

FINDING OF NO SIGNIFICANT IMPACT

Issuance of an Endangered Species Act Section 10(a)(1)(B) Incidental Take Permit (TE 53276B) and Implementation of the RE Cinco Project Habitat Conservation Plan for the Desert Tortoise

We, the U.S. Fish and Wildlife Service (Service), have completed an Environmental Assessment (EA) for our proposed issuance an incidental take permit (ITP), pursuant to section 10(a)(1)(B) of the Endangered Species Act (Act), to RE Barren Ridge 1, LLC (Applicant or Permittee) for the implementation of the RE Cinco Solar Facility Project Habitat Conservation Plan (HCP) for the desert tortoise (*Gopherus agassizii*). We briefly present why the EA (and other documents made available during the public comment period) supports our Finding of No Significant Impact (FONSI) and the reasons why the proposed action would not have a significant effect on the human environment.

DESCRIPTION OF THE PROPOSED ACTION

The Applicant seeks an ITP for the desert tortoise in connection with the development and operations of the 500-acre RE Cinco Solar Facility Project (proposed action) in Kern County, California. The proposed solar facility would produce up to 60 MW of electricity. The desert tortoise is the only “Covered Species” under the ITP. The ITP would authorize the incidental take of the desert tortoise in association with covered activities in the proposed HCP for a 40-year permit term.

Alternatives Considered

The EA describes the probable effects of this action on the human environment under four alternatives: No Action, the Proposed Action, Private Lands Solar Facility and Gen-Tie Line on Combination of Federal and Private Lands, and Private Lands Solar Facility Alternative and Gen-Tie on Private Lands Only.

No Action Alternative

Under the No Action alternative, the Service would not issue an ITP in association with the HCP. As a result, none of the beneficial effects described below under the Proposed Action are expected to occur under this alternative. Human activities would continue to adversely affect the mitigation lands and relocation sites described in the HCP and protection of these areas for the benefit of the desert tortoise would not be achieved. In addition, the Applicant’s proposed minimization and mitigation strategy that is designed to provide a net benefit to desert tortoise conservation would not be implemented in accordance with section 10(a)(1)(B) of the Act. The Service anticipates that many of the current threats to the desert tortoise would continue within the HCP plan area under the No Action Alternative, resulting in: 1) degradation of suitable desert tortoise habitat; 2) declines in desert tortoise populations; and 3) a reduced capacity to implement comprehensive adaptive management measures. The No Action Alternative is not expected to have significant effects to wetlands, floodplains, or to the human environment.

Proposed Action (Issuance of an ITP)

We would issue an ITP to the Applicant for the take of desert tortoise within the 500-acre Plan Area. The Applicant has prepared a proposed HCP as part of the application for an incidental take permit and submitted it to the Service. The HCP presents a program to avoid, minimize, and mitigate the effects of the incidental take of desert tortoises potentially resulting from development, operation, maintenance, and decommissioning of the solar facility. The HCP is attached to the EA as Appendix C. Under the Proposed Action, we would issue an ITP to the Applicant for the covered activities described in the HCP. This would include the construction of a solar facility that would be sited on approximately 500 acres of privately owned land, resulting in the loss of approximately 500 acres of desert tortoise habitat. The solar facility would include an estimated 400,000 photovoltaic (PV) solar panels. This alternative assumes that the Bureau of Land Management (Bureau) would issue a right-of-way grant for a connecting gen-tie line across Federal lands from the solar site to the Barren Ridge Switching Station, approximately 2 miles to the north. The Federal lands gen-tie line alignment would not be a part of the Service's proposed section 10(a)(1)(B) ITP action.

Avoidance and minimization measures intended to reduce effects of covered activities on the desert tortoise are listed in Table 2-3 of the EA. Clearance surveys and relocation of desert tortoises found in harm's way would be required of the Applicant to avoid and minimize effects to the species. Desert tortoises found during clearance surveys for the solar facility would be relocated to suitable habitat within one of three potential recipient sites located outside of exclusion fencing but within the 500-acre parcel owned by the Applicant. Exclusion fencing surrounding the solar facility would prevent relocated tortoises from returning to the solar facility, thereby reducing the potential for tortoises to be injured or killed during construction and operation of the solar facility. In addition, an authorized biologist would monitor ground-disturbing covered activities to avoid and minimize effects to desert tortoises.

