



DESERT TORTOISE COUNCIL

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Via email only

14 August 2020

Ronelle Candia
Kern County Planning Department
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Bakersfield, CA 93301-2323
CandiaR@kerncounty.com

RE: RB Inyokern Solar Project Draft Environmental Impact Report (SCH# 2017071020)

Dear Ms. Candia,

The Desert Tortoise Council (Council) is a non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

We appreciate this opportunity to provide comments on the above-referenced project. Given the location of the proposed project in habitats likely occupied by Agassiz's desert tortoise (*Gopherus agassizii*) (synonymous with "Mojave desert tortoise"), our comments pertain to enhancing protection of this species during activities authorized by Kern County Planning and Natural Resources Department (Kern County).

Description of Proposed Action

R&L Capital, Inc. (Proponent) is proposing to construct and operate a solar photovoltaic (PV) power generating facility and associated facilities. The proposed location is on private land in Inyokern, Kern County, California. The lifespan of the PV power generating facility is 35 years.

Kern County has prepared the RB Inyokern Solar Project Draft Environmental Impact Report (DEIR) (SCH# 2017071020) that analyzes the impacts of the Proponent's proposed action and three other action alternatives.

Alternatives

Kern County determined the following four alternatives, in addition to the No Project Alternative, as representing a reasonable range of alternatives that have the potential to attain most of the basic objectives of the Proposed Action:

1. No Project Alternative - No development would occur on the project site. The project site would remain unchanged.
2. Proposed Project (Project) – The Proponent would construct a solar PV facility that would generate a combined total of approximately 26.6 megawatts (MW) of renewable electrical energy. The Project's permanent facilities would include solar PV modules on a tracker system, energy storage systems (i.e., batteries), an operations and maintenance building, fenced switchyards, electrical collector system and inverters, gen-tie lines, overhead or underground telecommunication facilities and meteorological station, security fencing, and access roads. Battery technology is not identified but may include, but is not limited to, lithium ion, lead acid, sodium sulfur, and sodium or nickel hydride or any type of flow batteries. Water for day-to-day maintenance would be either from an onsite water well or trucked onto the site. Chain-link security fencing would be installed around the site perimeter.

The Proponent would construct 150 feet of a new gen-tie line that would connect with an existing Southern California Edison (SCE) 33-kilovolt (kV) electrical distribution line to an existing SCE Inyokern Substation approximately 0.5 mile to the east. The 166.5-acre Project would be constructed in two phases (Phase 1 = 20 MW on 124.5 acres, and Phase 2 = 6.6 MW on 42 acres), depending on market conditions. Phase 1 is located north of Inyokern Road (State Route 178 [SR 178]) and bordered by US 395 to the east, and Brown Road to the west, with a wastewater treatment facility on the northeast border. Phase 2 is located immediately south of Phase 1.

3. General Plan/Specific Plan and Zoning Build-Out Alternative – Under this alternative, the 166.5-acre Project Site would be developed to the maximum intensity allowed under the current Kern County General Plan land use designations, Inyokern Specific Plan, Kern County zoning, and other existing applicable restrictions. Under this alternative, the entire Project Site would be developed with commercial and industrial land uses that include outdoor storage and/or the use of heavy equipment, including general manufacturing processing and assembly activities.
4. Reduced Project Alternative – The Proponent would construct and operate one solar facility on approximately 124.5 acres, situated on the southern parcel of the Project site, would generate up to 20 MW of electricity and battery energy storage and deliver it to the grid. The project site would require Conditional Use Permit (CUP) and Specific Plan Amendment (SPA) approvals.

5. No Ground-Mounted Utility-Solar Development Alternative – Distributed Commercial and Industrial Rooftop Solar Only – For this alternative, the Proponent would construct 26.6 MW of PV solar distributed on rooftops throughout the Indian Wells Valley. Electricity generated would be for on-site use only. The battery energy storage facility would not be constructed as part of this alternative. Kern County identified this alternative as the Environmentally Superior Alternative.

