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survey results to non-surveyed areas across the project site.	6-29 Con't
 Statistically robust carcass removal and searcher efficiency trials for post-construction monitoring during project operations to correct for data biases. These trial data are needed adjust the survey frequency and improve the precision of mortality estimates. 	6-30
 Under authorization of the Service's Special Purpose Utility Permit and State's Scientific Collecting Permit, collect and salvage all dead and injured birds, and store/curate in freezer for later disposition and analysis under the supervision of the Service and CDFW. 	6-31
Impact avoidance and minimization measures should include:	T
 Development of an injured bird response plan that delineates care and curation of any and a injured birds, and funding for rehabilitation centers for the care and treatment, and eventua release or permanent storage of injured birds. 	6-32
 Handling and reporting requirements for dead and injured specimens according to applicab state or federal requirements. 	le 6-33
 Post-construction monitoring studies should be conducted by a third-party independent contractor under the direct supervision of the lead action agency and coordinated with the other public trust agencies for at least 3 years following commencement of commercial operation of each individual unit. At the end of the 3-year period, the County, in consultati with CDFW and the Service, will determine whether the survey program will be continued based on whether the data are sufficient to answer monitoring objectives within a predetermined level of statistical certainty. 	6-34
 Avoid using lattice-type structures and placing external ladders and platforms on towers to minimize perching and nesting. 	6-35
 Co-locate gen-ties of nearby projects on the same poles where feasible, unless the gen-tie a constructed underground. 	6-36
 Use dual-axis tracking systems for panel installations to allow for randomized orientation while stowed to disrupt the lake effect and minimize bird collisions during no producing hours of the day. 	6-37
 For projects constructed in phases, deploy different PV panel technologies (e.g., thin film, silicon wafer, concentrator) to generate comparative data on mortality risk by technology type using experimental design and monitoring principles. 	6-38
 Minimize use of outdoor lighting. If lighting is necessary, it should be focused downward reduce skyward illumination. Lights should be equipped with motion detectors to reduce continuous illumination. 	6-39

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 Where feasible, place gen-tie transmission lines underground or on the surface as insulate shielded wire to avoid collisions and electrocution of birds. Use the most recent recommendations of the Avian Power Line Interaction Committee (APLIC 2006, 2012) f any required above- ground lines, transformers, or conductors to reduce collisions and electrocutions. When transmission lines must be above-ground, avoid placing lines withi wetlands and over canyons. 	or 6-40
 Design and build onsite collector transmission lines underground to minimize bird collisi risk. 	on 6-41
 Install and replace flight diverters, as needed on gen-tie transmission lines to render the limore visible to both resident listed and migratory birds, including night-migrating birds. 	ne 6-42
 Install and replace fence markers or other devices as needed on perimeter fences to increavisibility to birds and potentially reduce collision rates. 	6-43
Impact mitigation measures should include:	
 Mitigate impacts to the affected subpopulations/subspecies of those species experiencing highest mortality rates by providing funding for habitat enhancement and improvement projects within the range of those species' populations. 	the 6-44
 Determine the geographic range of those species/subpopulations by providing funding to collect genotype, isotope, and morphometric data from the analysis of carcass specimens collected and curated from project sites. 	6-45
Western Burrowing Owl and Mountain Plover	
Potential mitigation options for the loss of foraging/nesting habitat include:	
 In-kind permanent mitigation (fee title or conservation easement) for loss of agricultural burrowing owl and mountain plover foraging habitat at a discounted ratio (habitat replaceme loss ratio), based on the premise that loss of the number of displaced burrowing owls and plo supported by incidentally compatible agricultural practices could be offset at a higher density a reduced land base of agricultural habitat if farmed with more intensive owl and plover-friet agricultural and wildlife management practices; 	vers v on
2. In-kind temporary mitigation on an equivalent acreage basis for loss of agricultural burrowing owl or mountain plover habitat by the purchase of conservation easements for the duration of County's solar development temporary use permit from cooperating landowners to grow owl/plover-friendly crops using owl/plover-friendly practices, assuming agricultural practices would resume after the temporary use permits expire for solar development projects; or	the 6-47
3. A market-driven crop differential fee program (difference in economic return to the landowned between net income expected from higher-profit crops and various lower-profit owl/plover-	6-48

3.0 COMMENTS AND RESPONSE TO COMMENTS

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friendly crops) paid annually for the life of the project by renewable energy developers to offset the income differential to farmers who enlist in the program and typically do not grow crops that provide suitable burrowing owl or mountain plover foraging habitat. This approach may require coordination with the County Agricultural Commissioner to determine cropping histories and focus the crop differential fee for landowners who have not typically grown crops that support burrowing owl and mountain plover foraging habitat.

6-48 Con't.

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RESPONSE TO COMMENT LETTER 6

Commenter: Kennon A. Corey, Assistant Field Supervisor, United States Department of the Interior,

Fish and Wildlife Service

Date of Letter: October 10, 2014

Response to Comment 6-1: The comment provides introductory remarks and a description of the proposed Project. No response is required.