The Applicant would mitigate for the effects of the incidental take by acquiring approximately 500 acres as a condition of the Service's incidental take permit. In total, the Applicant will acquire 1,566.87 acres of suitable desert tortoise habitat as a result of its requirements under the California Endangered Species Act (i.e., 1,500 acres for the solar site and 66.87 for the gen-tie line). Acquisition of off-site habitat would compensate for long-term habitat effects resulting from construction of the solar facility. The Applicant would be required to provide initial funding for a non-wasting endowment for the long-term land management of the off-site mitigation lands. The Applicant intends to meet its compensatory mitigation obligations prior to the initiation of project construction by, at minimum, upfront payment of a security or letter of credit for the estimated costs of mitigation (e.g., land acquisition and endowment costs), followed by completion of compensatory mitigation within 18 months following issuance of the permits and approvals. The Applicant would be required to submit a Compensation Land Acquisition Report to the Service for approval that describes the habitat characteristics of the parcel(s) and how the land to be acquired meets the requirements for desert tortoise.

Private Lands Solar Facility and Gen-Tie Line on a Combination of Federal and Private Lands Alternative

Under this alternative, the solar facility would be constructed and operated in an identical manner as that described above under the Proposed Action. We would issue an ITP based upon the Applicant's HCP for the project. The Bureau would issue a right-of-way grant for the

construction and operation of a gen-tie across Federal lands, but the route for the alignment would be different than that described in the Proposed Action. Under this alternative, the gen-tie alignment would exit the solar facility in its northeast corner and travel north across the Bureau's lands before rejoining the alignment for the Proposed Action, just south of Pine Tree Canyon Wash. This alternative alignment was evaluated in the environmental impact report issued by the County of Kern (County) in 2011. This alternative assumes that the Bureau would issue a right-of-way grant for a connecting gen-tie line across Federal lands from the solar site to the Barren Ridge Switching Station. The Federal lands gen-tie line alignment would not be a part of the Service's proposed section 10(a)(1)(B) ITP action.

Private Lands Solar Facility and Gen-Tie Line on Private Lands Only Alternative

Under this alternative, the solar facility would be constructed and operated in an identical manner as that described above under the Proposed Action. We would issue an ITP based upon the Applicant's HCP for the project. In addition, the ITP would also provide coverage for the construction and operation of a gen-tie line to be constructed solely on private lands; under this alternative, the gen-tie line would exit the southern end of the solar facility, travel east and then north on private lands before entering the switching station. The HCP would be identical to that described above under Proposed Action for the solar facility, but would also include avoidance and minimization measures specific to the private lands gen-tie line.

Impact Topic Areas

Based on both internal and external scoping of the proposed Federal action of issuance of an ITP, the following impact areas were analyzed in the EA: Air Resources, Biological Resources - Vegetation, Biological Resources - Wildlife, Climate Change, Cultural and Paleontological Resources, Energy Resources, Fire and Fuels, Hazardous and Solid Waste, Land Use, Noise and Vibration, Public Health and Safety, Recreation, Socio-Economics and Environmental Justice, Topography, Soils and Geology, Transportation and Public Access, Visual (Aesthetics), and Water Resources.

PUBLIC INVOLVEMENT AND REVIEW

Drafts of the HCP and EA were made available for public review during a 60-day public comment period beginning on October 10, 2014. To facilitate public review during the 60-day comment period, the EA was posted on the Ventura Fish and Wildlife Office's web site and the notice of availability of the EA was published in the Federal Register. The Service received one comment letter during the public review period, from the U.S. Environmental Protection Agency (EPA). The letter is attached to Appendix A with our responses to the issues raised in the EPA's letter.

DECISION

Effects on the Human Environment

The attached EA was prepared to analyze and disclose potential environmental impacts pursuant to the National Environmental Policy Act. The project area analyzed in the EA includes the solar facility on private land for which the applicant is seeking an ITP and a gen-tie line on land

managed by the Bureau of Land Management (BLM). When we identify the project area in this document, we are referring to the solar plant and the gen-tie line. BLM has prepared a separate EA and FONSI for the gen-tie line and requested initiation of section 7 consultation on the gen-tie line right-of-way with the Service. Only the EA and those documents made available during the public comment period were used in this FONSI. The EA supports the following findings:

Air Resources

Based on the emissions estimated to occur in the EA, construction emissions are expected to be far below established *de minimis* levels (see table 4.1-2 in the EA). Further, the Applicant would implement a number of standard emissions control actions during construction, as required by the County. These include the application of a dust palliative to further reduce PM10 emissions, which would reduce construction emissions even further. Additionally, operation and maintenance of the project would result in lower emissions than project construction, since there would be no stationary emission sources and operations and maintenance of the facilities would only involve periodic maintenance and worker activities. Although emissions are expected, they would be well below the *de minimis* levels. Therefore, the direct, indirect, and cumulative impacts to Air Resources would not be significant.

