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Governor's Office of Planning & Research

January 12 2024

STATE CLEARINGHOUSE

January 12, 2024

Janice Mayes, Planner III
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Subject: **Bullhead Solar Project by EDF Renewables, LLC (Project)**
Draft Environmental Impact Report (DEIR)
State Clearinghouse No. 2022110504

Dear Janice Mayes:

The California Department of Fish and Wildlife (CDFW) received a Draft Environmental Impact Report (DEIR) from Kern County Planning and Natural Resources Department (Kern County), as Lead Agency, for the Bullhead Solar Project by EDF Renewables, LLC (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.

Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 2

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. 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).

Protected Furbearing Mammals: CDFW has jurisdiction over furbearing mammals pursuant to Title 14, California Code of Regulations, Section 460. This Section 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, 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: EDF Renewables, LLC

Objective: The Project proposes to construct and operate a photovoltaic (PV) solar facility which would generate up to 270 megawatts (MW) of renewable electrical energy with a battery energy storage system (BESS) capable of storing approximately 270 MW or 1,080 megawatt-hours (MWh) of storage capacity. The proposed Project also includes associated infrastructure such as laydown yards, a meteorological station,

Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 3

microwave/communication tower, and a substation. PV panels, inverters, converters, foundations, and transformers would be installed onsite. The proposed Project also includes preferred and optional generation-tie (gen-tie) routes to the Rosamond or Whirlwind substations, only one of which would be constructed.

Location: The Project site is located on approximately 1,343 acres, comprised of 22 privately owned parcels in the southern unincorporated area of Kern County, adjacent to the previously approved BigBeau Solar project. Assessor's Parcel Number (APN) 358-051-03 would be used by the project proponent as a connector road to the BigBeau Solar project. The Project site is approximately 8 miles northwest of the community of Rosamond, and 2 miles north of the community of Willow Springs. The Project site is approximately 12 miles southwest of State Route (SR) 58 and approximately 7 miles west of SR-14 (Antelope Valley Freeway). SR-138 (West Avenue D) is approximately 9 miles to the south in Los Angeles County. The Project site is generally bounded by Favorito Avenue to the south, Champagne Avenue to the north, 105th Street West and the BigBeau Solar Project to the west, and 80th Street West to the east. The Project site is bisected by Tehachapi Willow Springs Road.

Timeframe: Construction would begin in the third quarter of 2024 and would extend for approximately 18 months.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Kern County in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct, indirect, and cumulative 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 area contains creosote bush scrub communities including creosote bush scrub, rabbitbrush scrub, Joshua tree woodland, active and fallow agricultural fields, orchards and tamarisk groves, ruderal habitats, and disturbed and developed areas. Based on a review of the Project description, California Natural Diversity Database (CNDDDB) records, and the surrounding habitat, several special-status species could potentially be impacted by Project activities.

Currently, the DEIR acknowledges that the Project site is within the geographic range of several special-status species and proposes specific mitigation measures to reduce impacts to less than significant. CDFW has concerns about the ability of some the proposed mitigation measures to reduce impacts to less than significant and avoid unauthorized take for several special-status species, including the State threatened Mohave ground squirrel (*xerospermophilus mohavensis*) and Swainson's hawk (*Buteo*

Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 4

swainsoni); the State and federally threatened desert tortoise (*Gopherus agassizii*); the State candidate for listing Crotch's bumble bee (*Bombus crotchii*) and western Joshua tree (*Yucca brevifolia*); the State protected furbearing mammal desert kit fox (*Vulpes macrotis arsipus*); and the State species of special concern northern California legless lizard (*Anniella pulchra*).

CDFW also has concerns about the ability of some the proposed mitigation measures to reduce impacts to less than significant and avoid unauthorized take for several special status plant species, including, but not limited to, the California Rare Plant Rank (CRPR) 1B.2 alkali mariposa-lily (*Calochortus striatus*) and recurved larkspur (*Delphinium recurvatum*); and the CRPR 4.2 Mojave spineflower (*Chorizanthe spinosa*). Finally, CDFW has concerns with potential impacts to migratory and non-migratory nesting birds.