- Response to Comment 6-2: The comment states the role of the United States Fish and Wildlife Service (USFWS) as having legal responsibility for the welfare of migratory birds, anadromous fish, and threatened and endangered animals and plants. The comments states that the comments provided are based on the Draft EIR, as well as the USFWS knowledge of sensitive and declining fish and wildlife resources and participation in regional renewable energy conservation planning efforts. These comments are noted. No response is required.
- **Response to Comment 6-3:** This comment states that USFWS recognizes the need for development of renewable energy and the challenge of balancing solar energy development with conserving natural resources in the Salton Sea Basin. The USFWS will offer assistance to ensure all proposed projects are evaluated with regard to State and Federal renewable energy goals and policies guiding renewable energy programs. These comments are noted. No response is required.
- **Response to Comment 6-4:** The comment provides a summary of the proposed Project noting that a specific type of tracking system was not identified. These comments are noted. No response is required.
- Response to Comment 6-5: The comment states that the Project would result in permanent, direct effects to approximately 2,793 acres of vegetation communities and other land cover types noting that the Project would impact 56.6 acres of jurisdictional waters and 12.1 acres of non-wetland waters. This information is consistent with the findings included in Section 4.12, Biological Resources of the Draft EIR. Table 4.12-3 (page 4.12-19 of the Draft EIR) identifies 56.6 acres of wetland and 12.1 acres of non-wetland waters as "Potential Jurisdictional Waters with the BSA". Impacts to wetland and non-wetland waters are identified in Table 4.12-14 of the Draft EIR. No further response is required.
- **Response to Comment 6-6:** The comment provides introductory remarks to USFWS recommendations to avoid, minimize and mitigate adverse impacts to public trust resources including migratory birds.
- Response to Comment 6-7: The comment provides introductory information regarding the Migratory Bird Treaty Act (MBTA) and the responsibilities of the USFWS in implementing the MBTA. The comment does not identify any issues with the environmental analysis in the Draft EIR. Accordingly, no response is required.
- **Response to Comment 6-8:** The comment notes the importance of migratory birds and the adverse effect of solar energy projects on migratory birds including loss of habitat, collisions with solar panels and entanglement in netting on water ponds. The comment also notes impacts to birds associated with solar thermal power tower technologies.

As noted in the Seville Solar Farm Complex Final EIR (SCH. No. 2013091039, September 2014), the available documentation regarding avian mortality levels at utility-scale solar energy facilities is currently for a small sample of projects that primarily include parabolic mirror trough and solar mirror power tower units. Publically available data on avian mortality for Photovoltaic (PV),

horizontal single-axis tracker (HSAT) or Concentrated Photovoltaic (CPV) solar designs in general, or for PV projects in the Imperial Valley specifically, is lacking. This is further affirmed in Comment 6-14 (i.e. "Currently, available information is lacking on how different solar technologies, on-site panel configuration, mounting systems and potential deterrents may affect/reduce bird mortality rates.") Given the lack of information pertaining to PV projects in the Imperial Valley and the use of the PV solar technologies to be implemented by the Project, estimating or predicting potential impacts to avian species during operation of the Wistaria Ranch Solar Energy Center is not feasible and would be speculative.

There appear to be significant differences between the solar facilities constructed in the Imperial Valley and the utility-scale PV, parabolic trough, and power tower projects currently in operation in the Mojave Desert which are reporting mortalities and injuries to avian species involving various project features. To date, the only solar technology used by the solar projects constructed in the Imperial Valley has been photovoltaics: no projects have utilized either the parabolic trough technology used by the Genesis Project or the power tower technology used by the Ivanpah Project discussed in the study. In addition, most of those PV projects constructed in the Imperial Valley have used HSAT systems for the PV panels, not the fixed PV panel systems used by the Desert Sunlight Project studies in the Mojave Desert. Lastly, the Mojave Desert facilities are not located adjacent to a large body of water, such as the Salton Sea, nor located adjacent to agricultural lands which provide forage for birds associated with that large body of water, such as the agricultural lands associated with the Salton Sea. Therefore, for all these reasons the likelihood of the Project creating an avian collision hazard is considered low. As provided in subsection 4.12.3 of the Draft EIR, found at page 4.12-160, the significance determination for impacts including avian collision hazards after mitigation is:

Significance After Mitigation

Upon implementation of Applicant proposed Measures/Project Design Features (as shown in Table 2.0-9, in Chapter 2.0 Project Description) and mitigation measures MM 4.12.1a, MM 4.12.1b, MM 4.12.1c, MM 4.12.1d, MM 4.12.1e, MM 4.12.1f and MM 4.12.14a, potentially significant construction and operation-related direct and indirect impacts to wildlife movement would be reduced to less than significant for both the Full Build-out Scenario and all CUPs (13-0036 thru 13-0052) proposed as part of the Phased CUP Scenario.

The proposed mitigation measures to address potential collision hazards with solar project components will render any created collision hazard less than significant.

Response to Comment 6-9: The comment states that there is growing evidence of hazards to water-associated birds seeking migratory stopover habitat (i.e. the "lake effect.") The comment references three sites with three technologies (thin film photovoltaic, solar thermal trough, solar thermal power tower) that have resulted in a high number of mortalities. The factors affecting mortality vary with higher mortalities potentially linked to the large number of water-associated species moving among the Lower Colorado River Valley, Salton Sea Basin and the Pacific Coast. Section 4.12, Biological Resources, on pages 4.12-60 thru 4.12-160 of the Draft EIR discusses this trend and includes a discussion of impacts for each special status avian species and migratory bird species that has the potential to occur at the Project site.

Response to Comment 6-10: The comment notes that many aquatic insects are vulnerable to "polarized light pollution." Decreases in the number of insects may indirectly affect other species that depend on them as important sources of food. The comment notes that aquatic insects, in particular, *Odonata* (dragonflies and damselflies), *Trichoptera* (caddisflies), *Ephemeroptera*

County of Imperial December 2014 (mayflies), and *Tabanidae* (tabanid flies), are vulnerable to "polarized light pollution." The comment further notes that these insects can fly continuously over solar panels until they become exhausted and die; thereby reducing a source of food for other species.

The studies conducted by Hovarth et al. and Kriska et al. in Hungary note that any shiny dark colored object (e.g., solar panels, asphalt, glass building, black tarps used for agriculture) can reflect polarized light that may attract insects. Kriska et al.'s (1998) work was in fact focused on asphalt roads and not photovoltaic (PV) solar panels. The Kriska et al. 2009 and Lundy et al. 2013 articles cited within the comment are also not related to PV solar panels. Furthermore, studies have not been conducted to determine if artificial polarized light sources have any effect on aquatic insect populations. The notion that aquatic insect populations of *Odonata* (dragonflies and damselflies), *Trichoptera* (caddisflies), *Ephemeroptera* (mayflies), and *Tabanidae* (tabanid flies) could decrease as a result of PV solar panels and consequently affect other species is speculative.