Biological Resources - Vegetation

Construction of the solar facility would require vegetation clearing and grading of up to approximately 500 acres. Construction of the gen-tie line would permanently remove approximately 2.2 acres of vegetation and temporarily disturb a little more than 63 acres. Impacts resulting from solar facility construction are considered long-term because impacts would span at least the life of the proposed solar facility. The majority of impacts would occur to creosote bush-white bursage scrub given that this is the most prevalent community in the relatively homogeneous solar facility parcel. Covered activities associated with construction, operation, maintenance, and decommissioning the solar facility would have the potential to introduce nonnative plant species and create airborne dust, sedimentation, and erosion, thereby degrading vegetation communities in the project area. Potential impacts to vegetation communities resulting from constructing the solar project and gen-tie line would be avoided and minimized through implementation of general measures identified in Table 4.2-1 of the EA. The Applicant would mitigate for the long-term vegetation effects through the mitigation of the loss of desert tortoise habitat, by acquiring 1,566.87 acres of off-site habitat. The Applicant would be required to provide initial funding for a non-wasting endowment for the long-term land management of the off-site mitigation lands. Therefore, with the inclusion of the avoidance, minimization and mitigation measures, the direct, indirect and cumulative impacts to Vegetation would not be significant.

Biological Resources – Wildlife

Under the proposed action, the construction of the solar facility would directly affect approximately 500 acres of suitable habitat for the desert tortoise, Mohave ground squirrel, burrowing owl, other raptors, migratory birds, and American badger. Construction of the gen-tie line would permanently remove approximately 2.2 acres and temporarily disturb a little more than 63 acres of habitat for these species.

Direct impacts during constructing, operating, maintaining, and decommissioning the solar facility could include disturbance, injury, or mortality of desert tortoises, Mohave ground squirrels burrowing owls, other raptors, migratory birds, and American badgers. Disturbance, injury, or mortality may result from individuals becoming trapped within open trenches, individuals being crushed or buried in their burrows, unauthorized collection, noise or vibrations from heavy equipment, increased human presence/activity, vehicle strikes, and encounters with pets belonging to workers and/or visitors.

Desert tortoises could also die or become injured during their capture and relocation if these methods are performed improperly, particularly during extreme temperatures. To minimize the potential of a desert tortoise being injured or killed by construction equipment and activities on site, the applicant would fence the entire solar facility with security and desert tortoise exclusion fencing and conduct clearance surveys and relocate any found tortoises. If the solar facility attracts predators (such as common ravens), predation on desert tortoises and other wildlife could increase.

Herbicides (glyphosate and triclopyr) may be used to treat invasive plant populations in wildlife habitat. The EA indicates that these herbicides are considered to have no to a moderate potential for impacts to terrestrial vertebrates from dermal contact, with the potential for a moderate risk only associated with glyphosate or triclopyr via direct spray at the maximum application rate and potential negative effects from ingestion of food sprayed with glyphosate or triclopyr at the typical application rate. To decrease the potential for negative impacts, the applicant would use targeted treatment of specific areas of weeds and would not use broadcast treatment.

As documented in the EA, migrating birds may be susceptible to collisions with PV panels or other project features. Migrant water birds have composed the majority of avian mortalities at the Desert Sunlight PV facility. However, the Desert Sunlight PV facility contains ponds that are an attractive feature to avian species. The proposed project would not contain ponds that would attract avian species to the site. Large areas of solar PV panels in the desert environment may also mimic the reflectivity of water bodies and inadvertently attract water bird species, although studies have shown that glare intensity and/or reflectivity of PV modules are lower than that of water and similar to asphalt. Another factor influencing mortality is polarized light, which is naturally polarized by large bodies of water and can sometimes be artificially polarized by large, smooth, dark surfaces such as PV panels. Polarized light pollution caused by solar PV panels may affect foraging behaviors, navigation, and orientation in birds, leading to potential collisions with panels. Avian species confusing the site with water may collide with solar panels and/or become stranded in solar fields, resulting in fatalities. Avian-specific measures contained in Table 4.3-3 of the EA would be implemented and would provide broad protections for all avian species. The Applicant would also comply with 2012 Avian Power Line Interaction Committee guidelines for preventing avian electrocutions and collisions with overhead power lines.