Mohave Ground Squirrel

The DEIR notes that the Mohave ground squirrel (MGS) is absent from the Project site as the Project is not located within the generally accepted range of the species, no CNDDDB occurrences are known to occur west of SR-14, and no individuals were documented during 2021 surveys for the Project, which followed the 2009 Mohave Ground Squirrel Survey Guidelines (CDFG 2009). It should be noted that CDFW does not consider SR-14 to be the definitive western boundary of the MGS range and there is the potential that the species could occur within or adjacent to the Project site over the life of the Project. Additionally, CDFW would like to note that MGS surveys are only valid for one year and should be conducted during the survey season immediately prior to the initiation of ground-disturbing activities. As such, CDFW recommends the following:

Recommended Mitigation Measure 1: MGS Surveys Prior to Construction

CDFW recommends that a qualified biologist, with appropriate permits, conduct protocol surveys for MGS following the methods described in the 2023 Mohave Ground Squirrel Survey Guidelines (CDFW 2023a) during the appropriate survey season and that these surveys be conducted in areas of potential habitat, including marginal habitat covering the entire Project site. Because of the large size of the Project site, it is recommended that the Project proponent propose a surveying methodology for CDFW review and approval prior to initiation of protocol surveys. It is also recommended that the results of these surveys be submitted to CDFW for evaluation. Please note MGS surveys are valid for one year and should be conducted during the survey season immediately prior to the initiation of ground-disturbing activities.

Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 5

Recommended Mitigation Measure 2: MGS Avoidance Buffer

If protocol-level surveys cannot be completed the survey season immediately prior to ground disturbance for the Project, CDFW recommends that all small mammal burrows and thatched/bunch grasses be avoided by a minimum of 50 feet to avoid take and potentially significant impacts. The Project proponent may also choose to assume presence of MGS and obtain an Incidental Take Permit (ITP) prior to initiating ground-disturbing activities.

Recommended Mitigation Measure 3: MGS Take Authorization

If MGS is identified during surveys or at any time during Project construction, and a minimum 50-foot no-disturbance buffer is not feasible, then CDFW recommends the Project obtain an ITP, pursuant to Fish and Game Code section 2081 subdivision (b).

Swainson's Hawk

The DEIR notes that 11 active Swainson's hawk (SWHA) nests were documented within five miles of the Project site and three active SWHA nests could potentially be directly impacted by construction activities. Mitigation Measure MM 4.4-9 is provided to mitigate for potential impacts to the species and proposes to require additional surveys following the survey methodology developed by the California Energy Commission (CEC) and CDFW in the *Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the Antelope Valley of Los Angeles and Kern Counties, California* (Antelope Valley SWHA Protocol) (CEC and CDFW 2010). These additional surveys would be conducted during the survey season immediately prior to Project construction. Mitigation Measure MM 4.4-9 would also require preconstruction surveys, avoidance buffers, and the potential need for mitigation.

As the DEIR notes that 11 active SWHA nests were documented within five miles of the Project site and three active SWHA nests would potentially be directly impacted by construction activities, CDFW strongly recommends the following:

Recommended Mitigation Measure 4: SWHA Take Authorization

As the DEIR notes that construction activities would impact nesting SWHA and there is a strong potential that SWHA would utilize the Project site over the life of the Project, CDFW strongly recommends the Project obtain an ITP pursuant to Fish and Game Code section 2081 subdivision (b), to avoid the unauthorized take of SWHA.

Mitigation Measure MM.4-9 also states that, "During the nesting season (March 1 through September 15), ensure no new ground disturbances, habitat conversions, or

Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 6

other project-related activities that may cause nest abandonment or forced fledging shall occur within 0.5 mile of an active nest. Buffer zones may be adjusted in consultation with CDFW and with the County.” CDFW does not concur with this portion of the measure, as any adjustment of a ½-mile SWHA buffer would potentially result in the unauthorized take of the species. As such, CDFW reiterates the recommendation to obtain an ITP pursuant to Fish and Game Code section 2081 subdivision (b) to avoid the unauthorized take of SWHA.

