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February 19, 2020

Governor's Office of Planning & Research

MAR 06 2020

STATE CLEARINGHOUSE

Terrance Smalls
Kern County Planning Department
2700 "M" Street, Suite 100
Bakersfield, California 93301

Subject: BigBeau Solar Project (Project)
Draft Environmental Impact Report (DEIR)
SCH No. 2019071059

Dear Mr. Smalls:

The California Department of Fish and Wildlife (CDFW) received a Notice of Availability of a DEIR from the Kern County Planning Department for the above-referenced 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, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through exercise of our 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 our trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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. For example, 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. Also, the Project may be subject to CDFW’s lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.).

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, 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).

PROJECT DESCRIPTION SUMMARY

Proponent: BigBeau Solar, LLC/EDF Renewables Development, Inc.

Objective: The Project is a proposed photovoltaic electrical generating facility with capacity to generate up to 128 megawatt hours (MW) of renewable electric energy and store up to 60 MW energy in a Battery Storage System (BESS). The proposed Project is situated on approximately 2,185 acres of privately-owned land and 160 acres of land owned by the California State Lands Commission. Implementation of the Project as proposed would include the following: (a) Zoning Classification Changes (ZCC) involving a total of approximately 1,367.6 acres; (b) two (2) Conditional Use Permits, each to allow for the construction and operation of a solar photovoltaic electrical generating facility; (c) two (2) Conditional Use Permits, each to allow for the construction and operation of a communication tower; (d) two (2) Conditional Use Permits, each to allow the construction of operation of a concrete batch plant; (e) amendment to the Circulation Element of the Kern County General Plan to remove sections and midsection line road reservations; (f) amendment to the Willow Spring Specific Plan to remove sections and midsection line road reservations; and (g) vacation of existing public easements on the Project site. The Project’s permanent facilities would include service roads, a communication tower, communication cables, overhead and underground transmission lines, an electrical switching station, Project substations, operations and maintenance facilities, PV panels, BESS, fencing, a meteorological station, microwave/communication tower, a power collection system, electrical switchyards and gen-tie line on the Project site. The Project would be supported by a 220-kV overhead transmission corridor.

Location: The proposed project site is located in the south-eastern portion of Kern County near the unincorporated community of Rosamond; west on Rosamond Boulevard, north of 140th Street West, and east on either side of the Avenue of the Stars.

Timeframe: Unspecified.

COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist Kern County Planning Department 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 document.

There are many special-status resources present within the Project location and these resources may need to be evaluated and addressed prior to any approvals that would allow vegetation- or ground-disturbing activities. CDFW have previously submitted a comment letter dated August 29, 2019, for this Project regarding potential impacts to special-status species including, but not limited to, the following special-status species: 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*), coast horned lizard (*Phrynosoma blainvillii*), and mountain plover (*Charadrius montanus*), the State threatened Swainson's hawk (*Buteo swainsoni*, SWHA), the State and federally endangered Bakersfield cactus (*Opuntia basilaris*), the State fully protected golden eagle (*Aquila chrysaetos*), the State threatened Mohave ground squirrel (*Spermophilus mohavensis*, MGS), the State and federally threatened desert tortoise (*Gopherus agassizii*), and desert kit fox (*Vulpes macrotis ssp. macrotis*) which is protected under California Code of Regulations (CCR), Title 14, Chapter 5, Section 460. CDFW appreciates that some of CDFW's recommendations in the August 29, 2019 comment letter were incorporated into the DEIR.

CDFW recommends the Project proponent consult with CDFW regarding obtaining an incidental take permit (ITP) to comply with CESA well before the anticipated start of Project construction. CDFW also recommends the Project proponent consult with the United States Fish and Wildlife Service (USFWS) who administers the federal Endangered Species Act.

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 USFWS?

COMMENT 1: Desert Tortoise

Issue: The Project site is within the range of desert tortoise and based on aerial imagery the site contains a desert wash and desert scrub habitat which is suitable habitat for desert tortoise (CDFW 2020). Desert tortoise are most common in desert scrub, desert wash, and Joshua tree habitats (CDFW 2018). The availability of habitat on the Project site demonstrates that desert tortoise may have the potential to be onsite and impacted by Project activities.

Specific impact: 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). Project activities may result in the loss of potential desert tortoise habitat through conversion, may increase habitat fragmentation, and expand urbanization into the area.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to desert tortoise, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the Environmental Impact Report (EIR) prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 1: Desert Tortoise Surveys

CDFW agrees with Mitigation Measure 4.4-5 in the DEIR that a qualified biologist conduct surveys 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. However, CDFW recommend the surveys be conducted within a year of the start of ground-disturbing activities and during the appropriate survey period when desert tortoise are more likely detectable. Survey results are

advised to be submitted to both CDFW and the USFWS. Please note that CDFW considers desert tortoise surveys to be valid for one year.

