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Governor's Office of Planning & Research

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STATE CLEARINGHOUSE

Carlos Rojas
Kern County Planning and
Community Development Department
2700 M Street, Suite 100
Bakersfield, California 93301-2323

**Subject: Notice of Preparation (NOP) for an Environmental Impact Report (EIR)
Big Beau Solar Project by EDF Renewables Development, Inc.;**
GPA 4, Map 215; SPA 32, Map 232; ZCC 13, Map 215; ZCC 44; Map 232;
CUP 13, Map 215; CUP 41, Map 232; CUP 14, Map 215; CUP 42, Map 232;
CUP 15, Map 215; CUP 43, Map 215
SCH No. 2019071059

Dear Mr. Rojas:

The California Department of Fish and Wildlife (Department) has reviewed the NOP for an EIR submitted by the Kern County Planning and Community Development Department (County) for the Big Beau Solar Project (Project). Project approval would allow construction, operation and maintenance and decommissioning of a 128-mega-watt (MW) photovoltaic (PV) electrical generating facility, including a battery energy storage system to store up to 60 MW of energy. The Project would occupy 2,290 acres of privately-owned land and 160 acres of land owned by the California State Lands Commission for a total Project area of 2,450 acres. The Project includes PV panels, battery storage facilities, perimeter fencing, a meteorological station, a microwave/communication tower, service roads, a power collection system, communication cables, overhead and underground transmission lines, up to 2 miles of generation tie-in electrical lines (gen-tie), electrical switchyards, a substation, and operations and maintenance facilities and be supported by a 220-kilo-Volt overhead transmission corridor. The gen-tie route selected (one of 9 proposed) would include a 125-foot wide corridor in which utility poles, cabling, trenches, and dirt maintenance roads. Temporary features associated with Project construction includes equipment/material laydown areas and a concrete batch plant. The Project is generally bounded by Avenue of the Stars to the south, the intersection of 125th Street and Champagne Avenue to the north, 135th Street West to the west and 105th Street West to the east, approximately 1.9 miles northwest of the unincorporated community of Rosamond; Sections 27, 34 and 35 of Township 10 North, Range 14 West and Sections 2, 3, 4, 9 and 10 of Township 9 North, Range 14 West in the East San Bernardino Baseline and Meridian, Kern County, California.

According to the NOP documentation, the Project site consists primarily of undeveloped rangeland with scattered residences in the vicinity. Potentially significant impacts to biological resources, including species listed under the California Endangered Species Act (CESA) (e.g., desert tortoise and Mohave ground squirrel), riparian habitat, federally protected wetlands, wildlife movement, alteration of a stream or river, and changes in erosion and runoff rates were identified. Field surveys for special-status wildlife and plant species, sensitive natural communities, and streams are in progress and the results will be used to inform the draft EIR prepared for the Project. The Department recommends that the County include discussions, evaluations, and appropriate mitigation for potentially significant impacts to biological resources, wildlife and streams in the draft EIR.

According to the California Natural Diversity Database, there are several special-status wildlife species known to occur or that have historically occurred in the vicinity of the Project site. These species include the State Species of Special Concern burrowing owl (*Athene cunicularia*, BUOW), ferruginous hawk (*Buteo regalis*), merlin (*Falco columbarius*), Le Conte's thrasher (*Toxostoma lecontei*), American badger (*Taxidea taxus*), and coast horned lizard (*Phrynosoma blainvillii*), the proposed for listing as threatened under the federal Endangered Species Act (ESA) mountain plover (*Charadrius montanus*), the listed as threatened under CESA Swainson's hawk (*Buteo swainsoni*, SWHA), the listed as threatened under CESA and ESA, Bakersfield cactus (*Opuntia basilaris*), and the State fully protected golden eagle (*Aquila chrysaetos*). The Project site is also within the range of the listed as threatened under CESA Mohave ground squirrel (*Spermophilus mohavensis*, MGS) and the listed as threatened under CESA and ESA desert tortoise (*Gopherus agassizii*); and the desert kit fox (*Vulpes macrotis ssp. macrotis*), which is protected under California Code of Regulations (CCR), Title 14, Chapter 5, Section 460.

