include den abandonment, which may result in reduced health or vigor of young, in addition to direct mortality.

Evidence impact is potentially significant: AMBA populations in California have been declining due to agriculture and urban development (Williams 1986). Habitat loss is a primary threat to American badger (Gittleman et. al 2001). The Project site is within the range of American badger and suitable habitat may be present on or in the vicinity of the Project site. As a result, Project activities have the potential to significantly impact local populations of American badger.

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Recommended Potentially Feasible Mitigation Measures

To evaluate potential Project-related impacts to AMBA, CDFW recommends conducting the following evaluation of the Project area, including the following mitigation measures in the EIR, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 14: AMBA Surveys

CDFW recommends that a qualified biologist conduct focused surveys for American badger and their requisite habitat features (dens) to evaluate potential impacts resulting from ground- and vegetation-disturbance.

Recommended Mitigation Measure 15: AMBA Avoidance

Avoidance whenever possible is encouraged via delineation and observation of a 50-foot no-disturbance buffer around occupied dens and a 250-foot no-disturbance buffer around natal dens until it is determined through non-invasive means that individuals occupying the den have dispersed.

COMMENT 10: Other State Species of Special Concern and Watchlist Species

Issue: Le Conte's thrasher, loggerhead shrike, prairie falcon (*Falco mexicanus*), and California horned lark (*Eremophila alpestris actia*) have the potential to occur in the Project area. All the species mentioned above have been documented to occur in the vicinity of the Project, which supports requisite habitat elements for these species (CDFW 2020).

Specific impact: Without appropriate avoidance and minimization measures for these species, potentially significant impacts associated with ground disturbance include habitat loss, nest abandonment, which may result in reduced health or vigor of eggs and/or young, and direct mortality.

Evidence impact is potentially significant: Habitat loss threatens all of the species mentioned above (Shuford and Gardali 2008). The Project and surrounding area contain undeveloped land; therefore, subsequent ground disturbing activities and habitat conversion associated with the Project may have the potential to significantly impact local the populations of these species.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential impacts to these special-status species associated with subsequent development, CDFW recommends conducting the following evaluation

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of the Project area, including the following mitigation measures in the EIR, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 16: Species of Special Concern and Watchlist Species Habitat Assessment

CDFW recommends that a qualified biologist conduct a habitat assessment in advance of project implementation, to determine if project areas or their immediate vicinity contain potential habitat for the species mentioned above.

Recommended Mitigation Measure 17: Species of Special Concern and Watchlist Species Surveys

If potential habitat is present, CDFW recommends that a qualified biologist conduct focused surveys for applicable species and their requisite habitat features to evaluate potential impacts resulting from ground and vegetation disturbance.

Recommended Mitigation Measure 18: Species of Special Concern and Watchlist Species Avoidance

Avoidance whenever possible is encouraged via delineation and observance a 50-foot no-disturbance buffer around burrow or den entrances that can provide refuge for small mammals, reptiles, and amphibians, and 250 feet around nests of special-status bird species.

II. Editorial Comments and/or Suggestions

Lake and Streambed Alteration: Aerial imagery shows the Project area contains several desert washes. Project activities have the potential to substantially change the bed, bank, and channel of these features and/or substantially divert the flow of any such feature that is subject to CDFW's regulatory authority pursuant Fish and Game Code section 1600 et seq. Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may (a) substantially divert or obstruct the natural flow of any river, stream, or lake; (b) substantially change or use any material from the bed, bank, or channel of any river, stream, or lake (including the removal of riparian vegetation); (c) deposit debris, waste or other materials that could pass into any river, stream, or lake. "Any river, stream, or lake" includes those that are ephemeral, intermittent, or episodic as well as those that are perennial.

CDFW is required to comply with CEQA in the issuance of a Lake or Streambed Alteration Agreement (LSAA); therefore, if the CEQA document approved for the Project does not adequately describe the Project and its impacts to lakes or streams, a

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subsequent CEQA analysis may be necessary for LSAA issuance. For information on notification requirements, please refer to CDFW's website (<https://wildlife.ca.gov/Conservation/LSA>) or contact CDFW staff in the Central Region Lake and Streambed Alteration Program at (559) 243-4593.