Regarding the action alternatives, the Council appreciates the inclusion of a “rooftop solar” alternative (Alternative 5) and supports this alternative for implementation. We concur this is an environmentally superior alternative for numerous reasons, one of which is avoiding impacts to species of special concern and the habitats they use [e.g., Mohave ground squirrel (*Xerospermophilus mohavensis*) and Mojave desert tortoise]. However, we question why the electricity generated would be for on-site use only and battery energy storage would not be included. For example, more than 90 percent of residential rooftop solar applications are not for on-site use only as they send the energy generated to the electrical grid. We found no explanation in the DEIR as to why this technology was not included in this alternative, and therefore request that it be addressed in the Final EIR.

Environmental Setting

According to the DEIR, no live desert tortoises were observed on or adjacent to the Project Site during protocol surveys conducted in 2015. However, the Project Site contains suitable habitat to support this species and an old carcass was found onsite. We remind Kern County that protocol surveys for the Mojave desert tortoise are only accepted by California Department of Fish and Wildlife (CDFW) for 1 year. Consequently, the area on and adjacent to the Project Site would need to be surveyed again for the tortoise. For the Mohave ground squirrel, potentially suitable habitat exists within the Project Site; and this species was observed during focused surveys.

We were unable to find an analysis of the direct and indirect impacts to the Mojave desert tortoise, Mohave ground squirrel, other species of special concern, and their habitats from increased use of the Project Site and nearby areas by predators of the tortoise, including common ravens (*Corvus corax*) and coyotes (*Canis latrans*). For example, grading, excavation, and other forms of ground disturbance result in exposure of and injury/mortality to burrowing and fossorial animals. This new food source attracts predators of the tortoise, ground squirrel and other species of special concern to the Project Site and increases predation pressure on these species that occur in the area. In addition, water would be used during construction to reduce fugitive dust, and during operation and maintenance to wash PV panels. We request that the Final EIR include an analysis of these impacts.

In the DEIR, Kern County says, “[t]he project site is predominantly Mojave creosote bush scrub with allscale scrub along the western margins in the south. Because of past disturbances, the project site has a high proportion of non-native species, including red-stemmed filaree (*Erodium cicutarium*), Saharan mustard (*Brassica tournefortii*), London rocket (*Sisymbrium irio*), Russian thistle (*Salsola tragus*), red brome (*Bromus madritensis* ssp. *rubens*), and cheat grass (*B. tectorum*).”

We were unable to find in the DEIR an analysis of direct or indirect impacts to the Mojave desert tortoise, Mohave ground squirrel, and other species of special concern and their habitats from the introduction of new and spread and proliferation of non-native invasive plant species at the Project Site and nearby areas.

Invasive plants cause several problems for desert ecosystems. Exotic annuals increase the fuel load and the frequency of fires in vegetation types (i.e., Mojave creosote bush scrub) that are poorly adapted to fire. Exotic plants may induce allelopathic effects, which hinder the growth or establishment of other plant species (BLM 2016). For example, roads promote the spread and establishment of exotic plants, either via the passage of vehicles or during construction, and act as corridors of disturbed land along which exotic plants can spread into otherwise undisturbed native vegetation (Brooks and Lair 2005, BLM 2016).

For the Mojave desert tortoise, impacts from invasive plants include competition for limited resources between native and nonnative plant species (Lovich and Bainbridge 1999); reduction in availability and quality of nutritious forage for tortoises that are essential for survival, reproduction, growth, and recruitment; and promotion of fine fuels that spread fire and damage/destroy woody shrubs and can result in plant type conversion to annual plant species.

We request that the Final EIR include an analysis of these impacts to the tortoise, ground squirrel, and species of special concern.

Mitigation Measures (MM)

Under Aesthetics (4.1) MM 4.1-3.e. says, “Prior to the commencement of project operations and decommissioning, the project proponent/operator shall submit a Landscape Revegetation and Restoration Plan for the project site to the Kern County Planning and Natural Resources Department for review and approval.”

This mitigation measure is under the Aesthetics section but it should also be relevant to the Biological Resources section. As such, its purpose and success standards should reflect its biological importance (e.g., native plant species biodiversity, habitat for wildlife including listed species and species of special concern, etc.). We have provided an attachment for your use including best management practices for restoration of desert habitats (Abella and Berry 2016).