- **Response to Comment 6-11:** The comment notes that solar panels with white borders or grids of white strips that criss-cross the panels can reduce the attractiveness of solar panels to aquatic insects by 10 to 26 fold. As noted in Response to Comment 6-10, the potential impacts that PV solar panels have on aquatic insect populations are as yet to be studied and determined.
- Response to Comment 6-12: The comment provides background information on avian use throughout the Salton Sea basin and notes that limited information exists on bird collisions at utility-scale solar energy facilities within the Salton Sea basin. It further notes that based on monitoring at other solar projects, avian mortalities and injuries may occur at Wistaria Ranch Solar Energy Farm.

Section 4.12, Biological Resources of the Draft EIR (pages 4.12-60 thru 4.12-160) discusses this trend and includes a discussion for each special status avian species and migratory bird species that has the potential to occur at the Project site. No further response is required.

- Response to Comment 6-13: The comment acknowledges USFWS's agreement with the Project's assessment of potentially direct and indirect significant impacts to migratory birds. The comment notes that the USFWS information regarding solar technologies is limited and evolving as additional data is increasing. The comment states that the Phased CUP Scenario may require additional mitigation measures based on evolving science and data from project monitoring if significant impacts are to be effectively minimized and offset. The comment recommends that the CEQA analysis account for this need for additional mitigation or minimization measures to reduce the significance of the impacts based on monitoring results proposed for the Phased CUP Scenario consistent with regulatory adaptive management principles. Mitigation measure MM 4.12.14a on pages 4.12-22 thru 4.12-25 of the Draft EIR states that a Bird and Bat Conservation Strategy (BBCS) will be developed by the Project Applicant in coordination with the County of Imperial, USFWS, and CDFW. This mitigation measure confirms that a conceptual adaptive management and decision-making framework for reviewing, characterizing, and responding to monitoring results will be included as a part of the BBCS.
- Response to Comment 6-14: The comment notes that information regarding different solar technologies' impacts on avian species is lacking because the majority of the projects in this portion of the County use thin film PM with similar mounting systems. Based on the 10 year period of the Phased CUP Scenario, the comment asserts that different technologies with appropriate mortality monitoring could provide information on different mortality rates for various types of technologies. The comment states that the USFWS is available to assist the County and Applicant in designing various technologies and configurations for adaptive management purposes. As noted in Chapter 2.0 Project Description of the Draft EIR (page 2.0-1),

PV and concentrated photovoltaic (CPV) technology is rapidly evolving and the specific type of technology that will be used is yet to be determined. The PV system to be developed on the Project site must be both technologically and economically feasible. As stated in Response to Comment 6-13, a conceptual adaptive management and decision-making framework for reviewing, characterizing, and responding to monitoring results will be included as a part of the BBCS that will be developed in coordination with the County of Imperial, USFWS, and CDFW to address this issue.

Response to Comment 6-15: The comment recommends the proposed mitigation measure MM 4.12.14a include a statistically robust, systematic avian and bat mortality and injury monitoring program to achieve the following: (1) estimate annual mortality by taxa and season using appropriate statistical design and appropriate estimators; (2) identify collision and other mortality during diurnal and nocturnal times of the day; and (3) assess the spatial distribution and abundance of mortalities [species composition (including rare and sensitive species), abundance, and distribution] on the Project site. USFWS's letter is accompanied by an enclosure, *Interim Migratory Bird and Bat Conservation Recommendations with Avoidance and Minimization Measures*, which expands on the general additional avoidance, minimization, and mitigation measures recommended above. Finally the comment recommends that the County require salvaging all dead and injured birds during construction and that the Applicant apply for an USFWS Special Purpose Utility (SPUT) Permit to properly handle, store, and report all avian carcasses found during the construction phase.

Mitigation measure MM 4.12.14a on pages 4.12-154 and 4.12-155 of the Draft EIR has been revised to include suggested language related to statistical techniques and avoidance and minimization measures where language was not previously provided (refer to Response to Comment 2-14 above). Based on experience, sample sizes will dictate the extent that fatality models can be used to generate fatality estimates within the various categories the USFWS has suggested. Sample sizes will not only depend on sample effort, but also on the number of avian and bat mortalities associated with the Project. Depending on the mortality numbers, sample sizes may not be large enough to conduct statistical analysis even with robust carcass removal and searcher efficiency trials. However, low mortality numbers would be good for the Project and the ecosystem and therefore, the Project should not be penalized by requiring and increased sample effort because it is has minimal impacts to birds and bats. Impact mitigation measures were not included as these would be developed within the adaptive management framework to be based on data collected during post-construction monitoring.

The measure has been revised to note carcasses will be collected under a SPUT Permit and State Scientific Collecting Permit. The BBCS will be prepared prior to commencement of construction activities that would affect bird or bat species.

Response to Comment 6-16: The USFWS recommends that the County require salvaging all dead and injured birds during construction and that the Applicant apply for a USFWS Special Purpose Utility Permit (SPUT) to properly handle, store, and report all avian carcasses found during the construction phase. Comment noted. Mitigation measure MM 4.12.14a has been revised to note carcasses will be collected under a SPUT Permit and State Scientific Collecting Permit (refer to Response to Comment 2-14).

Response to Comment 6-17: The comment acknowledges that some residual impacts to avian species would remain. The USFWS recommends that the County include a mitigation measure in the CUP to address the effects on direct habitat loss to birds and impacts to populations of migratory birds. The UWFWS identifies a joint-venture with the County and the Applicant as a possible means of

conservation of migratory birds. In addition, the Desert Renewable Energy Conservation Plan (DRECP) is currently being by prepared the BLM to identify areas where utility-scale renewable energy development will have fewer environmental impacts. The DRECP covers 22.5 million acres in California's Mojave and Colorado/Sonoran desert regions and involves a collaborative effort between a number of governing bodies, renewable energy developers, utility companies, Desert Renewable Energy Tribal Coalition, Off-Highway Vehicle Associations and Federal and State Agencies, including CDFW and USFWS. When completed and adopted, the DRECP could be a factor in developing mitigation for avian and other biological species (the proposed project is in the draft DRECP "development focus area," suggesting that the Project is properly sited for utility-scale renewable energy development). Comment noted. Refer to Response to Comment 6-16, above.