Potential impacts to desert tortoises and wildlife would be further avoided and minimized through implementation of the general measures identified in Table 4.2-1 of the EA and species-specific measures identified in the EA. Acquiring and conserving 1,566.87 acres of off-site habitat would mitigate the loss of approximately 500 acres of suitable wildlife habitat at the solar

site and the disturbance of approximately 65 acres for the gen-tie line. Therefore, with the mitigation identified in the EA, the direct, indirect and cumulative impacts of the proposed action would not have a significant impact on wildlife

Climate Change

The analysis used in the EA estimates that the green-house gas (GHG) emissions during construction of the solar facility and the gen-tie line would be 2,426 metric tons of carbon dioxide equivalent (CO_{2e}). Operational GHG emissions were estimated to be 1,134 metric tons of CO_{2e}, for a total GHG emissions quantity of 3,560 metric tons CO_{2e}. This total includes GHG emissions for construction and operation of both the private lands solar facility and a gen-tie line on public lands. The overall GHG emissions would be well below the Council on Environmental Quality's indicator of 25,000 metric tons of CO_{2e} per year. These incremental emissions would not likely contribute to an increase in GHG and the solar project would be expected to provide an incremental benefit over the life of the project. Therefore, the direct, indirect and cumulative impacts of the proposed action would not have a significant effect on climate change.

Cultural and Paleontological Resources

Based on the results of the field survey and research, none of the archaeological sites located within the project area meet the eligibility criteria for inclusion in the National Register of Historic Places (NRHP). The isolated finds are, by definition, not sites, and are not eligible for inclusion in the NRHP. Because none of the identified resources are NRHP-eligible, they are not historic properties under section 106 of the NHPA.

Potential fossil-bearing strata in the project area are limited to the older Quaternary alluvium that underlays the younger Quaternary alluvium that overlays much of the project area. The depth beneath the surface of the older strata varies and cannot be precisely known without subsurface testing. Therefore, some potential exists that older Quaternary alluvium deposit could be encountered during installation of some of the project components, particularly during installation of the footings for poles along the gen-tie line. The applicant would follow the requirements established by the County that are described in the EA to mitigate the effects to paleontological resources.

Since the project area does not support any cultural resources of a quality to be eligible as historic properties and the applicant would be required to implement the County's mitigation measures, the direct, indirect and cumulative impacts of the proposed action would not significantly affect cultural or paleontological resources.

Energy Resources

The project area is located immediately adjacent to Federal lands that have been designated as an energy corridor. The corridor was established, in part, to expedite applications to construct or modify electricity transmission and distribution facilities within such corridors. Even though the proposed solar facility would be located on private lands, the project area's location adjacent to the designated corridor makes the project's construction and operation more appropriate than would otherwise be the case. The project would be consistent with adopted Federal goals and

policies associated with the increased production and transmission of renewable energy resources. Therefore, the proposed action would not result in an adverse impact to energy resources.

Fire and Fuels

During construction, activities would be implemented to minimize distribution of invasive plants; invasive plants can cause fire to spread more than natives species, displace native plant species, and reduce habitat quality for wildlife that depends on native plant species. These efforts are described in section 2.4.4 of the EA. During operation, invasive species and other weeds would be managed through mechanical and chemical controls. These efforts are described in section 2.3.7 of the EA and would serve to limit the increased distribution of invasive plants and weeds. Safety and emergency management plans and programs would also be established. These activities would prescribe methods by which fire risk could be minimized and actions to be taken in the event of fire. Based on each of these factors, the proposed action would have no adverse impact to the management of fire and fuels.

Hazardous and Solid Waste

Wastes to be generated during construction of the proposed project would be non-hazardous and consist of copper wire, scrap steel and wood, common trash, and wire spools. Hazardous fuels and lubricants used on field equipment would be subject to the requirements of plans for the disposal of materials and solid waste and a spill response plan, as described in section 2.4.4 of the EA.

The herbicides used would be approved for their specific purposes and would be transported, handled, stored, and applied in accordance with applicable regulations and applicable standard operating procedures contained in BLM's 2007 Programmatic Environmental Impact Statement (PEIS) for Vegetation Management Using Herbicides. The PEIS evaluated the environmental effects of herbicide use and was the subject of a biological assessment prepared by the BLM. The Service issued a biological opinion for the proposed vegetation management plan and concluded that the BLM's proposed action was not likely to jeopardize the continued existence of listed species, including the desert tortoise. Any herbicide use conducted for any of the action alternatives would follow the same protocols and mitigations as that prescribed in the PEIS and approximately. Because those protocols and mitigations have already been reviewed and approved by Service, the PEIS's analysis and findings are also applicable to the action alternatives and have been integrated into this analysis. Therefore, hazardous and solid waste associated with the proposed action would not cause a significant impact.