Recommended Mitigation Measure 2: Perimeter/Exclusion Fence

Mitigation Measure 4.4-5 in the DEIR proposes the potential use of a permanent tortoise proof exclusion fence prior to the initiation of earth disturbing activities. As stated in our previous letter, CDFW 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. CDFW recommends that exclusion fencing is installed after desert tortoise and Mohave ground squirrel surveys are completed and no desert tortoise or Mohave ground squirrels are detected on-site to avoid take of these species. Fish and Game Code section 86 defines take as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CDFW considers animals trapped within exclusion fencing to be captured and if this occurs absent the acquisition of a State ITP, unauthorized take has occurred in violation of CESA. Alternatively, if the Project acquires an ITP, installation and maintenance of exclusion fencing should follow the requirements of the ITP.

COMMENT 2: Swainson's Hawk (SWHA)

Issue: SWHA have the potential to nest near the Project site, and forage within the Project site. SWHA have been documented to occur near the Project site (CDFW 2020), and SWHA surveys conducted for the Project in a letter dated August 10, 2018 have demonstrated three (3) SWHA nests between one and five miles from the Project site.

Specific impacts: Without appropriate avoidance and minimization measures for SWHA, potential significant impacts that may result from Project activities include: nest abandonment, loss of nest trees, loss of foraging habitat that would reduce nesting success (loss or reduced health or vigor of eggs or young), and direct mortality. Any take of SWHA without appropriate incidental take authorization would be a violation of Fish and Game Code.

Evidence impact is potentially significant: SWHA exhibit high nest-site fidelity year after year and lack of suitable nesting habitat in the Antelope Valley and the Kern County portion of the Mohave Desert limits their local distribution and abundance (CDFW 2016). Approval of the Project may lead to subsequent ground-disturbing activities that involve noise, groundwork, and movement of workers that could affect nests and has the potential to result in nest abandonment and loss of foraging habitat, significantly impacting local nesting SWHA.

Recommended Potentially Feasible Mitigation Measure(s)

Because suitable foraging habitat for SWHA is present throughout the Project site, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 3: No-disturbance Buffer

If ground-disturbing activities are to take place during the normal bird breeding season (March 1 through September 15), CDFW recommends pre-activity surveys in addition to surveys described in "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" (CEC & CDFG 2010). These pre-activity surveys for active nests within a ½-mile of the Project be conducted by a qualified biologist in addition to the protocol surveys no more than 10 days prior to the start of Project implementation to ensure that SWHA have not moved into nesting habitat features between the end of protocol surveys and the start of Project Implementation. CDFW agrees with Mitigation Measure 4.4-7 of the DEIR that a minimum no-disturbance buffer of ½-mile be delineated around active nests 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.

Recommended Mitigation Measure 4: SWHA Take Authorization

In the event an active SWHA nest is detected during surveys and cannot avoid the nest by a minimum ½-mile buffer, consultation with CDFW is warranted to discuss how to implement the project and avoid take. If take cannot be avoided, take authorization through the issuance of an ITP, pursuant to Fish and Game Code section 2081(b) is necessary to comply with CESA.

Recommended Mitigation Measure 5: Loss of SWHA Foraging Habitat

CDFW recommends compensation for the loss of SWHA foraging habitat as described in CDFW's "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" (CEC & CDFG 2010) to reduce impacts to foraging habitat to less than significant. The SWHA survey protocol recommends that plans for mitigating loss of SWHA foraging habitat be mitigated by providing HM lands within the Antelope Valley SWHA breeding range at a minimum 2:1 ratio for such habitat impacted within a five-mile radius of active SWHA nest(s). CDFW considers a nest active if it was used one or more times within the last 5 years

Recommended Mitigation Measure 6: SWHA Nest Trees

CDFW recommends that the removal of known raptor nest trees, even outside of the nesting season, be replaced with an appropriate native tree species planting at a ratio of 3:1 at or near the Project area or in another area that will be protected in perpetuity to reduce impacts resulting from the loss of nesting habitat.

COMMENT 3: Mohave Ground Squirrel (MGS)

Issue: MGS have the potential to occur on the Project site. Surveys following CDFW's MGS guidelines (CDFW 2010) were conducted in 2018 for the Project, and no MGS were captured. According to Condition 11 of CDFW's MGS survey guidelines, if a survey conducted according to the guidelines result in no capture or observation of the Mohave ground squirrel on a project site, this is not necessarily evidence that the Mohave ground squirrel does not exist on the site or that the site is not actual or potential habitat of the species. However, in the circumstance of such a negative result, CDFW will stipulate that the project site harbors no Mohave ground squirrels. This stipulation will expire one year from the ending date of the last trapping on the project site conducted according to these guidelines (CDFW 2010).