The Department agrees that biological surveys are necessary to inform the County's EIR. The Department recommends that the County require the Project proponent to conduct species-specific surveys according to acceptable protocols. The results of these surveys will help inform the County's EIR analysis of potential Project-related impacts to these species, as well as any additional species that also depend on desert scrub and grassland habitats found on the Project. The County should also propose appropriate avoidance, minimization, and mitigation measures in the draft EIR to reduce potentially significant biological impacts to less than significant levels. The Department also recommends the County include a cumulative impacts analysis to determine how this Project along with recently approved or reasonably foreseeable projects in the vicinity with similar impacts will affect biological resources. Our specific recommendations follow.

Swainson's Hawk: Multiple (at least 10) known SWHA nest sites are located within five (5) miles of the Project to the east and southeast. The Project site contains suitable SWHA foraging habitat and may contain suitable nest structures (i.e., Joshua trees). The Department recommends that a qualified biologist follow the California Energy

Commission and the Department's 2010 *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* before starting Project-related activities. The Department recommends that these survey results be used by the County during analysis of Project-related and cumulative impacts to nesting SWHA and foraging habitat for the draft EIR. The Department also recommends that the County include the resulting analysis and develop appropriate avoidance, minimization, and mitigation measures to address potential impacts to SWHA nest structures and foraging habitat in the draft EIR. The Department recommends the County include in the draft EIR a requirement to place 2,450 acres of land suitable for SWHA foraging habitat under a conservation easement and fund an endowment for the in-perpetuity management of said lands for the benefit of SWHA prior to starting ground-disturbing activities.

If complete avoidance of an active SWHA nest is infeasible (maintaining a minimum 0.5-mile no-disturbance buffer during the breeding season defined as March 1 through September 15), acquisition of an Incidental Take Permit (ITP) prior to initiating ground-disturbing activities would be warranted to comply with CESA.

Desert Tortoise: The Project site is located within the range of desert tortoise and contains suitable habitat for this species. The Department recommends that Presence/Absence surveys following the United States Fish and Wildlife Service (USFWS) protocol (USFWS 2010); which can be found at http://www.fws.gov/ventura/species_information/protocols_guidelines/index.html; be conducted during the appropriate survey periods for the entire Project, including the gen-tie line corridor, to determine the potential for desert tortoise use of the Project and surrounding area. The Department further recommends that survey results be submitted to both the Department and USFWS. If surveys indicate the presence or potential presence of desert tortoise, the Department recommends the Project applicant consult with the Department and USFWS to develop avoidance, minimization, and mitigation measures. If "take" could occur as a result of Project implementation, acquisition of a State ITP would be warranted prior to initiating ground-disturbing activities to comply with CESA. The Department also recommends the Project applicant consult with USFWS on potential impacts to this species to inform the draft EIR prepared for the Project.

The Department recommends that all perimeter fencing be raised seven (7) to eight (8) inches above ground for the length of the fencing with the bottom fencing material knuckled back to maintain movement and habitat connectivity for desert tortoise.

Mohave Ground Squirrel (MGS): The Project is within the range of MGS and provides habitat for the species. The Department recommends that protocol-level surveys utilizing our Mohave Ground Squirrel Survey Guidelines (DFG, 2010) as the basis be conducted in areas of potential habitat, including marginal habitat covering the entire Project, including the gen-tie line corridor. Because of the large size of the Project, the

Department recommends the Project applicant propose a surveying methodology that additionally includes use of remote camera stations. The Department recommends submittal of the proposed survey methodology to the Department for review and approval prior to implementation to avoid expenditure of funds on an inadequate survey effort. The Department also recommends that the results of these survey efforts be submitted to the Department for evaluation. If the Department determines that the species could be present, consultation with the Department is warranted to develop avoidance, minimization, and mitigation measures. If take cannot likely be avoided, acquisition of a State ITP would be warranted prior to initiating ground-disturbing activities to comply with CESA. Alternately, the Project proponent may choose to assume presence of MGS and obtain an ITP prior to initiating ground-disturbing activities.

Burrowing Owl: The Department recommends that a qualified biologist conduct surveys following the protocol in the Department's 2012 *Staff Report on Burrowing Owl Mitigation*. If burrowing owls or their sign are detected on-site or within 500 feet of the site, the Department recommends off-site mitigation measures to compensate for the burrowing owl fatalities and habitat degradation that will likely result from Project implementation.