Mitigation Measure MM 4.4-10 states that, “The project proponent shall mitigate for the loss of Swainson’s Hawk nesting and foraging habitat at a ratio of 0.5:1 based on the total approved area of the project. Mitigation lands may be nested with other compensatory lands provided it meets the necessary biological requirements and as determined by appropriate wildlife agency.” CDFW does not concur with this portion of the measure as the amount of mitigation required for impacts to SWHA foraging habitat is substantially less than what is recommended in the Antelope Valley SWHA Protocol (CEC and CDFW 2010), which recommends a minimum 2:1 mitigation ratio for impacted SWHA foraging habitat within a five-mile radius of an active SWHA nest. As such, CDFW recommends the following:

Recommended Mitigation Measure 5: SWHA Foraging Habitat Mitigation

CDFW recommends compensation for the loss of SWHA foraging habitat as described in the Antelope Valley SWHA Protocol (CEC and CDFW 2010) to reduce impacts to foraging habitat to less than significant. The protocol recommends that mitigation for suitable habitat loss within a five-mile radius of an active SWHA nests occur at a minimum 2:1 ratio.

Desert Tortoise

Mitigation Measure MM 4.4-7 states that, “Within 14 days prior to the commencement of any ground-disturbing activities the project operator shall conduct preconstruction surveys for desert tortoise within the project area. The surveys shall be conducted in accordance with the U.S. Fish and Wildlife Service protocol (2010). If no burrows or tortoises are discovered during preconstruction surveys, no further mitigation is necessary. The desert tortoise is a federally and state threatened species and consequently, impacts that would cause “take” of the species would require the issuance of Incidental Take Permits from both the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife to comply with the Federal Endangered Species Act and California Endangered Species Act. If burrows or tortoises are identified on the project site during preconstruction surveys, the project operator shall be required to consult with U.S. Fish and Wildlife Service and California Department of Fish and Wildlife regarding take coverage, and adhere to the following minimum conditions.” CDFW concurs with this portion of Mitigation Measure MM 4.4-7 but

Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 7

recommends that surveys follow the updated protocol, Preparing for Any Action That May Occur Within the Range of the Mojave Desert Tortoise (USFWS 2019), and that these surveys be conducted during the survey season immediately prior to construction and during the time period when desert tortoise (DT) are most active. Survey results should be submitted to both CDFW and the U.S. Fish and Wildlife Service (USFWS). If surveys indicate the presence or potential presence of desert tortoise, CDFW recommends the Project consult and obtain an ITP, pursuant to Fish and Game Code section 2081 subdivision (b).

Crotch's Bumble Bee

The DEIR notes that the Project site is within the range of Crotch's bumble bee (CBB), suitable habitat is present, and the species has a moderate potential to occur within portions of the Project site, and Mitigation Measure MM 4.4-3 is proposed to mitigation for impacts. Mitigation Measure MM 4.4-3 requires preconstruction surveys, reporting requirements, and avoidance buffers. CDFW is concerned that several portions of Mitigation Measure MM 4.4-3 would conflict with the survey guidance outlined in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023b) document. Additionally, CDFW is concerned that the measure may not adequately mitigate impacts and avoid take. CDFW's concerns are provided in more detail below:

Mitigation Measure MM 4.4-3 states that, "Prior to any ground-disturbing activities in the active season for Crotch bumble bee (February 1 through October 31), a qualified biologist (a biologist holding an MOU for Crotch bumble bee) should conduct a preconstruction survey within habitats identified as having a moderate potential for Crotch bumble bee to occur. The biologist should perform meandering transects on three separate days over a 14-day period prior to construction within the planned activity footprint. To the extent possible, surveys should be conducted between 9am and 1pm, when temperatures are between 65-90F, and when wind speeds are less than 8 miles per hour to encompass the period when bees are most active. The biologist should collect photographic vouchers of bumble bees (i.e., genus *Bombus*) to the extent possible through photographing the bee on floral resources, or by netting and chilling the specimens (conducted by a biologist holding an MOU for the Crotch's bumble bee) and obtaining diagnostic photographs of the captured bees. Survey data should be captured on the California bumble bee atlas (CBBA) data sheet or a project specific data sheet if it encompasses the same CBBA data sheet information (available at: https://www.cabumblebeeatlas.org/uploads/1/1/6/9/116937560/cabba_data_sheet_2023.pdf). Survey results should be provided to the California Department of Fish and Wildlife and Kern County Natural Resources Department." CDFW does not concur that survey procedures outlined above would be adequate to determine presence/absence of CBB within a given season, and recommends the following:

Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 8

Recommended Mitigation Measure 6: CBB Surveys Prior to Construction

CDFW recommends that a qualified biologist conduct focused surveys for CBB, and their requisite habitat features following the methodology outlined in the Survey Considerations for California Endangered Species Act Candidate Bumble Bee Species (CDFW 2023b), during the blooming period immediately prior to construction.

