



DEPARTMENT OF FISH AND WILDLIFE

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GAVIN NEWSOM, Governor  
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Governor's Office of Planning & Research

Mar 29 2021

March 29, 2021

## STATE CLEARINGHOUSE

Ronelle Candia  
Kern County Planning and Natural Resources Department  
2700 "M" Street Suite 100  
Bakersfield California, 93301

**Subject: Aratina Solar Project 2.0 by 64NB 8ME LLC (Project)  
Notice of Preparation (NOP)  
SCH No.: 2021020513**

Dear Ms. Candia:

The California Department of Fish and Wildlife (CDFW) received an NOP from the Kern County Planning and Natural Resources Department for the above-referenced Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup>

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, CDFW appreciates the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under Fish and Game Code.

### CDFW ROLE

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a)). CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species (*Id.*, § 1802). Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

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

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CDFW is also submitting comments as a **Responsible Agency** under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority (Fish & G. Code, § 1600 et seq.). Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), related authorization as provided by the Fish and Game Code may be required.

**Fully Protected Species:** CDFW 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. CDFW prohibits and cannot authorize take of any fully protected species.

**Nesting Birds:** CDFW has jurisdiction over actions with potential to result in the disturbance or destruction of active nest sites or the unauthorized take of birds. Fish and Game Code sections that protect birds, their eggs and nests include, sections 3503 (regarding unlawful take, possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the take, possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful take of any migratory nongame bird).

## **PROJECT DESCRIPTION SUMMARY**

**Proponent:** 64NB 8ME LLC

**Objective:** In August 2020, the Kern County Planning and Natural Resources Department circulated a Notice of Preparation for the previously proposed Aratina Solar Farm Project. Since that time, the project proponent, 64NB 8ME LLC, has modified the project design to incorporate additional setbacks from the unincorporated communities of Boron and Desert Lake and submitted a revised project description to the County. The proposed project described in the Notice of Preparation/Initial Study reflects the modified project, titled the Aratina Solar Project 2.0.

The Aratina Solar Project 2.0, as proposed by 64NB 8ME LLC, would develop a photovoltaic solar facility and associated infrastructure necessary to generate up to 530 megawatt-alternating current (MW-AC) of renewable energy, including up to 600 megawatts of energy storage, on approximately 2,317 acres of privately-owned land. The project site consists of five sites (Sites 1 through 5) located on 22 parcels. The project would be supported by a 230-kilovolt (kV) gen-tie overhead and/or underground electrical transmission line(s) originating from one or more on-site substations and terminating at the Southern California Edison's Holgate Substation to the north. Alternatively, the project may interconnect at Southern California Edison's Kramer

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Substation to the east, located in San Bernardino County via an up to 230kV transmission line located within an Edwards Air Force Base utility corridor. The project's permanent facilities would include, but are not limited to, service roads, a power collection system, inverter stations, transformer systems, transmission lines, electrical switchyards, project substations, energy (battery) storage system, and operations and maintenance facilities.

**Location:** The Project site is located at the western edge of the Mojave Desert. The project site is located on the Boron and Leuhman Ridge 7.5 minute USGS quadrangles. Sites 1,2, and 3 are located within the Boron USGS Quadrangle (USGS 2012; USGS 2018). The Burlington-Santa Fe Railroad crosses the project site, traversing generally north/south through site 3, then paralleling SR 58 east-west.

## **COMMENTS AND RECOMMENDATIONS**

CDFW offers the following comments and recommendations to assist the city of Kern County Planning and Natural Resources 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 CEQA document prepared for this Project.

There are special-status species that have been documented in the Project vicinity and may be present at individual Project sites in the Project area. These resources may need to be evaluated and addressed prior to any approvals that would allow ground-disturbing activities or land use changes.

CDFW is concerned regarding potential impacts to special-status species including, but not limited to, the State and Federally threatened desert tortoise (*Gopherus agassizii*); the State threatened Mojave ground squirrel (*Sterna antillarum browni*) and Swainson's Hawk (*Buteo swainsonii*); the State candidate for CESA listing western Joshua tree (*Yucca brevifolia*); and the State species of special concern American badger (*Taxidea taxus*), northern legless lizard (*Anniella pulchra*), burrowing owl (*Athene cunicularia*), and loggerhead shrike (*Lanius ludovicianus*). In order to adequately assess any potential impact to biological resources, focused biological surveys should be conducted by a qualified wildlife biologist/botanist during the appropriate survey period(s) in order to determine whether any special-status species may be present within the Project area. Properly conducted biological surveys, and the information assembled from them, are essential to identify any mitigation, minimization, and avoidance measures and/or the need for additional or protocol-level surveys, and to identify any Project-related impacts under CESA and other species of concern.