Because of the presence of a live Mojave ground squirrel and evidence of use of the habitat by the Mojave desert tortoise, we request that the Landscape Revegetation and Restoration Plan be submitted to the U. S. Fish and Wildlife Service (USFWS) and CDFW for their review and approval. The native vegetation established at the Project Site should consist of the diversity, density, and cover of species native to nearby undisturbed areas to restore the area to vegetation used by listed species and species of special concern.

In addition, MM 4.1-3.e. says “[t]he three-year monitoring program is intended to ensure the site naturally achieve native plant diversity, establishes perennials...” We note that in these times of climate changes and extended drought conditions and climate change, three years would likely be inadequate to establish native perennial species and achieve native plant diversity. A more realistic time would be 7 to 10 years.

Finally, MM 4.1-3.e. says, “Should efforts to revegetate ...prove in the second year to not be successful by 75 percent cover rate, re-evaluation of revegetation methods shall be made in consultation with the Kern County Planning and Natural Resources Department and an additional year shall be added to the monitoring program to ensure coverage is achieved.”

We are unsure what is meant by a 75 percent cover rate as we can interpret this three ways – (1) 75 percent of the Project Site will have been revegetated to the level of density, diversity and cover that undisturbed areas have; (2) the Project Site will have achieved a 75 percent cover rate of the typical 25 percent cover found in woody plants in Mojave creosote bush scrub; or (3) the Project Site will have a plant cover rate of 75 percent including annual and perennial plants. We suggest that the DEIR clarify this statement.

We were unable to locate in the DEIR what the requirements would be if the 75 percent cover rate is not achieved by the end of the third year. It appears the Proponent would have met their commitment to revegetate the site, but may not have met the success standards. We request that the Proponent be required to revegetate to the “to be determined” success standards, to provide monitoring reports annually to Kern County and CDFW to demonstrate the Proponent is progressing working toward achieving success standards, and to remove an end time when the Proponent’s revegetation efforts would cease. These requirements would provide an incentive to the Proponent to successfully revegetate the site with native plants to meet the success standards as soon as feasible.

Under Air Quality (Section 4.3), MM 4.3-2.d. says, “[a] Revegetation Plan shall be submitted for approval to the Kern County Planning and Natural Resources Department. To minimize long term dust issues from the project, the project site shall be revegetated (consistent with existing site conditions).” “Following construction completion, the project area shall be re-seeded with native vegetation. See Mitigation Measure MM 4.1-3 for plan specifications.” We request that the CDFW and USFWS be added to the list of entities that review and approve the Revegetation Plan because of the presence of the state threatened Mohave ground squirrel, and use of the Project Site by the Mojave desert tortoise and species of concern.

We were unable to find a requirement for a plan to manage/control invasive plant species at the Project Site. We request that an Invasive Species Management Plan be developed and implemented during all phases of the Project that includes regular monitoring and removal of invasive plant species. Our reasons for this request were provided above under Environmental Setting.

Under Biological Resources (Section 4.4), Kern County says, the Proponent applied to CDFW for a Section 2081 Incidental Take Permit in the spring of 2020. Obtaining this permit is necessary to comply with Mitigation Measure 4.4-4.a., which says, “Pre-construction tortoise clearance surveys shall be conducted at 15-foot intervals to locate any desert tortoises prior to grading or ground disturbance. The surveys shall be conducted by an authorized biologist within 24 hours of the onset of the surface disturbance and prior to the installation of all tortoise-proof fencing. An “authorized biologist” is defined as a wildlife biologist who has been authorized to handle desert tortoises by U.S. Fish and Wildlife Service and California Department of Fish and Wildlife for this project.” CDFW is not able to authorize a biologist to handle a species listed

under the California Endangered Species Act until it issues a Section 2081 Incidental Take Permit for that species and that project. Similarly, USFWS is not able to authorize a biologist to handle a species listed under the Federal Endangered Species Act until it issues a Section 10(a)(1)(B) Incidental Take Permit for that species and that project. We request Kern County add this requirement to the DEIR and require these permits if handling or other forms of take are likely to occur.