Land Use

The public lands associated with the proposed gen-tie line are classified by BLM's California Desert Conservation Area Plan (BLM 1980, 1999; CDCA Plan) as Multiple Use Class "L" or "Limited Use" lands. According to the CDCA Plan, Class L lands are to be managed to provide for generally lower intensity, carefully controlled multiple use of resources, while ensuring that sensitive values are not significantly diminished. The CDCA Plan provides that new electric

transmission facilities can be allowed within Class L lands if they are located within designated transmission corridors. The project area is included within a designated Energy Policy Act section 368 energy corridor. The “23-106 Corridor” in the project area was designated in 2009. The corridor includes all of the BLM lands under consideration for the proposed action. A 2008 PEIS prepared for the Federal west-wide energy corridors found that the 23-106 Corridor’s designation within the project area was consistent with the CDCA Plan. Accordingly, a plan amendment is not required for energy transmission projects proposed within the corridor. Therefore, the proposed action would not be a significant impact to land use.

Noise and Vibration

Construction noise and vibration would represent a short-term impact on ambient noise and vibration levels in the project area. Equipment associated with construction of the solar facility and the gen-tie line, including power augers, cranes, trucks, and other equipment would generate noise and vibration. All construction work, including any nighttime or weekend work, would comply with the County’s noise ordinance. Therefore, noise impacts from operation would be minor and well below the County’s most restrictive nighttime standard of 45 dBA.

Public Health and Safety

Aboveground transmission lines can pose a threat to aviation safety if they are located within an airport land use plan or flight zone. The project area is not located within an airport compatibility zone associated with any of the public airports in Kern County. The closest public airport is the California City Airport, which is located approximately 4.8 miles to the southeast of the project.

Fugitive dust generated during project activities could expose workers to the *Coccidioides* fungal spores that may be present in desert soils. The period of greatest risk for exposure would be during project construction. Dust control represents the principal means of prevention of contact with valley fever spores during ground-disturbing activities. As discussed in section 2.2.2 of the EA, dust control would be implemented during construction in accordance with the County’s guidelines. Effective control would generally be gained with regular applications of water using water trucks. In some areas of regular use, such as construction access roads, a dust palliative would be used to minimize dust. Implementation of these measures would reduce the risk to workers and the public of contracting valley fever. Therefore, the proposed action would not result in a significant impact to public health and safety.

Recreation

The principal recreation activities associated with the project area include the riding of off-highway vehicles, primitive camping, hiking, hunting, and other outdoor pursuits. The various travel routes that cross the private lands and BLM-managed lands in the area provide recreational users with access to the area for the pursuit of these activities. With construction of the solar facility and its perimeter fencing, these roadways would only be accessible to authorized users. However, existing public users of these roadways would still have access to adjoining public and private lands through the use of other roadways that traverse the area. Therefore, the proposed action would not have significant direct, indirect, or cumulative impacts recreation.

Socio-Economics and Environmental Justice

The site of the proposed solar facility and the alternative routes for the gen-tie line do not support any residences. The nearest residence is approximately 2 miles from the project area. Further, all project components would be constructed in accordance with all Federal, State, and local plans and policies. As described within this EA, all potential adverse effects from construction, operations, maintenance, and decommissioning of the proposed solar facility and gen-tie line would be reduced with implementation of the identified mitigation measures. Therefore, the operations, maintenance, and decommissioning of the proposed solar facility and gen-tie line would have no direct or indirect adverse effects on the health, environment, or socio-economics of any population. Therefore, implementation of the project would not result in high or adverse human health, environmental, or socio-economic effects that would disproportionately affect an environmental justice population.

Topography, Soils and Geology

The project would not require mass grading or other activities that would substantially alter the existing topography in the area. Construction of the proposed solar facility and gen-tie line would occur on areas of low to moderate slope. New roadways would be consistent with existing dirt roadways in the area. Placement of structures would generally occur below grade, and would not alter area topography. The Garlock (West) Fault runs along the base of Barren Ridge and is located several hundred feet west of the project area. Direct damage to the project facilities from fault rupture would be unlikely based on the distance from the potential fault rupture zone. Soils in the project area predominately consist of loamy sands. These soils are generally well drained and are moderately susceptible to water erosion in areas of high slope. Slopes within the project area are only moderate, and generally range from 2 to 15%. Implementation of standard best management practices during construction would suffice to limit the potential for water erosion.