Specifically, the Department recommends the applicant quantify the area of all burrowing owl home ranges that the Project may impact and conserve an appropriate extent of burrowing owl habitat. The mitigation habitat should currently support burrowing owls but be capable of being managed to enhance the numbers of burrowing owls present, such that the number of burrowing owls likely impacted through the life of the Project can be replaced. The Department also recommends the County require the applicant to conserve off-site mitigation habitat in perpetuity and fund its management through a perpetual endowment.

General Bird Protection Measures: The trees, shrubs, and grasses existing on (and in the vicinity of) the Project likely provide nesting habitat for songbirds and raptors. The Department recommends Project construction and decommissioning occur during the non-breeding bird season. However, if these activities must occur during the breeding season (February through mid-September), the Department recommends the County ensure that Project construction and decommissioning would not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced below.

No more than 10 days prior to work commencing, including staging, clearing, grubbing, ground-disturbing O&M activities, decommissioning, etc., the Department recommends conducting surveys for active bird nests by a qualified wildlife biologist on the Project and in a sufficient area around the Project to identify any nests that are present and to determine their status. A sufficient area means any nest within an area that could potentially be affected by the Project. In addition to direct impacts such as nest destruction, nests might be affected by noise, vibration, odors, and movement of

workers or equipment. The Department recommends identified nests be continuously surveyed for the first 24 hours prior to any construction-related activities to establish a behavioral baseline. Once work commences, continuously monitor all nests to detect any behavioral changes as a result of the Project. If behavioral changes are observed, cease all work causing that change and consult with the Department for additional avoidance and minimization measures. Should Project activities be delayed or suspended for 10 days or more during the bird breeding season, conduct additional bird nest surveys prior to restarting activities.

If continuous monitoring of identified nests by a qualified wildlife biologist is not feasible, the Department recommends a minimum no-disturbance buffer of 250 feet around active nests of non-listed bird species, a 500-foot no-disturbance buffer around the nests of unlisted raptors, and a ½-mile no-disturbance buffer around nests of listed bird species until the breeding season has ended, or until a qualified biologist has determined that the birds have fledged and are no longer dependent upon the nest or parental care for survival. Varying the distances of these no-disturbance buffers may be appropriate when there is compelling biological or ecological reason to do so (as determined by a qualified wildlife biologist). The Department recommends consulting with the Department before implementing buffers different than those discussed above.

The Department recommends that the proposed communication and meteorological towers be of monopole design to avoid the use of guy wires to reduce bird collision, injury, or death.

The Department recommends the County require solar mount poles, fencing poles, or other hollow vertical structures be capped immediately after installation to prevent bird entrapment and death.

Bird and Bat Avoidance: The NOP documentation states that Project-related impacts to bird and bat species may be potentially significant. The Department concurs and recommends the County include a vigorous analysis of potential impacts to bird and bat species from "lake effect" where avian species may perceive solar panels as a body of water in which injury or mortality may occur as a result of strikes with the panels, or particularly true with waterfowl, landing within the solar arrays and not be able to take flight out of the Project. Raising of the perimeter fencing may help alleviate some of the impacts to stranded birds. The Department recommends the County include appropriate minimization and mitigation measures to address any potentially significant impacts. The Department also recommends the County include a vigorous cumulative impact analysis on lake effect taking into consideration the past, present, and known future solar development projects in the vicinity of the Project.

American Badger: The Department recommends the County require the Project proponent to develop a scientifically sound survey methodology that is reviewed by the Department. The Department recommends the Department-reviewed American badger surveys be conducted by a qualified wildlife biologist prior to starting Project-related

activities. Otherwise, the Department recommends that a qualified biologist perform a pre-construction survey before starting Project-related activities. The Department recommends the County require that all burrows that have the potential to be used by American badger be avoided by at least 50 feet and grassland habitat be maintained throughout the Project to provide appropriate foraging habitat. The Department recommends all perimeter fencing be raised 7 to 8 inches above ground level and knuckled under to allow American badger movement into and out of the Project.

Desert Kit Fox: Desert kit fox is protected under CCR, Title 14, Section 460, which prohibits take of the species at any time. The Department recommends that the draft EIR include measures to help ensure the Project complies with this regulation and to avoid the take of desert kit fox. The Department recommends the County require that a qualified biologist conduct surveys following the methodology in the *U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance*, which can be found at http://www.fws.gov/sacramento/es/Survey-Protocols-Guidelines/Documents/kitfox_standard_rec_2011.pdf. While this survey methodology was developed specifically for the San Joaquin kit fox subspecies, it has been found to be effective in detecting dens of the desert fox subspecies as well. If any active or potential dens are found on the Project site, consultation with the Department would be warranted for guidance on take avoidance measures for the desert kit fox. The Department recommends all perimeter fencing be raised seven (7) to eight (8) inches above ground level and knuckled under to allow desert kit fox movement into and out of the Project site and to maintain habitat connectivity.