Mitigation Measure MM 4.4-3 continues by stating that, "If a suspected or confirmed Crotch bumble bee is detected in the Project Area, every effort shall be made to find the nest. If a nest is found in the Project Area, the biologist shall delineate a 50-foot 'no activity' buffer around the nest until the nest senesces (becomes inactive and is no longer in use). If no suspected or confirmed Crotch bumble bee is detected in the planned activity footprint, construction could proceed without further measures." CDFW would like to note that any detection of CBB prior to or during Project implementation warrants consultation with CDFW to discuss how to avoid take. As such, CDFW recommends the following:

Recommended Mitigation Measure 7: CBB Take Authorization

In the event a CBB nest is detected within the Project site, consultation with CDFW is warranted to discuss how to implement Project activities and avoid take. If take cannot be avoided, CDFW recommends the Project obtain an ITP, pursuant to Fish and Game Code section 2081 subdivision (b).

Western Joshua Tree

Mitigation Measure MM 4.4-14 states that, "Prior to the issuance of a grading permit, the project proponent/operator shall develop a Joshua Tree Preservation Plan. The Plan shall be prepared by a qualified biologist preapproved by Kern County and shall be approved by the appropriate agencies, including Kern County, prior to implementation. At a minimum, the plan shall identify the methods utilized, as applicable, that the project is taking to comply with any CDFW CESA take requirements and compensatory mitigation related to the protection or mitigation of impacted Joshua Trees and documentation of any such CDFW take authorization and mitigation shall be provided to the Kern County Planning and Natural Resources Department." CDFW concurs with this measure, but strongly recommends the following as western Joshua tree (WJT) were documented throughout the Project site:

Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 9

Recommended Mitigation Measure 8: WJT Avoidance Buffer

In the absence of obtaining an ITP for the take of WJT, CDFW recommends a minimum no-disturbance buffer for an individual WJT of 290 feet. A 290-foot no-disturbance buffer is warranted to not only avoid impacts to individual trees, but potential impacts to the seed bank as it has been documented that 290 feet is the maximum distance of seed dispersal by rodents (Vander Wall et al. 2006).

Recommended Mitigation Measure 9: WJT Take Authorization

If a minimum 290-foot no-disturbance buffer for each identified WJT is not feasible, then CDFW recommends the Project obtain take authorization for WJT through issuance of an ITP, pursuant to Fish and Game Code section 2081 subdivision (b). Additionally, with the passage of the Western Joshua Tree Conservation Act in July 2023, the Project may also have the option to obtain take authorization through issuance of an ITP, pursuant to Fish and Game Code section 1927.3.

Desert Kit Fox

Mitigation Measure MM 4.4-6 (b) states that, "Preconstruction surveys shall be conducted by a qualified biologist for the presence of American badger or desert kit fox dens within 14 days prior to commencement of construction activities. The surveys shall be conducted in areas of suitable habitat for American badger and desert kit fox, which includes desert scrub habitats. Surveys need not be conducted for all areas of suitable habitat at one time; they may be phased so that surveys occur within 14 days prior to that portion of the project site disturbed. If potential dens are observed and avoidance is feasible, the following buffer distances shall be established prior to construction activities:

- Desert kit fox or American badger potential den: 50 feet.
- Desert kit fox or American badger active den: 100 feet.
- Desert kit fox or American badger natal den: 500 feet.