Occasional high winds are common in the area, which make disturbed and loose soils susceptible to wind erosion during construction. As discussed previously in section 4.1, disturbed portions of the project area would be watered and/or treated with a dust palliative during construction to lessen wind erosion and dust production. Implementation of these standard techniques would limit the potential for wind erosion during construction. Therefore, the proposed action would not have significant direct, indirect, and cumulative impacts on topography, soils, and geology.

Transportation and Public Access

Potential impacts to transportation and public access would generally center around construction traffic entering and exiting the project area from/to State Route 14, as well as potential impacts to existing BLM-designated and private lands routes that would be crossed or used during construction of the gen-tie line alignment. Traffic associated with operations and maintenance would be minor; decommissioning would likely require an increase in traffic. Current traffic along private land and BLM-designated routes in the area is very limited and is generally restricted to occasional recreational users and maintenance crews associated with the existing transmission facilities in the area. Existing uses would not be impeded during construction,

operations, maintenance, and decommissioning. Designated routes would remain available for public use and any new service roads or service road segments constructed, as part of gen-tie line construction would also be available for public use. Therefore, the direct, indirect, and cumulative impacts of the proposed action would not result in a significant impact to transportation and public access.

Visual (Aesthetics)

Visual impact levels were outlined by alternative (see Table 11 in Appendix H of the EA). During the short term of construction, direct impacts to people and scenery in the visual landscape is anticipated to be moderate to high and contrasts would comply with BLM Visual Resource Management (VRM) Class III management objectives. Construction activities that are located within 0.5 mile of high or moderate sensitivity viewers and have strong or moderate contrasts and/or impacts to the visual landscape would not be expected to comply with BLM VRM Class III objectives.

Mitigation for project facilities constructed at distances greater than 0.5 mile from stationary and linear key observation points typically would reduce visual contrasts to moderate and, therefore, result in compliance with VRM Class III management objectives. Construction and operation of the solar facility would result in some residual impacts to people and scenery. Topographic modifications on moderate slopes, vegetation management, and potentially sky-lined structures situated in the immediate foreground would impact sensitive viewers and Class C scenery. Application of integrated design features, as described previously in section 2.3.1 of the HCP, would lessen visual impacts related these alternatives from moderate to low. These features include coating the surface of applicable permanent structures with an appropriate color palette to minimize contrast with surrounding visual elements. All lighting would be shielded and directed downward to minimize the potential for glare and spillover. Additionally, the solar facility substation would be sufficiently far from State Route 14 to reduce visual impacts when viewed from the road.

As noted in section 3.17.1 of the EA, to preserve continuity, approved Interim BLM VRM Classifications from the immediately adjacent Barren Ridge Renewable Transmission Project (BRRTP) have been adopted for this project. For the BRRTP, the surrounding scenic quality was classified as BLM Class C scenic quality, or a “common area where characteristic features have little variation in form, line color, or texture in relation to the surrounding region” (BLM 1986a in the EA). Also for the BRRTP, the BLM VRM Management Objectives were assigned an interim classification of Class III. For Class III landscapes, the management objective “is to partially retain the existing character of the landscape. Changes to the landscape character may begin to attract attention but should not dominate the visual setting” (BLM 1986a in the EA). Therefore, the direct, indirect and cumulative impacts of the proposed action will not result in significant impacts to visual resources.

Water Resources

Impacts to surface water resources would be limited, and would be largely related to surface flows that could be impacted by facility construction. No perennial streams occur in the area; the

only flows that occur are during infrequent storm events. Flows during storm events could be interrupted or diverted by roadways and other features. However, flows would be allowed to pass over service roads and other features via carefully placed cutouts that would allow flows to pass along their existing courses. These features would be maintained during the operational phase of the project. During construction, standard best management practices would be implemented to limit the effects of water erosion on loose and disturbed soils. These measures could include the placement of straw bales, waffling, or other techniques to slow and redirect flows to limit their erosive potential. No wells or impoundments would be constructed or used as part of project construction or operation. Therefore, the direct, indirect and cumulative impacts of the proposed action would not result in a significant impact to water resources.

CONCLUSIONS

It is my determination that the proposed action is not a major Federal action significantly affecting the quality of the human environment under section 102(2)(c) of National Environmental Policy Act. Accordingly, an environmental impact statement on the proposed action is not required. An EA has been prepared in support of this finding and is attached. The EA is also available from the Service's Palms Springs Fish and Wildlife Office upon request.