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## **I. Environmental Setting and Related Impact**

**Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or the United States Fish and Wildlife Service (USFWS)?**

### **COMMENT 1: Desert Tortoise**

**Issue:** The Project site is within the range of desert tortoise and based on aerial imagery, appears to contain suitable habitat for desert tortoise. Desert tortoise are most common in desert scrub, desert wash, and Joshua tree habitats (CDFW, 2018).

**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, Kareiva, Kleptka, 1994). Habitat conversion to agriculture results in the loss of habitat and may lead to an increase in the predator raven population, drawdown of water table, introduction of pesticides and other toxic chemicals, and the potential introduction of invasive plants (Boarman, 2002). Project activities may result in the loss of potential desert tortoise habitat through conversion and may increase habitat fragmentation.

### **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 and including the following measures in the EIR.

### **Recommended Mitigation Measure 1: Desert Tortoise Surveys**

CDFW advises surveys for desert tortoise be conducted by a qualified wildlife biologist who understands and will follow the pre-project survey protocol as outlined in "Preparing for any action that may occur within the range of the Mojave Desert tortoise (*Gopherus agassizii*)" (USFWS, 2010) and has previous experience surveying for desert tortoise. Survey results are advised to be submitted to both CDFW and the USFWS.

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### **Recommended Mitigation Measure 2: Desert Tortoise Take Authorization**

If desert tortoise is found within the Project area during surveys or construction activities, consultation with CDFW is advised to discuss how to implement the Project and avoid take; or if avoidance is not feasible, to acquire an Incidental Take Permit (ITP) pursuant to Fish and Game Code section 2081 subdivision (b) prior to any vegetation- or ground-disturbing activities. Any take of desert tortoise without take authorization would be a violation of Fish and Game Code section 2080. Alternatively, the Project can forego desert tortoise surveys advised in Recommended Mitigation Measure 1, assume presence of desert tortoise, and request an ITP.

### **COMMENT 2: Mohave Ground Squirrel (MGS)**

**Issue:** The Project site is within the range of MGS and based on aerial imagery, the Project site appears to contain suitable habitat for MGS.

**Specific impact:** Without appropriate avoidance and minimization measure 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 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 and may increase habitat fragmentation.

### **Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential Project-related impacts to MGS, CDFW recommends conducting the following evaluation of the Project site and including the following measures in the EIR.

### **Recommended Mitigation Measure 3: MGS Surveys**

CDFW recommends that a qualified biologist, with appropriate permits, conduct protocol surveys for MGS following the methods described in the "Mohave Ground Squirrel Survey Guidelines" (CDFG, 2003) during the appropriate survey season prior to Project implementation. Survey methods include trapping by a qualified biologist up to three times per trapping season. Results of the MGS surveys are advised to be submitted to

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the CDFW prior to ground disturbance. Please note MGS surveys are valid for one year and should be conducted within a year of the start of ground-disturbing activities.

#### **Recommended Mitigation Measure 4: MGS Avoidance**

In order to implement full avoidance for MGS, CDFW recommends a 50-foot no disturbance buffer be employed around all burrows that could be used by MGS.

#### **Mitigation Measure 5: MGS Take Authorization**

If MGS are found within the Project area during 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 pursuant to Fish and Game Code section 2081 subdivision (b) prior to any ground-disturbing activities. Any take of MGS without take authorization would be a violation of Fish and Game Code section 2080. Alternatively, the Project can forego MGS surveys advised in Recommended Mitigation Measure 3, assume presence of MGS, and request an ITP.

#### **COMMENT 3: Swainson's Hawk (SWHA)**

**Issue:** SWHA have the potential to forage within, and nest near, the Project site. Aerial imagery shows the presence of suitable foraging habitat for the species.

**Specific impacts:** Without appropriate avoidance and minimization measures for SWHA, potential significant impacts that may result from Project activities include 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:** The Project as proposed will involve noise, groundwork, and movement of workers that could affect nests and has the potential to result in nest abandonment, significantly impacting local nesting SWHA.