Listed Plant Species: The NOP states that field surveys for special status plant species will be conducted and the results will be assessed in the draft EIR. The Department recommends conducting repeated floristic surveys by a qualified botanist during the appropriate floristic period(s) to adequately assess the potential Project-related impacts to listed plant species (DFG, 2000; USFWS, 2000) in the year prior to the start of the Project. If plants listed as threatened or endangered pursuant to CESA, including Bakersfield cactus (including potential hybrids), are detected during surveys, consultation with the Department is warranted to discuss the potential for take under CESA. Plants listed as threatened or endangered under CESA cannot be addressed by methods described in the Native Plant Protection Act without incidental take authority secured under sections 2080.1 or 2081 of the Fish and Game Code.

It should be noted that biological survey results are generally only valid for one year after the last survey effort, specifically for annual plant species. Depending on the timing of the start of the Project additional surveys may be necessary.

Lake and Streambed Alteration: The NOP states that streams will be filled and constructed upon. A jurisdictional delineation will be prepared. The Department recommends the County include an analysis of potential Project-related impacts to all streams that could be impacted by the Project and provide appropriate avoidance,

minimization, and mitigation measures (restoration and/or compensation) in the draft EIR prepared for this Project.

Trustee Agency Authority

The Department is a Trustee Agency with the responsibility under the California Environmental Quality Act (CEQA) for commenting on projects that could impact plant and wildlife resources. Pursuant to Fish and Game Code Section 1802, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. As a Trustee Agency for fish and wildlife resources, the Department is responsible for providing, as available, biological expertise to review and comment on environmental documents and impacts arising from project activities, as those terms are used under CEQA.

Responsible Agency Authority

Incidental Take Permit (ITP): The Department has regulatory authority over projects that could result in the take of any species listed by the State as threatened or endangered, pursuant to Fish and Game Code Section 2081, part of CESA. If the Project could result in the take of any species listed as threatened or endangered under CESA, the Department may need to issue an ITP for the Project. CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (Sections 21001{c}, 21083, Guidelines Sections 15380, 15064, 15065). Impacts must be avoided or mitigated to less than significant levels unless the CEQA Lead Agency makes and supports a Statement of Overriding Consideration (SOC). The CEQA Lead Agency's SOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code Section 2080.

Lake and Streambed Alteration Agreement: The Department also has regulatory authority with regard to activities occurring in streams and/or lakes that could adversely affect any fish or wildlife resource, pursuant to Fish and Game Code Section 1600 *et seq.* The Department is required to comply with CEQA in the issuance or the renewal of a Stream Alteration Agreement. Therefore, for efficiency in environmental compliance, the Department recommends that the stream disturbance be described and mitigation for the disturbance be developed as part of the environmental review process. This would reduce the need for the Department to require extensive additional environmental review for a Stream Alteration Agreement for this Project in the future.

Fish and Game Code Jurisdiction

Bird Protection: The Department has jurisdiction over actions which may result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Sections of the Fish and Game Code 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).

Fully Protected Species: The Department also has jurisdiction over fully protected species of birds, mammals, amphibians, reptiles, and fish, pursuant to Fish and Game Code sections 3511, 4700, 5050, and 5515. Take of any fully protected species is prohibited except for necessary scientific research, and the Department cannot authorize their take under the Project. The Department recommends the draft EIR for this Project include appropriate species-specific measures to avoid take of these species. The California condor (*Gymnogyps californianus*) and golden eagle are fully protected species that are known to occur in the Project site vicinity or could occur on the Project site.

Water Quality Protection: 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 the "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species. Deleterious materials can include, but are not limited to, petroleum products, concrete, and sediment.

Thank you for providing us the opportunity to comment on this NOP for this renewable energy Project. If you have any questions regarding these comments, please contact Lisa Gymer, Senior Environmental Scientist Specialist, at the address provided on this letterhead, by telephone at (559) 243-4014, extension 238, or by electronic mail at Lisa.Gymer@wildlife.ca.gov.

Sincerely,



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Regional Manager

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Literature Cited

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