Response to Comment 6-18: The comment notes that the agricultural lands in the Imperial Valley support the highest known population densities of burrowing owl in the State. Likewise the Imperial Valley provides one of the major wintering grounds in North America for mountain plover. This comment provides context for the discussion that follows. This comment is noted for the decision-makers' consideration. No response is required.

Response to Comment 6-19: The comment cites displacement and indirect impacts to owls and states that impacts and loses of this scale are cumulatively significant and require mitigation to offset impacts. The comment also describes the mitigation provided in the Draft EIR to off-set impacts to burrowing owl. Notwithstanding support of the farm incentive program, the comment also states that the USFWS does not agree with the proposed mitigation ratios or the duration of the short-term conservation lease.

The comment goes on to state that the USFWS would like to work with the CDFW, the County and the Applicant on the development of a comprehensive package to account for complete loss of foraging habitat for owls and wintering habitat for plovers associated with the Project. The USFWS asserts that elements of a mitigation package for both species should include:

- 1) Owl and plover-friendly farming practices implemented through an incentive program with the cooperation of landowners;
- 2) A menu of mitigation options for loss of foraging and nesting habitats consistent with the long-term maintenance of agricultural practices upon which the owl and plover depend;
- 3) Development of a standardized owl displacement strategy that optimized survivorship based on the results of a comparative study between active and passive translocation methods; and
- 4) Monitoring studies on the fate of burrowing owls nesting adjacent to the Project but suffering significant losses of foraging habitat that they depend on in their breeding territories and yearlong home ranges.

The commenter is directed to Appendix J of the Draft EIR for the methodology used to determine the impacts to burrowing owl foraging habitat. The *Staff Report on Burrowing Owl Mitigation* in 2012 (CDFW 2012) encourages project applicants to develop site specific impact analyses that can better lead to targeted compensation strategies by linking local conservation challenges and project-specific impacts to the conservation strategy. The Burrowing Owl Technical Report (Appendix J) relied on occupancy estimation and development of spatially explicit habitat use predictions to better estimate core foraging habitat specific to this site. This methodology provides a robust framework to estimate site-specific impacts to core foraging habitat and is consistent with efforts by CDFW to better inform the Project's impact analysis and mitigation strategy.

Also see Response to Comments 2-9, 2-11, and 2-12, where elements of mitigation measure MM 4.12.7 are discussed in more detail. In summary, this mitigation measure provides for three compensatory mitigation strategies to offset losses to foraging habitat (agriculture): purchase of conservation easements to protect agricultural use on the land, CDFW-approved in-lieu fees (if available), and development and implementation of the Burrowing Owl Habitat Mitigation Plan that is to be submitted to CDFW for approval prior to construction specifies performance standards for the Burrowing Owl Habitat Mitigation Plan, as well as a Burrowing Owl Exclusion Plan, including (collectively) identification of owl-friendly farm practices, options for protecting foraging and nesting habitat, owl displacement methodology and procedures, monitoring and reporting. Mitigation measure MM 4.12.7 and Response to Comments 2-9, 2-11, and 2-12 provide an adequate basis to conclude the implementation of mitigation measure MM 4.12.7 will reduce impacts to core foraging habitat for the burrowing owl to a less than significant level.

In regards to mountain plovers, the Audubon 2012 Mountain Plover Winter Survey report recommended maintaining alfalfa or grass fields to avoid impacts on mountain plovers. The burrowing owl impacts analysis and mitigation plan focuses on these same crops and therefore provides a reasonable surrogate for analysis of impacts to mountain plover foraging habitat. The burrowing owl mitigation strategies will similarly benefit mountain plover, thereby mitigating impacts to mountain plover winter forage habitat.

Response to Comment 6-20: The comment provides details regarding the Yuma Ridgway rail (formerly Yuma clapper rail as it is referred to in the Draft EIR). The comment provides details regarding Yuma Ridgeway rails' habitat and behavior. This comment provides context for the comment that follows. No response is required.

Response to Comment 6-21: The comment agrees with the Draft EIR's assessment of potentially significant direct and indirect impacts to Yuma Ridgway's rail during construction and operation. However, the comment contends that mitigation measure MM 4.12.5 does not reduce the significance of the impacts without a corresponding offsetting measure, nor does it address the potential for panel collision or collision with other project features. The comment contends that existing and proposed utility-scale solar projects and their associated infrastructure introduce new sources of mortality to resident and dispersing rails which cumulatively could be significant enough to function as on-going sources of mortality for the species for the life of these projects. The comment notes that mitigation measure MM 4.12.5 proposes to conduct a Yuma Ridgway's rail (formally named the Yuma clapper rail) field habitat assessment to determine if potentially suitable habitat is adjacent to the Project or Study Area.

Table 2.0-9 on page 2.0-62 in Chapter 2.0 Project Description of the Draft EIR describes the Applicant Proposed Project Design Features included as part of the Project. These avian species features (listed below) help to avoid and minimize potential collision impacts to the Yuma Ridgway's rail:

- To the extent feasible, non-reflective PV or CPV modules shall be used over reflective technologies to minimize collision risk.
- When above-ground lines, transformers, or conductors are necessary, all shall be spaced and designed to fully comply with the APLIC (2006) suggested practices to prevent avian electrocutions.

When above-ground lines are necessary, power line/wire marking devices including aerial marker spheres, swinging plates, bird diverters, paint, and other bird avoidance devices shall be used to prevent avian collisions as outlined in the APLIC Reducing Avian Collisions with

Power Lines: State of the Art document (2012). Bird flight diverters have proven effective for reducing and preventing bird collisions in some cases (CEC 2002).