If avoidance of the potential dens is not possible, the following measures are required to avoid potential adverse effects to the American badger and desert kit fox:

1. If the qualified biologist determines that potential dens are inactive, the biologist shall excavate these dens by hand with a shovel to prevent American badgers or desert kit foxes from re-using them during construction.
2. If the qualified biologist determines that potential dens may be active, an on-site passive relocation program shall be implemented. This program shall consist of excluding American badgers or desert kit foxes from occupied burrows by installation of one-way doors at burrow entrances, monitoring of the burrow for

Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 10

seven (7) days to confirm usage has been discontinued, and excavation and collapse of the burrow to prevent reoccupation. After the qualified biologist determines that American badgers or desert kit foxes have stopped using the dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction.”

CDFW would like to note that desert kit fox (DKF) is considered a furbearing mammal, pursuant to Title 14, California Code of Regulations, Section 460, and CDFW cannot authorize the species take. As implementation of Mitigation Measure MM 4.4-6 has the potential to result in take of DKF, it is recommended that the Project proponent consult with CDFW for guidance on appropriate take avoidance measures if active DKF dens are documented on the Project site, and the buffers outlined in Mitigation Measure MM 4.4-6 are not able to be maintained.

Mitigation Measure MM 4.4-5 (d) states that, “To prevent inadvertent entrapment of desert kit foxes, American badgers, or other wildlife during construction, all excavated, steep-walled holes or trenches more than two (2) feet deep shall be covered with plywood or similar materials at the close of each working day, or provided with one or more escape ramps constructed of earth fill or wooden planks. All holes and trenches, whether covered or not, shall be inspected for trapped wildlife at the start and end of each workday. Before such holes or trenches are filled, they shall be thoroughly inspected by the Lead Biologist or approved biological monitor for trapped wildlife. If trapped animals are observed, escape ramps or structures shall be installed immediately to allow escape. If a listed species is found trapped, all work shall cease immediately. If the animal is apparently uninjured, then the Lead Biologist shall directly supervise the provision of escape structures and/or trench modification to allow the trapped animal to escape safely. Work shall not resume in the vicinity of the animal, and it shall be allowed to leave the work area and project site on its own. If the listed animal is injured, then the Lead Biologist or approved biological monitor shall immediately contact the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife to identify an individual with the appropriate permit or authorization to handle listed species, who shall bring the animal to a pre-identified wildlife rehabilitation or veterinary facility for care.” CDFW concurs with this measure; however, it is recommended that all holes and trenches, whether covered or not, be inspected for trapped wildlife at the start and end of each workday by the Lead Biologist or approved biological monitor.

Mitigation Measure MM 4.4-5 (l) states that, “To enable kit foxes and other wildlife (e.g., American badger) to pass through the project site after construction, the security fence, and any permanent interior fencing shall be a wildlife friendly design that meets the goals of allowing wildlife to move freely through the project site during operation, leaving 4- to 7-inch openings or portals in the fence or the fence shall be raised 7 inches above the ground leaving a gap between the fence mesh and the ground. In the latter case the

Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 11

bottom of the fence fabric shall be knuckled (wrapped back to form a smooth edge) to protect wildlife that passes under the fence.” CDFW concurs with raising perimeter fencing to allow for wildlife movement through the Project site after construction but recommends that the style of fencing selected is the type that is raised four to six inches above ground level and knuckled back to form a smooth edge and permeability for wildlife. CDFW does not recommend the use of openings or portals as they are inadequate to create the permeability necessary to avoid the Project site becoming a barrier to wildlife movement.

Northern California Legless Lizard

The Project DEIR notes that northern California legless lizard (NCLL) has a moderate potential to occur within the Project vicinity and the Project site contains suitable habitat for the species; however, it appears no mitigation measures are proposed to mitigate for potential impacts. As such, CDFW recommends the following:

Recommended Mitigation Measure 10: NCLL Surveys Prior to Construction

CDFW recommends that a qualified biologist conduct focused surveys for NCLL, and their requisite habitat features within areas of suitable habitat, immediately prior to construction to evaluate potential impacts resulting from ground-disturbance.

Recommended Mitigation Measure 11: NCLL Avoidance Buffer

If NCLL are documented during surveys, avoidance whenever possible is encouraged via delineation and observance of a 50-foot no-disturbance buffer; however, a qualified biologist with the appropriate permit(s) may relocate NCLL out of the Project site and into a nearby area with suitable habitat.