For MM 4.4-4.c., please add to the requirement for inspection of desert tortoise exclusion fencing that inspections will occur immediately after a rainfall event on the Project Site or immediately upgradient of the Project Site. In addition, please include that if the inspection reveals damage to the fence, it will be repaired/replaced within 8 hours.

For MM 4.4-4.g. please add that the authorized biologist shall investigate how a tortoise was able to access the Project Site after completion of tortoise clearance surveys and construction and maintenance of the tortoise exclusion fence around the project site. Immediately after its discovery, the access point(s) would be fixed so ingress of a tortoise to the Project Site does not occur again. The authorized biologist would submit a report to the USFWS, CDFW, and Kern County on the findings and implemented remedies within 30 days of the discovery of the tortoise.

For MM 4.4-5, please add the qualified biologist must also be approved by the CDFW.

For MM 4.4-5.e., please add “[a]ny individuals who undertake biological monitoring and mitigation tasks shall be supervised on site by the qualified biologist(s).” We believe this is a CDFW requirement.

For MM 4.4-6, please add “Any employee, contractor, or other person(s) working at the project site who are participating in the operations, maintenance, and/or decommissioning of the project facilities, including implementation of mitigation, shall also attend the Worker Environmental Awareness Training and Education Program prior to starting work on the project and on an annual basis.”

MM 4.4-7.g says, “To prevent inadvertent entrapment of desert kit foxes, American badgers, or other animals during construction, all excavated, steep-walled holes or trenches more than 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.” We are unsure how Kern County determined that a depth of 2 feet is the minimum depth in which animals would become entrapped in a steep-sided hole or trench. For example, an adult tortoise would have a difficult time leaving a steep-walled trench 18 or 20 inches deep while a smaller tortoise would be entrapped in a smaller depth hole or trench. We request that Kern County provide a citation that supports the claim that a steep-sided hole or trench less than 2 feet deep provides egress for animals. Absent this citation, we request that all steep-sided holes or trenches be covered or provided with escape ramps and that they be inspected in the morning and evening for animals.

We find MM 4.4-7.h. to be unclear. It says, “all construction pipes, culverts, or similar structures with a diameter of 4 inches or more that are stored at a construction site (during operation or maintenance) for one or more overnight periods shall be thoroughly inspected by a qualified biologist for special-status wildlife or nesting birds before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If an animal is discovered inside a pipe, that section of pipe shall not be moved...”

We are unsure whether this mitigation measure would be implemented during the construction phase, as it says construction pipes, culverts, or similar structures, the operation and maintenance phase, as this wording is parenthetically added, or both. We request that this mitigation measure be clarified to include all phases of the Project. However, a typical best management practice is that all pipes and similar structures are capped to prevent animals from using them.

MM 4.4 – 8. This mitigation measure requires the development of a Raven Management Plan for the Project Site, which requires during construction, the identification of raven nests onsite and implementation of measures onsite to reduce its attractiveness to ravens; during operation, the inspection for raven nests; and during decommissioning, minimization of practices that attract ravens.

The wording during the operation phase only requires inspection of raven nests. Resources associated with human activities have allowed raven populations to grow beyond their “natural” carrying capacity in the desert habitat (Boarman 1993). For example, powerline poles and towers provide artificial perches and nest sites for common ravens (Lovich and Bainbridge 1999). Ravens are able to fly at least 30 miles in search of food and water on a daily basis (Boarman et al. 2006). Boarman (2003) reports that tortoise shells have been found beneath active raven nests and shells with evidence of raven predation have been found beneath likely raven perch sites. Mojave desert tortoises experience hyperpredation (Boarman 2003) when the raven population is maintained by some abundant, often introduced prey (e.g., human subsidies of food) but depredate rare native prey (e.g., Mojave desert tortoise) when they encounter them in the same habitat.