#### **Recommended Potentially Feasible Mitigation Measure(s)**

Because suitable habitat for SWHA is present throughout the Project site, CDFW recommends conducting the following evaluation of the Project site and including the following measures in the EIR.

#### **Recommended Mitigation Measure 6: SWHA Surveys**

To evaluate potential impacts, CDFW recommends that a qualified wildlife biologist conduct surveys as described in the Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Projects in the

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Antelope Valley of Los Angeles and Kern Counties, California (2010) prior to project implementation. The survey protocol includes early season surveys to assist the project proponent in implementing necessary avoidance and minimization measures, and in identifying active nest sites prior to initiating ground-disturbing activities.

**Recommended Mitigation Measure 7: No-disturbance Buffer**

If ground disturbing activities are to take place during the normal bird breeding season (March 1 through September 15), CDFW recommends that additional pre activity surveys for active nests be conducted by a qualified biologist no more than 10 days prior to the start of Project implementation to ensure that no SWHA have begun nesting activities near the Project site. CDFW recommends a minimum no disturbance buffer of 0.5-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 8: SWHA Foraging Habitat**

CDFW recommends compensation for the loss of SWHA foraging habitat to reduce impacts to SWHA foraging habitat to less than significant based on 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 (2010).

**Recommended Mitigation Measure 9: SWHA Take Authorization**

CDFW recommends that in the event an active SWHA nest is detected during surveys and the ½-mile no-disturbance buffer around the nest cannot feasibly be implemented, 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 subdivision (b) is necessary to comply with CESA. Although the Project may assume presence of SWHA for purposes of acquiring an ITP, CDFW recommends that SWHA surveys advised in Recommended Mitigation Measure 6 are still conducted to determine what, if any, foraging habitat compensation is necessary as advised in Recommended Mitigation Measure 8.

**COMMENT 4: Burrowing Owl (BUOW)**

**Issue:** BUOW have been documented near the Project site (CDFW 2021). BUOW inhabit open grassland or adjacent canal banks, ROWs, vacant lots, etc. containing small mammal burrows, a requisite habitat feature used by BUOW for nesting and cover.

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**Specific impact:** Potentially significant direct impacts associated with subsequent activities include burrow collapse, inadvertent entrapment, nest abandonment, reduced reproductive success, reduction in health and vigor of eggs and/or young, and direct mortality of individuals.

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

**Recommended Potentially Feasible Mitigation Measure(s) (Regarding Environmental Setting and Related Impact)**

To evaluate potential impacts to BUOW, 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 10: BUOW Surveys**

CDFW recommends assessing presence/absence of BUOW by having a qualified biologist conduct surveys following the California Burrowing Owl Consortium's "Burrowing Owl Survey Protocol and Mitigation Guidelines" (CBOC 1993) and CDFW's Staff Report on Burrowing Owl Mitigation" (CDFG 2012). Specifically, CBOC and CDFW's Staff Report suggest three or more surveillance surveys conducted during daylight with each visit occurring at least three weeks apart during the peak breeding season (April 15 to July 15), when BUOW are most detectable. These surveys are to determine if there are more BUOW in addition to the December 2017 observation surveyed for the Project.

**Recommended Mitigation Measure 11: BUOW Avoidance**

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

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

\* meters (m)

### **Recommended Mitigation Measure 12: BUOW Passive Relocation and Mitigation**

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

### **COMMENT 5: Special-Status Plant species**

**Issue:** Plants listed pursuant to federal Endangered Species Act, CESA, and the Native Plant Protection Act, as well as other special status plants such California Rare Plant Rank (CRPR) plant species have been documented to occur in and around the Project area (CDFW 2021). Based upon available aerial photography, western Joshua tree appears to occur within the Project site.

**Specific impact:** Without appropriate avoidance and minimization measures potential impacts to special-status plant species include inability to reproduce and direct mortality. Unauthorized take of species listed as threatened, endangered, or rare pursuant to CESA or the Native Plant Protection Act is a violation of Fish and Game Code.

**Evidence impact would be significant:** Special-status plant species plant species are threatened with habitat loss and habitat fragmentation resulting from development, vehicle and foot traffic, and introduction of non-native plant species (CNPS 2020), all of which may be unintended impacts of the Project. Therefore,

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impacts of the Project have the potential to significantly impact populations of the species mentioned above.

**Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts to special-status plants associated with the Project, CDFW recommends conducting the following evaluation of the Project area and including the following mitigation measures as conditions of Project approval in the Project's EIR.

**Recommended Mitigation Measure 13: Special-Status Plant Habitat Assessment**

CDFW recommends that a qualified botanist conduct a habitat assessment of individual Project sites well in advance of Project implementation, to determine if the Project area or its vicinity contains suitable habitat for special-status plant species.

**Recommended Mitigation Measure 14: Focused Surveys**

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

**Recommended Mitigation Measure 15: Special-Status Plant Avoidance**

CDFW recommends special-status plant species be avoided whenever possible by delineation and observing a no-disturbance buffer of at least 50 feet from the outer edge of the plant population(s) or specific habitat type(s) required by special-status plant species with the exception of western Joshua Tree. CDFW recommends a no-disturbance buffer for individual western Joshua trees of 290 feet. A 290-foot buffer is warranted to not only avoid impacts to individual trees, but potential impacts to the seed bank as well. Vander Wall et. al. 2006 documented 290 feet as maximum distance of seeds dispersed carried by rodents. 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.

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### **Recommended Mitigation Measure 16: Special-Status Plant Take Authorization**

As stated above, Joshua tree appears to occur on the Project site based upon available aerial photography. Therefore, consultation with CDFW is warranted to discuss take authorization. If another State-listed plant species is identified during botanical surveys, consultation with CDFW is warranted to determine if the Project can avoid take of that species. If take cannot be avoided, take authorization would need to be acquired by the Project proponent through the acquisition of an ITP from CDFW to comply with CESA and/or Fish and Game Code section 1900 and California Code of Regulations, title 14, section 786.9, subdivision (b).

### **COMMENT 6: Other Species of Special Concern**

**Issue:** American badger, loggerhead shrike, and northern legless lizard have the potential to occur in the project vicinity. Suitable habitat for these species is present within the project area.

**Specific impact:** Without appropriate avoidance and minimization measures for these special status species potentially significant impacts associated with the Project's activities could include site abandonment which may result in reduced health or vigor of eggs and/or young, and/or direct mortality.

**Evidence impact is potentially significant:** The Project area has the capacity to support the species and thus, subsequent ground-disturbing activities involved with the Project have the potential to impact the species.

### **Recommended Potentially Feasible Mitigation Measure(s)**

To evaluate potential impacts to these special status species, 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 17: Species Specific Surveys**

If suitable habitat is present, CDFW recommends that a qualified biologist conduct focused surveys for each of these species and their requisite habitat features using the appropriate survey protocol to evaluate potential impacts resulting from Project-related activities.

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### **Recommended Mitigation Measure 18: Special-Status Species Avoidance**

Avoidance whenever possible is encouraged via delineation however, a qualified biologist with the appropriate handling permit may relocate special status species out of the project area into a nearby area with suitable habitat.

### **Recommended Mitigation Measure 19: American Badger Avoidance**

If suitable badger dens are present, avoidance whenever possible is encouraged via delineation and observation of a 50-foot no-disturbance buffer around dens until it is determined through non-invasive means that individuals occupying the den have dispersed.

## **II. Editorial Comments and/or Suggestions**

**Desert Kit Fox:** Desert kit fox (*Vulpes macrotis arsipus*) is protected under the California Code of Regulations, Chapter 5, Section 460, which prohibits “take” of the species for any reason. 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.

**Federally Listed Species:** CDFW recommends consulting with the USFWS on potential impacts to federally listed species including, but not limited to, desert tortoise. Take under 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 ground-disturbing activities.

**Nesting birds:** CDFW encourages Project implementation at individual Project sites occur during the bird non-nesting season if suitable nesting bird habitat is present. However, if ground-disturbing activities must occur during the breeding season (February through mid-September), the Project’s applicant is responsible for ensuring that implementation of the Project does not result in violation of the Migratory Bird Treaty Act or relevant Fish and Game Codes as referenced above.

To evaluate Project-related impacts on nesting birds if suitable habitat is present, 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

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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. 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. 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.

## **ENVIRONMENTAL DATA**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations (Pub. Resources Code, § 21003, subd. (e)). Accordingly, please report any special-status species and natural communities detected during Project surveys to the 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**

If it is determined that the Project has the potential to impact biological resources, an assessment of filing fees will be 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 for the underlying project approval to be operative, vested, and final (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089).