Other Special Status Plant Species

Mitigation Measure MM 4.4-12 states that, “Within 14 days prior to the commencement of any ground-disturbing activities, the project operator shall conduct preconstruction surveys for special-status and protected plant species within the project area, including but not limited to, alkali mariposa lily and recurved larkspur. After the preconstruction survey determines the exact location of these species, if present, on the project site and the number of individuals or populations present, the project proponent/operator shall submit written documentation to the Kern County Planning and Natural Resources Department confirming implementation of the measures described below.” CDFW concurs with the portion of the measure that requires preconstruction special status plant surveys, but recommends that the surveys be conducted during the appropriate plant bloom period immediately prior to construction. Conducting surveys during the

Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 12

appropriate bloom period will ensure that special status plant species will have germinated and be identifiable during surveys.

Mitigation Measure MM 4.4-12 (a) continues by stating that, “The project proponent/operator shall work with a qualified biologist to determine presence of alkali mariposa lily and recurved larkspur and identify all known locations of alkali mariposa lily to establish “avoidance areas”. All special-status plants found within the project site shall be avoided by a buffer of 25 feet. Sturdy, highly visible, orange plastic construction fencing (or equivalent material verified by the authorized biologist) shall be installed around all locations of detected special-status plants to protect from impacts during the construction phase, until they can be relocated. The fence shall be securely staked and installed in a durable manner that would be reasonably expected to withstand wind and weather events and last at least through the construction period. Fencing shall be removed upon completion of the project construction.” CDFW does not concur that a 25-foot no-disturbance buffer would be sufficient to avoid take of special-status plants and recommends the following:

Recommended Mitigation Measure 12: Other Special Status Plant Species Avoidance Buffer

CDFW recommends special status plant species be avoided whenever possible by delineation and observation of a 50-foot no-disturbance buffer from the outer edge of the special status 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.

Nesting Birds

Mitigation Measure MM 4.4-11 states that, “If construction is scheduled to commence during the non-nesting season (i.e., September 1 to January 31), no preconstruction surveys or additional measures are required. To avoid impacts to nesting birds in the project area, a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within the project site for construction activities that are initiated during the breeding season (i.e., February 1 to August 31). The raptor survey shall focus on potential nest sites (e.g., cliffs, large trees, windrows) within a 0.5-mile buffer around the project site. Surveys shall be conducted no more than 14 days prior to construction activities. Surveys need not be conducted for the entire project site at one time; they may be phased so that surveys occur shortly before a portion of the project site is disturbed. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (e.g., 200–300 feet for common raptors; 0.5 mile for Swainson’s hawk; 30–50 feet for passerine

Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 13

species) shall be established around active nests and no construction within the buffer allowed until a qualified biologist has determined that the nest is no longer active (e.g., the nestlings have fledged and are no longer reliant on the nest). For non-listed species, encroachment into the avoidance buffer may occur at the discretion of a qualified biologist; however, for State-listed species, consultation with CDFW shall occur prior to encroachment into the aforementioned buffers.”

CDFW does not concur that Mitigation Measure MM 4.4-11 is sufficient to mitigate impacts to nests during the bird breeding season, particularly for the portions of the measure that states surveys be conducted no more than 14 days prior to the start of construction, defines the breeding season as ending on August 31, and allows for the placement of a 100-foot buffer for non-listed avian species and 300-foot buffer for non-listed raptors. As such, CDFW recommends the following:

Recommended Mitigation Measure 13: Nesting Bird Surveys Prior to Construction

If ground-disturbing activities occur during the nesting bird season (February 1 – September 15), CDFW recommends that a qualified biologist conduct pre-activity surveys for active nests no more than one week prior to the start of ground 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 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, odors, and movement of workers or equipment could also affect nests. Prior to initiation of construction activities, CDFW recommends a qualified biologist conduct a survey to establish a behavioral baseline of all identified nests.

Recommended Mitigation Measure 14: Nesting Bird Monitoring and/or Avoidance Buffer

Once construction begins, CDFW recommends a qualified biologist continuously monitor nests to detect behavioral changes resulting from the Project. If behavioral changes occur, CDFW recommends the work causing that change to cease and that CDFW be consulted 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 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 a compelling biological or ecological reason to do so, such as when the construction

Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 14

area 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.