We request that the Raven Management Plan require implementing effective deterrents to prevent ravens from nesting, perching, or roosting on newly constructed buildings, fences, gen-tie poles, and other vertical structures that would subsidize their abilities to more effectively hunt wildlife species including Mojave desert tortoise, Mohave ground squirrel, and species of special concern in and near the Project Site. In addition, the Project will provide a water source for ravens during all phases. Please see our comments above under MM 4.3-1.a.i. In addition, in Appendix M Utilities and Service Systems, Kern County says the PV panels would be washed four times a year. This is another potential water source if water is allowed to pool. The Raven Management Plan should prohibit pooling of water on the Project Site.

We were unable to find a description of the poles that would be used for construction of the gen-tie line. Because common ravens are known to use lattice towers for nesting, we request that the Proponent use monopoles for supporting the gen-tie lines and other transmission lines associated with the Project to reduce the substrate available for nest construction.

The Raven Management Plan would be “approved by the Kern County Planning and Natural Resources Department.” We request that the USFWS and CDFW review and approve of this plan.

USFWS (2010) provides a template for a project-specific management plan for common ravens. This template includes sections on construction, operation and maintenance, and decommissioning (including restoration) with monitoring and adaptive management during each project phase. We request the Raven Management Plan follow the guidance developed by the USFWS (2010).

In the DEIR, Kern County mentions several plans that would be developed to mitigate the impacts of the Project. Some mitigation plans that are relevant to the Mojave desert tortoise, Mohave ground squirrel, and species of special concern include mitigation for aesthetics, air quality, biological resources, and hazards/hazardous materials. These plans include: aesthetics = Landscape Revegetation and Restoration Plan; air quality = Fugitive Dust Emissions Control and Monitoring Plan; biological resources = Raven Management Plan, Phased Grading Plan, Seed Harvesting, Storage, and Planting Plan, Stormwater Pollution Prevention Plan, Erosion Control Plan, Burrowing Owl Exclusion Plan, Habitat Mitigation and Monitoring Plan; and hazards and hazardous materials = Hazardous Materials Business Plan. Kern County says, “with implementation of these mitigation measures,” which includes the to-be-developed mitigation plans, “impacts [to these resource issues] would be less than significant.”

Unfortunately, the DEIR does not provide a draft of these mitigation plans. The public must trust that Kern County will ensure that these plans will be adequate, science-based, and effective, include monitoring and adaptive management, and have measurable objectives/success criteria in achieving what Kern County asserts they will do. We contend the absence of these crucial mitigation plans is not acceptable under CEQA as the DEIR does not provide sufficient information about these plans to conclude the impacts to these resource issues would be less than significant. We request that Kern County include the draft mitigation plans in the Final EIR, so the decisionmaker and the public have sufficient information to see if the plans will achieve what Kern County says they will achieve, especially those mitigation plans affecting the Mojave desert tortoise, Mohave ground squirrel, and species of special concern.

In addition to the development of these mitigation plans, we request that Kern County require an Invasive Species Management Plan and Fire Prevention and Management Plan be developed and implemented for the Project. Both plans are needed because invasive species fuel and carry fires, and batteries and other material stored/used at the Project Site (e.g., lithium batteries) are prone to fire. Invasive species within and near the Project Site will fuel and carry a fire across the Project Site and into adjacent desert vegetation not adapted to and historically not experiencing large or recurring fires.

We appreciate this opportunity to provide input and trust that our comments will help protect tortoises during any authorized project activities. Herein, we ask that the Desert Tortoise Council

be identified as an Affected Interest for this and all other Kern County projects that may affect species of desert tortoises, and that any subsequent environmental documentation for this particular project is provided to us at the contact information listed above.

Regards,



Ken MacDonald
Desert Tortoise Council, Chairperson

cc: California State Clearinghouse

Literature Cited

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Lovich, J.E., and D. Bainbridge. 1999. Anthropogenic degradation of the southern California desert ecosystem and prospects for natural recovery and restoration. *Environmental Management*, v. 24, p. 309–326.

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Attachments

Abella S.R. and K.H. Berry. 2016. Enhancing and restoring habitat for the desert tortoise (*Gopherus agassizii*). *Journal of Fish and Wildlife Management* 7(1):xx–xx; e1944-687X. doi: 10.3996/052015-JFWM-046.