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CDFW appreciates the opportunity to comment on the Project to assist the Kern County Planning and Natural Resources 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>). If you have any questions, please contact Jaime Marquez, Environmental Scientist, at the address provided on this letterhead, by telephone at (559) 243-4014, extension 291, or by electronic mail at [Jaime.Marquez@wildlife.ca.gov](mailto:Jaime.Marquez@wildlife.ca.gov).

Sincerely,

DocuSigned by:  
  
041A77B10D78486...  
Julie A. Vance  
Regional Manager

Attachment

cc: United States Fish and Wildlife Service  
2800 Cottage Way, Suite W-2605  
Sacramento, California 95825

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## LITERATURE CITED

- Boarman, W. I., 2002. Threats to desert tortoise populations: a critical review of literature. U.S. Geological Survey Western Ecological Research Center, August 9, 2002.
- California Burrowing Owl Consortium. 1993. Burrowing owl survey protocol and mitigation guidelines. April 1993.
- California Department of Fish and Game (CDFG). (2003). Mohave ground squirrel survey guidelines. California Department of Fish and Game.
- California Department of Fish and Wildlife (CDFW), 2018. California Wildlife Habitat Relationship System, Desert Tortoise.  
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=2659&inline=1>. Accessed February 11, 2021.
- CDFG. 2012. Staff Report on Burrowing Owl Mitigation. California Department of Fish and Game.
- CDFW. 2016. Five Year Status Review for Swainson's Hawk (*Buteo swainsoni*). California Department of Fish and Wildlife. April 11, 2016.
- CDFW, 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. California Department of Fish and Wildlife. March 20, 2018.
- CDFW. 2021. Biogeographic Information and Observation System (BIOS).  
<https://www.wildlife.ca.gov/Data/BIOS>. Accessed March 16, 2021
- California Energy Commission and 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 Energy Commission and Department of Fish and game, June 2, 2010.
- California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website  
<http://www.rareplants.cnps.org>. Accessed March 16, 2021.
- Gervais, J.A., D.D. Rosenberg, and L.A. Comrack. Burrowing Owl (*Athene cunicularia*) in Shuford, W.D. and T. Gardali, editors. 2008. California Bird Species of Special

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Grinnell, J., and A. H. Miller. 1944. The Distribution of Birds of California. Pacific Coast Avifauna 27. Cooper Ornithological Club, Berkeley, CA, USA.

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.

Monson, G. 1960. The nesting season. Southwest Regional Report, Audubon Field Notes 14:469.

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.

**Attachment 1**

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

**PROJECT: Aratina Solar Project 2.0  
SCH No.: 2021020513**

| <b>RECOMMENDED MITIGATION MEASURE</b>                          | <b>STATUS/DATE/INITIALS</b> |
|--|-----------------------------|
| <i>Before Disturbing Soil or Vegetation</i>                    |                             |
| Mitigation Measure 1: Desert Tortoise Surveys                  |                             |
| Mitigation Measure 2: Desert Tortoise Take Authorization       |                             |
| Mitigation Measure 3: MGS Surveys                              |                             |
| Mitigation Measure 5: MGS Take Authorization                   |                             |
| Mitigation Measure 6: SWHA Surveys                             |                             |
| Mitigation Measure 8: SWHA Foraging Habitat                    |                             |
| Mitigation Measure 9: SWHA Take Authorization                  |                             |
| Mitigation Measure 10: BUOW Surveys                            |                             |
| Mitigation Measure 12: BUOW Passive Relocation and Mitigation  |                             |
| Mitigation Measure 13: Special-Status Plant Habitat Assessment |                             |
| Mitigation Measure 14: Focused Surveys                         |                             |
| Mitigation Measure 16: Special-Status Plant Take Authorization |                             |
| Mitigation Measure 17: Species Specific Surveys                |                             |
|  |                             |
| <i>During Construction</i>                                     |                             |
| Mitigation Measure 4: MGS Avoidance                            |                             |
| Mitigation Measure 7: No-Disturbance Buffer                    |                             |
| Mitigation Measure 11: BUOW Avoidance                          |                             |
| Mitigation Measure 15: Special-Status Plant Avoidance          |                             |
| Mitigation Measure 18: Special-Status Species Avoidance        |                             |
| Mitigation Measure 19: American Badger Avoidance               |                             |