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

Evidence impact is potentially significant: Major threats to the MGS are drought, habitat destruction, habitat fragmentation, and habitat degradation (Gustafson 1993). 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). Project activities may result in the loss of potential MGS habitat through conversion into solar fields, may increase habitat fragmentation, and expand urbanization into the area.

Recommended Potentially Feasible Mitigation Measure(s)

To evaluate potential Project-related impacts to MGS, CDFW recommends conducting the following evaluation of the Project site, incorporating the following mitigation measures into the EIR prepared for this Project, and that these measures be made conditions of approval for the Project.

Recommended Mitigation Measure 7: Mohave Ground Squirrel 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 2010) 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 2010). Results of the MGS surveys are advised to be submitted to the CDFW. As indicated above, MGS surveys are valid for one year and CDFW recommend surveys be conducted within a year from the start of ground-disturbing activities.

Recommended Mitigation Measure 8: Mohave Ground Squirrel 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 Code section 2081(b). Alternatively, the applicant can assume presence and acquire an ITP prior to initiating Project implementation as proposed in Section IV – Biological Resources subsection (a).

II. Editorial Comments and/or Suggestions

Nesting Birds: CDFW encourages Project construction occur during the bird non-nesting season (September 16 through January 31). However, if ground-disturbing activities must occur during the breeding season (February 1 through September 15), the Project applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Code sections as referenced above.

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 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 the 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 a qualified biologist conduct 24-hours of monitoring to establish a behavioral baseline of all identified nests. 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 cease and CDFW consulted for additional avoidance and minimization measures.

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. Consult with CDFW if the nest of a listed species is found to determine appropriate avoidance measures or if avoidance is not possible to obtain an ITP. 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 the USFWS on potential impacts to federally listed species including, but not limited to Bakersfield cactus and desert tortoise. Take under the federal Endangered Species Act (ESA) is more broadly defined than CESA; take under ESA 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 ESA, is advised well in advance of any ground-disturbing activities.

ENVIRONMENTAL DATA

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database that 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 California Natural Diversity Database (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

CDFW has determined that the Project will impact fish and/or wildlife; therefore, an assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

CONCLUSION

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

More information on survey and monitoring protocols for sensitive species can be found at CDFW's website (<https://www.wildlife.ca.gov/Conservation/Survey-Protocols>). Questions regarding this letter or further coordination should be directed to Jim Vang, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 243-4014 extension 254, or by electronic email at Jim.Vang@wildlife.ca.gov.

Sincerely,



Julie A. Vance
Regional Manager

Attachment

cc: Ray Bransfield (Ventura Office)
United States Fish and
Wildlife Service
2493 Portola Road, Suite B
Ventura, California 93003

REFERENCES

- California Department of Fish and Game (CDFG). 2010. Mohave Ground Squirrel Survey Guidelines. California Department of Fish and Game, July 2010.
- California Department of Fish and Wildlife (CDFW). 2016. Five Year Status Review for Swainson's Hawk (*Buteo swainsoni*). California Department of Fish and Wildlife. April 11, 2016.
- CDFW. 2020. Biogeographic Information and Observation System (BIOS). <https://www.wildlife.ca.gov/Data/BIOS>. Accessed February 19, 2020.
- California Energy Commission and California Department of Fish and Game (CEC & CDFG). 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. California Department of Fish and Game. 2 June 2010.
- Doak, D., Kareiva, P. and Kleptka, B., 1994. Modeling Population Viability for the Desert Tortoise in the Western Mojave Desert. Ecological Applications, August 1994.
- Gustafson, J., 1993. Report to the Fish and Game Commission: A Status Review of the Mohave Ground Squirrel (*Spermophilus mohavensis*). California Department of Fish and Game, March 1993.
- USFWS, 2010. Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*). United States Fish and Wildlife Service, July 2010.

Attachment 1

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

PROJECT: BigBeau Solar Project

SCH No.: 2019071059

RECOMMENDED MITIGATION MEASURE	STATUS/DATE/INITIALS
<i>Before Disturbing Soil or Vegetation</i>	
Recommended Mitigation Measure 1: Desert Tortoise Surveys	
Recommended Mitigation Measure 2: Perimeter/Exclusion Fence	
Recommended Mitigation Measure 3: No-disturbance Buffer	
Recommended Mitigation Measure 4: SWHA Take Authorization	
Recommended Mitigation Measure 5: Loss of SWHA Foraging Habitat	
Recommended Mitigation Measure 6: SWHA Nest Trees	
Recommended Mitigation Measure 7: Mohave Ground Squirrel Surveys	
Recommended Mitigation Measure 8: Mohave Ground Squirrel Take Authorization	