- WRS is committed to assessing Project-related impacts to avian and bat species to avoid and reduce potential impacts to the greatest extent feasible. WRS is voluntarily developing a BBCS for this Project. This plan will be developed in coordination with the County of Imperial, USFWS, and CDFW. Avian- and bat-specific measures outlined herein will be finalized during the development process of the BBCS. The primary objectives of the BBCS are to:
 - 1. Identify feasible conservation measures that could be implemented to reduce negative impacts to avian and bat species.
 - 2. Develop a wildlife monitoring and reporting program to estimate post-construction fatality rates and impacts on avian and bat species.
 - 3. Determine whether avoidance, minimization, and mitigation measures implemented for the Project are adequate or whether additional corrective action or adaptive management is warranted. An adaptive management framework will be prepared to inform the potential development of additional actions.

To meet these objectives, the BBCS will include the following components:

- A description and assessment of the existing habitat and avian and bat species;
- An avian and bat risk assessment and specific measures to avoid, minimize, reduce, or eliminate avian and bat injury or mortality during all phases of the project.
- A post-construction monitoring plan that will be implemented to assess impacts on avian and bat species resulting from the Project. The post-construction monitoring plan will include a description of standardized carcass searches, scavenger rate (i.e., carcass removal) trials, searcher efficiency trials, and reporting. Statistical methods will be used to estimate Project avian and bat fatalities if sufficient data is collected to support statistical analysis.
- An injured bird response plan that delineates care and curation of any and all injured birds.
- A nesting bird management strategy to outline actions to be taken for avian nests detected within the impact footprint during operation of the Project. A conceptual adaptive management and decision-making framework for reviewing, characterizing, and responding to monitoring results."
 - Monitoring studies following commencement of commercial operation of each CUP area.
 Monitoring results will be reviewed annually by the Applicant and the County of Imperial, in consultation with CDFW and USFWS, to inform adaptive management responses
 - o Additionally, a BBCS will be developed to avoid and reduce potential impacts to avian species (mitigation measure MM 14.12.14a). The BBCS will include a monitoring plan for all avian species. Mitigation measure MM 4.12.5 includes an offsetting measure if Yuma Ridgway's rail is detected during focused surveys during the breeding season: consultation with USFWS. (See Save Panoche Valley v. San Benito County (2013) 217 Cal. App. 4th 503, 525-26 (EIR's requirement to conduct preconstruction surveys where surveys were not already conducted and reported in the EIR did not improperly defer significant aspects of mitigation because the measures provide for specific actions to be taken upon discovery of a certain species); Rialto Citizens for Responsible Growth v. City of Rialto (2012) 208 Cal. App. 4th 899, 945 (EIR did not improperly defer mitigation where

further surveys for the species and consultation with USFWS were proposed because "consultation" is governed by the statutory standards of the ESA).

Mitigation measure MM 4.12.14a on page 4.12-154 of the Draft EIR has been revised to state that if any federal listed, state listed, or fully protected avian carcasses or injured birds are found during post-construction monitoring, the Project Applicant shall notify the USFWS and CDFW within 24 hours via email or phone and work with the resource agencies to determine the appropriate course of action for these species (Refer to Response to Comment 2-14). Yuma Ridgway's rail is a state Fully Protected Species (CFGC Section 86) and "take" of this species by the Project Applicant and/or CUP developers is prohibited; and measures would be implemented to avoid "take."

Response to Comment 6-22: The comment recommends developing a mitigation strategy to address the potential for incidental take of Yuma Ridgway's rail. The comment notes that if a mortality of a federally listed species is documented, the take should be addressed by applying for an incidental take permit through the development of a Habitat Conservation Plan (HCP) that satisfies the permit issuance criteria stipulated under Section 10(a)(I)(B) of the Endangered Species Act or through consultation under Section 7 of the federal Endangered Species Act.

As noted in Response to Comment 6-21, a BBCS will be developed to avoid and reduce potential impacts to avian species. The BBCS will include a monitoring plan for all avian species. Mitigation measure MM 4.12.14a has been revised with the language suggested by the USFWS. Refer to Response to Comment 2-14.

Response to Comment 6-23: The comment includes closing remarks including a reference to the USFWS attached recommendations to assist with avoidance and minimization of impacts. The USFWS contact name and phone number are provided. No response is required.

Response to Enclosure Comments 6-24 thru 6-34: The comment recommends that the Project Applicant prepare and implement an interim Bird and Bat Conservation Strategy (BBCS). This BBCS should include the following:

- A description and assessment of the habitat impacts, characterization or mortality risk, and appropriate onsite avoidance and minimization measures.
- Appropriate sampling designs and estimators, conduct a statistically robust avian and bat
 mortality (and injury) monitoring program to: (1) estimate annual mortality by taxa and
 season (including rare and sensitive species when directed by the Service or CDFW) for all
 project structures likely to cause injury and fatality; (2) determine collision rates during
 diurnal and nocturnal periods; (3) assess the spatial distribution and abundance of mortalities
 on the project site; and (4) determine species composition, on the project site.
- Statistically robust carcass removal and searcher efficiency trials for post-construction monitoring during project operations to correct for data biases.
- An adaptive management and decision-making framework for interpreting monitoring results.
- An injured bird response plan that delineates care and curation of any and all injured birds, and funding for rehabilitation centers for the care and treatment, and eventual release or permanent storage of injured birds.
- Post-construction monitoring studies should be conducted by a third party independent contractor under the direct supervision of the lead action agency and coordinated with other

public trust agencies for at least 3 years following commencement of commercial operation of each individual CUP.

Mitigation measure MM 4.12.14a includes the recommendation for continued monitoring post-construction for at least two years (Refer to Response to Comment 2-14). The Applicant will consult on these studies annually with USFWS, the County of Imperial, and CDFW to determine if, and to what extent, post construction monitoring studies shall be continued in future years. Mitigation measure MM 4.12.14a also includes preparation of a BBCS in coordination with the County of Imperial, USFWS, and CDFW that substantially meets the recommendations above.