Desert Kit Fox: The proposed Project area is within desert kit fox range. The desert kit fox is protected under Title 14, California Code of Regulations, Section 460, which prohibits take of the species at any time. CDFW recommends that the USFWS "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (2011) be followed to minimize impacts to desert kit fox. Please note the guidelines indicate pre-activity surveys be conducted by a qualified biologist no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities (USFWS 2011). If any active or potential dens are found on the Project site during surveys, consultation with CDFW would be warranted for guidance on take avoidance measures for the desert kit fox.

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). CDFW encourages Project implementation to occur during the bird non-nesting season; however, if Project activities must occur during the breeding season (i.e., February through mid-September), 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 Codes as referenced above.

To evaluate Project-related impacts on nesting birds, CDFW recommends that a qualified wildlife biologist conduct pre-activity surveys for active nests no more than 10 days prior to the start of ground disturbance to maximize the probability that nests that could potentially be impacted by the Project are detected. CDFW also recommends that surveys cover a sufficient area around the work site to identify nests and determine their status. A sufficient area means any area potentially affected by a project. In addition to direct impacts (i.e., nest destruction), noise, vibration, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends that a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests. Once construction begins, CDFW recommends that a qualified biologist continuously monitor nests to detect behavioral changes resulting from the project. If behavioral changes occur, CDFW recommends that the work causing that change cease and CDFW be consulted for additional avoidance and minimization measures.

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If continuous monitoring of identified nests by a qualified wildlife 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 that the birds have fledged and are no longer reliant upon the nest or parental care for survival. Variance from these no-disturbance buffers is possible when there is compelling biological or ecological reason to do so, such as when the construction area would be concealed from a nest site by topography. CDFW recommends that a qualified wildlife 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 the desert tortoise. 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 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).

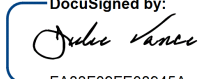
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CONCLUSION

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

If you have any questions, please contact Craig Bailey, Senior Environmental Scientist (Supervisory), at the address provided on this letterhead, or by electronic mail at Craig.Bailey@wildlife.ca.gov.

Sincerely,

DocuSigned by:

FA83F09FE08945A...
Julie A. Vance
Regional Manager

Attachment

ec: Office of Planning and Research
State Clearinghouse
state.clearinghouse@opr.ca.gov
Ray Bransfield
United States Fish and Wildlife Service
ray_bransfield@fws.gov

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California Department of Fish and Wildlife

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Attachment 1

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

**PROJECT: Kudu Solar Farm by 69SV 8ME LLC (Project)
Notice of Preparation (NOP)**

SCH No.: 2020099017

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
Mitigation Measure 1: Desert Tortoise Surveys	
Mitigation Measure 2: Desert Tortoise Avoidance and Take Authorization	
Mitigation Measure 3: MGS Surveys	
Mitigation Measure 4: MGS Avoidance	
Mitigation Measure 5: MGS Take Authorization	
Mitigation Measure 6: WJT Surveys	
Mitigation Measure 7: WJT Consultation and Take Authorization	
Mitigation Measure 8: Special-Status Plant Surveys	
Mitigation Measure 9: Special-Status Plant Avoidance	
Mitigation Measure 10: Listed Plant Species Take Authorization	
Mitigation Measure 11: BUOW Surveys	
Mitigation Measure 12: BUOW Avoidance	
Mitigation Measure 13: BUOW Passive Relocation and Mitigation	
Mitigation Measure 14: AMBA Surveys	
Mitigation Measure 15: AMBA Avoidance	
Mitigation Measure 16: Species of Special Concern and Watchlist Species Habitat Assessment	
Mitigation Measure 17: Species of Special Concern and Watchlist Species Surveys	
Mitigation Measure 18: Species of Special Concern and Watchlist Species Avoidance	
<i>During Construction</i>	
Mitigation Measure 2: Desert Tortoise Avoidance and Take Authorization	
Mitigation Measure 4: MGS Avoidance	
Mitigation Measure 9: Special-Status Plant Avoidance	
Mitigation Measure 12: BUOW Avoidance	

Mitigation Measure 13: BUOW Passive Relocation and Mitigation	
Mitigation Measure 15: AMBA Avoidance	
Mitigation Measure 18: Species of Special Concern and Watchlist Species Avoidance	