Deputy Regional Director
Pacific Southwest Region
U.S. Fish and Wildlife Service



Date

APPENDIX A – RESPONSE TO COMMENTS

The following are our responses to issues raised in a comment letter from U.S. Environmental Protection Agency (attached) on the draft EA and HCP:

Ephemeral Washes, Site Hydrology, and Fencing

Ephemeral washes are described in the jurisdictional delineation letter report prepared by AECOM, dated May 27, 2011, and included with the EA as Appendix F. The report includes maps and clearly identifies all jurisdictional features and quantifies acreages. The project area does not support any waters of the United States or tributaries to waters of the United States. Waters within the project area are under the jurisdiction of the State of California.

The State of California has delegated review of any proposed work within the ephemeral washes to the California Department of Fish and Wildlife (CDFW) and California Regional Water Quality Control Board (RWQCB). As part of this project, the applicant obtained appropriate permits or approvals from both CDFW (California Fish and Game Code Section 1600 Streambed Alteration Agreement No. 1600-2014-0063-R4) and RWQCB (Notice of Applicability for coverage under the California Water Code Division 7 General Waste Discharge Requirements, R6T-2003-0004-217) for removal of existing vegetation and grading within the ephemeral washes. Both agency agreements required mitigation, which is being carried out.

The project applicant has determined that avoiding the washes or retaining the existing vegetation as suggested by EPA is not economically feasible, which is why permits from CDFW and RWQCB were obtained.

Although existing vegetation is to be removed and minor grading performed within the ephemeral washes, the general contours of the site will be retained and the washes themselves will remain and will continue to convey water across the site during operation and maintenance of the project. Impacts to storm water runoff and overland flow was analyzed by AECOM as part of the “Preliminary Hydrology and Hydraulics Study for Cinco,” dated July 30, 2014, and are incorporated by reference and attached herewith. The report showed that even with the vegetation removed, runoff would still follow historical drainage paths. Mass grading of the site, artificial channels, or pipe networks are not proposed. As discussed in the hydrology study, per Kern County Development Standards (section 408-7.02), increased runoff resulting from increased impervious area must be retained entirely in cut (below existing grade); therefore, retention basins have been incorporated into the project design to attenuate the very minor increase in flows resulting from the project.

The downstream side of the project site is bounded by State Route 14, which channelizes flow with existing swales and berms. Flow is conveyed beneath the highway with an existing box culvert at the southeast corner of the site. As the quantity of flow is unchanged and the location of outfall is unchanged, the project has no impact to downstream properties or habitat. The only impacts are to the project site itself, which have been permitted as discussed above.

The hydrology and hydraulics study also evaluated the effect of fencing on surface flows. Chain-link fence would be installed along the perimeter of the site. The fence is proposed to be 9 feet in

height. Typically chain-link fence contains approximately 92 percent open area with 1.5-inch diameter poles spaced 10 feet on center. Because of this, the effect of the fence on impervious area and surface flow would be negligible.

Air Quality and Fugitive Dust

The proposed solar facility is located on private lands and is therefore under the jurisdiction of Kern County. The Eastern Kern County Air Pollution Control District (EKCAPCD) regulates air pollutant emissions from all sources in the project area other than motor vehicles. The County of Kern prepared an environmental impact report (EIR) for the project in 2011 per the requirements of the California Environmental Quality Act. Mitigation contained within the EIR required that the project comply fully with all applicable EKCAPCD rules and regulations, including Rule 402. Additional measures related to dust control were also prescribed, including watering of disturbed areas during construction, minimization of disturbance, stabilization of soil stockpiles, restrictions on certain activities during periods of winds greater than 20 miles per hour, limitations on vehicle speeds on the project site, and application of dust palliatives. Implementation of these requirements would be required per the County's building permit for the project. Enforcement of the measures would be followed via regular monitoring as per the County's Mitigation Monitoring and Reporting Plan, and would be a condition of issuance of the building permit.

Incorporating Best Management Practices and Design Features from other Regional Renewable Energy Siting Efforts

The Desert Renewable Energy Conservation Plan is currently in draft form and has not been implemented. If implemented, the DRECP will provide a framework for addressing incidental take permitting under section 10(a)(1)(B) of the Endangered Species Act. Until the plan is implemented, however, pending projects, including the proposed project, are required to undergo individual section 10 permitting in accordance with the regulations and requirements in effect at the time of permit issuance. The HCP that has been prepared for the proposed project fully meets current requirements for listed species protection and conservation. By extension, the conservation measures implemented as part of the HCP will also provide benefits to other species and natural communities. In addition, the project is also subject to oversight and permitting requirements of other agencies, including the RWQCB and the CDFW, and the requirements of those agencies will also provide conservation benefits. Other parts of the project that are not a part of the HCP (i.e., the right-of-way grant for the transmission gen-tie line) are under the jurisdiction of the BLM and are therefore subject to the planning and conservation requirements of that agency. All aspects of the proposed project have been designed and reviewed in accordance with current agency requirements, which include applicable best management practices currently in effect for each agency. Enforcement of agency-prescribed conditions and applicable best management practices would occur through the issuance of permits or right-of-way grants issued by each agency and the monitoring and enforcement requirements thereof.