Response to Enclosure Comment 6-35, 39, 40, 41, 42: The comments recommend the following:

- Avoid using lattice-type structures and placing external ladders and platforms on towers to minimize perching and nesting.
- Minimizing use of outdoor lighting.
- Placing gen-tie transmission lines underground or on the surface as insulated, shielded wire, where feasible, to avoid collisions and electrocution of birds.
- Use of the most recent recommendations of the Avian Power Line Interaction Committee (APLIC 2006, 2012) is recommended for any required above-ground lines, transformers, or conductors.
- Designing and building onsite collector transmission lines underground to minimize bird collision risk.
- Installing and replacing flight diverters, as needed, on gen-tie transmission lines to render the lines more visible to both resident listed and migratory birds, including night migrating birds.

The **avian** specific design measures described in Table 2.0-9 of Chapter 2 include or have been revised to include many of the above recommendations.

Response to Enclosure Comment 6-36: The comment recommends co-location of gen-ties of nearby projects on the same poles where feasible, unless the gen-ties are constructed underground. Chapter 2 (Project Construction) of the EIR notes that the Project Applicant has entered into an agreement to share the Mount Signal Solar Farm Gen-Tie with the owner of the Mount Signal Solar Farm Project.

Response to Enclosure Comments 6-37, 38: These comments recommend the following:

- Using dual-axis tracking systems for panel installations to allow for randomized orientation
 while stowed to disrupt the lake effect and minimize bird collisions during no-producing hours
 of the day.
- Projects constructed in phases deploy different PV panel technologies (e.g. thin film, silicon wafer, concentrator) to generate comparative data on mortality risk by technology type using experimental design and monitoring principles.

Response to Comment 6-14 addresses the above recommendations.

Response to Enclosure Comment 6-43: The comment recommends installing and replacing fence markers or other devices as needed on perimeter fences to increase visibility to birds and potentially reduce collision rates. This recommended measure was not included as the need for this measure would be evaluated within the adaptive management framework to be based on data collected during post-construction monitoring.

Response to Enclosure Comment 6-44: The comment recommends to mitigate impacts to the affected subpopulations/subspecies to those species experiencing the highest mortality rates by providing funding for habitat enhancement and improvement projects within the range of those species' populations. This impact mitigation measure was not included as the need for this measure would be evaluated within the adaptive management framework to be based on data collected during post-construction monitoring.

Response to Enclosure Comment 6-45: This comment recommends determination of the range of those subspecies/subpopulations by providing funding to collect genotype, isotope, and morphometric data from the analysis of carcass specimens collected and curated from project sites. This impact mitigation measure was not included as the need for this measure would be evaluated within the adaptive management framework to be based on data collected during post-construction monitoring.

Response to Enclosure Comments 6-46, 47, 48: These comments recommend the following:

- In-kind permanent mitigation (fee title or conservation easement) for loss of agricultural burrowing owl and mountain plover foraging habitat at a discounted ratio (habitat replacement to loss ratio).
- In-kind temporary mitigation on an equivalent acreage basis for loss of agricultural burrowing owl or mountain plover habitat
- A market-driven crop differential fee program (difference in economic return to the landowner between net income expected from higher-profit crops and various lower-profit owl/plover friendly crops) paid annually for the life of the project by renewable energy developers to offset the income differential to farmers who enlist in the program and typically do not grow crops that provide suitable burrowing owl or mountain plover foraging habitat

Mitigation measure MM 4.12.7 in the Draft EIR and Response to Comment 2-7, 2-9, and 2-10 address mitigation for the burrowing owl and mountain plover. Response to Comment 6-19 also addresses these mitigation measures.

Michael Abatti P.O. Box 287 El Centro, Ca 92244 760-352-0755 760-352-0725 Fax



OCT 10 2014

Via Electronic and U.S. Mail

October 10, 2014

IMPERIAL COUNTY PLANNING & DEVELOPMENT SERVICES

Jim Minnick, Interim Director Imperial County Planning & Development Services Department 801 Main Street, El Centro, CA 92243

Email: jimminnick@imperialcounty.net

Comments on Wistaria Ranch Solar Energy Center Project Draft EIR

Dear Mr. Minnick:

The following comments are made in regards to the Draft Environmental Impact Report (EIR) for the Wistaria Ranch Solar Energy Center Project. Please include these comments as part of the administrative record for this project.

7-2

General Comments

The project proposes to construct solar energy facilities employing photovoltaic (PV) or concentrated photovoltaic (CPV) technology upon 2,793 acres of farmland west of Calexico to generate 250 megawatts of renewable energy. The project would use the existing gen-tie line that extends from the solar field sites to the Imperial Solar Energy Center South (ISECS) switchyard. This project is one of a number of similar solar development projects in the area which are expected to generate renewable energy for export through the SDG&E Sunrise Powerlink transmission line.

The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided (Public Resources Code Section 21002). The EIR is also intended to demonstrate to an apprehensive public that the agency has, in fact analyzed and considered the ecological implications of its action [in approving a project] (No Oil Inc. v. City of Los Angeles (1974) 13 C3d 68, 86). The foremost principal under CEQA is that the legislature intended the Act to be interpreted in such a manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language. (Laurel Heights Improvement Assn v. Regents of the University of California (1988) 47 C3d 376,

390). The current Draft EIR falls short in achieving these purposes on at least two fronts. First,

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an inadequate range of alternatives to the proposed project is presented within the document to provide any meaningful analysis. Second, the analyses of impacts within the document are flawed and/or inadequate with respect to a number of environmental concerns.

7-3 cont.

Inadequate Range of Project Alternative

CEQA Guidelines provide that "[a]n EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation" (CEQA Guidelines Section 15126.6(a)). The Draft EIR fails to meet this standard because the range of alternatives evaluated is limited in location to only agricultural lands like the proposed project. The failure to include a project alternative located on non-agricultural lands prevents the public and decision makers from evaluating whether there are alternatives to the project which would avoid the proposed project's significant effects.