Editorial Comments and/or Suggestions

Federally Listed Species: CDFW recommends consulting with USFWS regarding potential impacts to federally listed species including but not limited to 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.

Lake and Streambed Alteration: Based on the information provided in the DEIR, the Project contains multiple streams. Project activities may be subject to CDFW's regulatory authority pursuant to 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; therefore, if the DEIR approved for the Project does not adequately describe the Project and its impacts to lakes or streams, a subsequent CEQA analysis may be necessary for LSA Agreement 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 or R4LSA@wildlife.ca.gov.

Cumulative Impacts: Currently, the DEIR has a very broad analysis of cumulative impacts to biological resources and does not adequately evaluate impacts to specific resources. As such, the conclusions reached in the cumulative impacts analysis are not supported by substantial evidence and the analysis lacks sufficient rigor and transparency to adequately develop reasonable and feasible measures to reduce harm. To address this lack of evidence, CDFW recommends that a cumulative impact analysis be conducted for all biological resources that will either be significantly or potentially significantly impacted by implementation of the Project, including those whose impacts are determined to be less than significant with mitigation incorporated or for those

Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 15

resources that are rare or in poor or declining health and will be impacted by the Project, even if those impacts are relatively small (i.e., less than significant). CDFW recommends cumulative impacts be analyzed for the following species using an acceptable methodology to evaluate the impacts of past, present, and reasonably foreseeable future projects on resources and be focused specifically on the resource, not the Project. An appropriate resource study area should be identified and mapped for each resource being analyzed and utilized for this analysis. CDFW recommends a scientifically sound cumulative impacts analysis be conducted for the following species: MGS, SWHA, tricolored blackbird, DT, CBB, WJT, American badger, DKF, BUOW, NCLL, and special status plant species, including, but not limited to, alkali mariposa-lily, recurved larkspur, and Mojave spineflower. CDFW staff is available for consultation in support of cumulative impacts analyses as a trustee and responsible agency under CEQA.

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. €). 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).

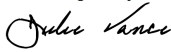
Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 16

CONCLUSION

CDFW appreciates the opportunity to comment on the DEIR to assist Kern County Planning and Natural Resources Department in identifying and mitigating Project impacts on biological resources.

If you have any questions, please contact Jeremy Pohlman, Senior Environmental Scientist (Specialist), at the address provided on this letterhead, by telephone at (805) 503-2375 or by electronic mail at Jeremy.Pohlman@wildlife.ca.gov.

Sincerely,

DocuSigned by:

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Julie A. Vance
Regional Manager

ec: State Clearinghouse
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Janice Mayes
Kern County Planning and Natural Resources Department
January 12, 2024
Page 17

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Attachment 1

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

PROJECT: Bullhead Solar Project

SCH No.: 2022110504

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
MGS	
Recommended Mitigation Measure 1: MGS surveys prior to construction	
Recommended Mitigation Measure 3: MGS take authorization	
SWHA	
Recommended Mitigation Measure 4: SWHA take authorization	
Recommended Mitigation Measure 5: SWHA foraging habitat mitigation	
CBB	
Recommended Mitigation Measure 6: CBB surveys prior to construction	
Recommended Mitigation Measure 7: CBB take authorization	
WJT	
Recommended Mitigation Measure 9: WJT take authorization	
NCLL	
Recommended Mitigation Measure 10: NCLL surveys prior to construction	
Nesting Birds	
Recommended Mitigation Measure 13: Nesting bird surveys prior to construction	
<i>During Construction</i>	
MGS	
Recommended Mitigation Measure 2: MGS avoidance buffer	
WJT	
Recommended Mitigation Measure 8: WJT avoidance buffer	
NCLL	
Recommended Mitigation Measure 11: NCLL avoidance buffer	
Other Special Status Plant Species	
Recommended Mitigation Measure 12: Other special status plant species avoidance buffer	

Nesting Birds	
Recommended Mitigation Measure 14: Nesting bird monitoring and avoidance buffer	