Photovoltaic Production and Recycling

Construction and operation of the proposed project would be subject to the California Integrated Solid Waste Management Act (Public Resources Code 40050, et. seq.), which encourages contractors and operators to divert waste from disposal in landfills and to maximize source

reduction, reuse, and recycling of project-related materials. The secondary market for recyclable and reusable solar facility materials is becoming stronger and demand for these materials will likely increase into the future. This will create incentives for solar facility operators to recycle and/or reuse materials whenever feasible.

Mitigation contained in the County's the EIR for the project required that any debris and waste generated during construction, operation, and decommissioning be recycled to the extent feasible. An on-site recycling coordinator will be designated by the project proponent to facilitate recycling of all construction waste through coordination with the onsite contractors, local waste haulers, and/or other facilities that recycle construction/demolition wastes. Implementation of these requirements would be required per the County's building permit for the project. Enforcement of the measures would be followed via regular monitoring as per the County's Mitigation Monitoring and Reporting Plan, and would be a condition of issuance of the building permit.

Visual Impacts – Glint and Glare

Photovoltaic panel surfaces are designed to be light absorptive, so they typically reflect very little light. For the RE Cinco Project, the applicant will use two types of modules: REC Peak Energy 72 Series and Yingli YGE-U72 Cell Series. The Yingli modules are surfaced with solar glass, which is finely stippled glass that increases light absorbance and reduces light reflectance compared with standard glass. The REC modules are coated with an anti-reflective coating. Glare impacts to travelers were considered in the County's EIR and were determined to be minimal. They were also evaluated in the EA with respect to the potential for photovoltaic panels to inadvertently attract water bird species. As stated on page 120 of the EA, studies have shown that glare intensity and/or reflectivity of photovoltaic panels are substantially lower than that of water and are similar to asphalt. To further verify this finding, the Sandia Labs Solar Glare Hazard Analysis Tool (SGHAT) was used to model the project from three locations along State Route 14. The reports are incorporated by reference and attached herewith. The SGHAT model incorporates a number of variables to determine potential glare, including the angle of the panels, the location of the source, and the photovoltaic panel material. The reports found that no glare would be encountered along the three modeled locations along State Route 14.

The lack of glare impacts would also be applicable to aviators operating in the airspace above the project site. The anti-reflective characteristics of the photovoltaic panels described above would minimize glare impacts to aviators. Further, both the Federal Aviation Administration and the Edwards Air Force Base R-2508 Complex Sustainability Office have issued determinations that the proposed project would not present a hazard to aviation. Both letters are incorporated by reference and attached herewith.

Based upon the above information, implementation of the preferred alternative would not from adverse effects as a result of glint and glare.

Thin Film Modules

Since the EA was circulated, the applicant has determined which type of photovoltaic panel technology it will use for the project. The REC Peak Energy 72 Series and Yingli YGE-U72 Cell Series panels that would be used for the Cinco project are both conventional multicrystalline

panels and would not include cadmium telluride. They would therefore not present a hazard with respect to potential releases of cadmium telluride

DOCUMENTS INCORPORATED BY REFERENCE

AECOM Technical Services, Inc. 2011. Preliminary hydrology and hydraulics study for Barren Ridge Recurrent Energy. August 1. Bakersfield, California.

AECOM Technical Services, Inc. 2014. Habitat conservation plan for the RE Cinco Project. Prepared for RE Barren Ridge Solar 1, LLC. San Diego, California.

Edwards Air Force Base R-2508 Complex Sustainability Office. 2014. No impact on military operations concurrence letter. November 19. Edwards Air Force Base, California.

Federal Aviation Administration. 2014. Determination of no hazard to air navigation. November 13. Fort Worth, Texas.

County of Kern. 2011. Final environmental impact report for RE distributed solar projects. Available at: <http://pcd.kerndsa.com/planning/environmental-documents/218-re-distributed-solar-projects>. Bakersfield, California.

Sandia National Laboratories. 2014. Solar glare hazard analysis report. December 9. <https://share.sandia.gov/phlux>. U.S. Department of Energy.

U.S. Fish and Wildlife Service. 2014. Draft environmental assessment for the RE Cinco Project habitat conservation plan. Palm Springs, California.