The Draft EIR considers three project alternatives including the "no project" alternative. The first alternative is described as the "Williamson Act Avoidance Alternative". This alternative would exclude from the project CUPs 13-0051 and 13-0052 which are located on lands currently under Williamson Act contract encompassing approximately 436 acres resulting in a reduced area of approximately 2,357 acres. The Draft EIR concludes that this alternative would result in reducing the potentially significant impacts to agricultural soils. The second alternative is described as the "Reduced Size Solar Generation Facility Alternative". This alternative is identified as the environmentally superior alternative since it would exclude CUP 13-0047 which is located on a 130 acre site near the New River thereby reducing potentially significant impacts to sensitive lands in this area. The third alternative, the "no project" alternative, provides for no development and is used as a baseline against which the preferred and other two alternatives are compared.

The Draft EIR notes in Section 6.0 of the document that a non-agricultural land alternative on BLM property was considered but not selected for analysis because it "may" have greater impacts to cultural resources, native vegetation, and flat tailed horned lizard than the proposed project. This logic is unavailing to the extent that no formal analysis of such purported impacts was performed, nor was it weighed against the significant impacts identified as resulting from the proposed project itself. (i.e., significant impacts to the Southwestern Willow Flycatcher, Yuma Clapper Rail, Sandhill Crane, Burrowing Owl).

The preferred project and its alternatives (excluding the "no project" alternative) all result in significant impacts to this state's agricultural resources. The preferred project will result in a reduction of 395 acres of Prime Farmland and 2,194 acres of Non-prime Farmland. The "Williamson Act Avoidance Alternative" will result in a similar reduction of Prime Farmland and the "Reduced Size Solar Generation Facility Alternative" will result in a reduction of 45 acres of Prime Farmland.

7-7

7-6

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The Draft EIR identifies a number of measures (MM 4.9.1a) to potentially mitigate these impacts including the procurement of Agricultural Conservation Easements on a 2 to 1 basis for Prime Farmland and a 1 to 1 basis for Non-prime Farmland, payment of an "Agricultural In-Lieu Mitigation Fee" to the Imperial County Agricultural Commissioner in the amount of 30% of the fair market value for Prime Farmland or 20% of the fair market value for Non-prime Farmland, and the execution of a Public Benefit Agreement or Development Agreement between the Permittee and the County to be used for the stewardship, preservation and enhancement of agricultural lands. In addition, the Permittee is required to submit to Imperial County a reclamation plan documenting how the land will be returned to its current agricultural condition assuming this occurs at the end of the project's projected 30 year life (MM 4.9.1b).

7-7 cont.

Notwithstanding the inadequacy of these mitigation measures which is separately discussed below, the failure of the Draft EIR to include a single project alternative not located on farmland conflicts with CEQA's mandate that an EIR describe reasonable alternatives to the project which may eliminate or minimize significant environmental impacts. This is perhaps the Draft EIR's most glaring error. This oversight is not surprising, however, considering that the project is but one puzzle piece in the larger universe of solar projects recently constructed and/or proposed for construction on agricultural lands in this area which have also failed to consider using non-agricultural lands to minimize their impacts to agricultural resources.

7-8

Inaccurate and Incomplete Analysis of Environmental Impacts

Agricultural Resources Impact Analysis The Draft EIR fails to provide an accurate and complete analysis of the project's impacts upon agricultural resources. As noted above, the Draft EIR recognizes that the project will have significant impacts upon agricultural resources. However, the Draft EIR fails to draw a conclusion as to whether those impacts will be mitigated to be less than significant and the mitigation measures themselves are speculative in nature. Hence, the analysis in the Draft EIR is incomplete. The Draft EIR also wrongly concludes that the conversion of agricultural lands to solar development is consistent with the County's General Plan.

7-9

On page 4.9-49, the Draft EIR notes that the developer proposes to mitigate the project's significant impacts on agricultural resources under MM 4.9.1a by adopting a Public Benefit Agreement or Development Agreement with the County wherein they would pay an Agricultural Benefit Fee and Community Benefit Fee consistent with the County's "Guidelines for the Public Benefit Program for Use with Solar Power Plants in Imperial County" which was adopted as part of Resolution No. 2012-005. The Draft EIR also notes that a reclamation plan will be prepared for the project to allow restoration of the land to farming after the project is decommissioned. However, on page 4.9-51 under the heading "Significance After Mitigation" no conclusion is drawn as to whether these mitigation measures will mitigate the impacts to be less than significant. The Draft EIR only notes that the measures will "reduce" the impact. Similarly, in the Executive Summary of the Draft EIR on page ES-51, no indication is made in Table ES-1 "Summary of Impacts" as to the level of impact or significance resulting to Agricultural Resources after mitigation. Perhaps these omissions are intentional to avoid advertising the unavoidable conclusion that the project will have significant impacts on agricultural resources despite the proposed mitigation.

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The Draft EIR does not specifically describe how the payment of an Agricultural Benefit Fee or Community Benefit Fee will mitigate impacts to agricultural resources other than to note that such fees may be used for certain purposes under the County's Resolution 2012-005 and the Board of Supervisor's subsequent "Funding Allocation Guidelines and the Proposed General Procedures/Guidelines for Allocation of Ag Benefit Funds" which were approved on February 11, 2014. The Draft EIR describes the allocation under these County policies to be as follows:

The Agricultural Business Development Category, such as funding for agricultural commodity processing plants and energy plants that use agricultural products, which was identified as the greatest job creator category would receive 50 percent of the funds;

The Research & Development Category, such as funding for development of new highyield or water-efficient crops, new water conservation techniques, new technology to improve yields in existing crops, and partial funding for an endowment to support an agricultural research specialist, would receive 20% of the funds. Improved water conservation and efficient crop production keeps more farmland in production during drought cycles therefore supports job creation and maintenance;

The Agricultural Stewardship Category, such as programs that bring fields back into production, implement soil reclamation, and improve existing fields to improve crop yields, would receive 20%. Increase production of crops again leads to more agricultural jobs to prepare and harvest the fields; and

The Education/Scholarship Category, such as matching funds for scholarships awarded by agricultural organizations for agricultural studies, student loans, Future Farmers of America and 4-H loans, would receive 10%. Training the next generation of farmers to continue and expand farming operations will also support agricultural job creation.

While some of these funding categories may mitigate economic impacts within the agricultural community resulting from the loss of agricultural lands, none of them serve to protect or off-set the physical loss of agricultural resources resulting from the project. The fact that 50 percent of the funds may be used for agricultural commodity processing plants and energy plants that use agricultural products leaves me wondering as to whether the real purpose behind the Agricultural Benefit Fee program is to help fund some of the County's "pet" projects. It is recognized that the Draft EIR also allows conservation easements and/or Agricultural In-lieu Mitigation Fees as means of mitigation in addition to a Public Benefit Agreement or Developer Agreement, but these measures likewise fail for the same reason. In addition, non-specific fee based mitigation measures are speculative in nature and insufficient for the purposes of CEQA. (See for example, Anderson First Coalition v. City of Anderson (2005) 130 Cal.App.4th 1173).

The fact that a reclamation plan is required under MM 4.9.1b in no way assures that lands will actually be restored to agricultural uses at the end of the project's 30 year life. The preparation of a plan itself is not a firm commitment to restore the lands and cannot be relied upon as mitigation.

7-12

7-11

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On pages 4.9-6 through 4.9-20, the Draft EIR provides a summary of the project's purported consistency with the County's General Plan. This analysis fails to accurately describe the project's consistency with a number of the General Plan elements. For example, the analysis claims that the project is consistent with the Agricultural Resources Element, Preservation of Important Farmland, Goal 1 which states:

7-13

Goal 1: All Important Farmland, including the categories of Prime Farmland, Farmland of Statewide Importance, Unique Farmland, and Farmland of Local Importance, as defined by Federal and State agencies, should be reserved for agricultural uses.

The Draft EIR concludes on page 4.9-6 that because mitigation measures MM 4.9.1a allows for the preservation of comparable Prime Farmland and non-Prime Farmlands and MM 4.9.1b directs the Applicant to prepare a Reclamation/Decommissioning Plan, as well as the fact that the project description includes restoration of land as part of the project, it is consistent with this goal. However, this is clearly not the case. A solar project is not an agricultural land use and allowing such uses on agricultural lands is directly contrary to the goal that these lands be reserved for agricultural uses. The fact that the project description provides for the return of these lands to agricultural uses at the end of their life (again a highly speculative proposition) does nothing to prevent the loss of such land for agricultural uses during the life of the project. Mitigation measure MM 4.9.1a provides no offset to the removal of agricultural lands from production, only allowance for protecting other existing agricultural lands. The fact that the County Board of Supervisors chooses to ignore the inherent conflict with this primary General Plan goal in approving the construction of solar facilities on agricultural lands cannot be used as evidence of compliance.

7-14

Similarly, the Draft EIR claims that the project is consistent with Objective 1.1 of the County's General Plan Agricultural Resources Element which provides:

Objective 1.1 Maintain existing agricultural land uses outside of urbanizing areas and allow only those land uses in agricultural areas that are compatible with agricultural activities.

7-15

The Draft EIR concludes on page 4.9-6 that because solar energy facilities are allowed as conditional uses in agricultural zones under the General Plan it is consistent with this objective. However, the question that must be addressed is not whether it is allowable under the General Plan, but rather as noted in the objective whether it is compatible with agricultural activities. The construction of solar facilities on agricultural lands is not compatible with agricultural activities. Compatible can be defined in this context as being able to exist or occur together without conflict. The construction of solar panels on agricultural lands prevents them from being used for agricultural and is thus in conflict with this purpose. The construction of solar panels on lands adjacent to agriculture can also conflict with those lands as noted below. Conflicts of the project with the General Plan's Agricultural Resources Element, Preservation of Important Farmland, Objective 1.3 is also inevitable on similar grounds.

On page 4.9-8 the Draft EIR claims that the project is consistent with Objective 1.5 which states:

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Objective 1.5 Direct development to less valuable farmland (i.e., Unique Farmland and Farmland of Local Importance rather than Prime Farmland or Farmland of Statewide Importance) when conversion of agricultural land is justified.

As justification for concluding that the project is compatible with this objective, the Draft EIR notes that although 394.8 acres of Prime Farmland and 5.5 acres of Unique Farmland will be converted to solar purposes the conversion would be temporary due to the project's 30 year life and the requirement that a restoration plan be prepared to restore the site to-pre-construction conditions. Notwithstanding the fact that a "temporary" project with a life span of 30 years is in reality a permanent project, this objective has clearly not been met as there has been no attempt to direct the development to less valuable farmland or for that matter non-farmland.

7-16 cont.

On page 4.9-11 the Draft EIR claims that the project is consistent with Objective 2.1 which states:

Objective 2.1 Do not allow the placement of new non-agricultural land uses such that agricultural fields or parcels become isolated or more difficult to economically and conveniently farm.

As the owner of farm land (APN 052-180-030) which is located at the southeast corner of Kubler Road and Rockwood Road near the center of the Wistaria Ranch project I am particularly disappointed in this conclusion as this project together with the Rockwood and Centinela solar projects effectively isolate my land from other agricultural lands and leaves me as an island within a sea of solar developments. Other portions of the Wistaria Ranch project border lands I own or farm along or northward of Lyons Road and there are a number of other agricultural lands which become isolated as a result of this project. It is absolutely unrealistic to claim that the proposed project conforms to this objective. In support of its conclusion, the Draft EIR notes that the Department of Conservation has stated "[b]ecause the County has concentrated solar facilities in various states of completion. The Department believes that based on the County's decision to focus solar development in the area, which the Department recognizes as an industrial use of the land, the proposed project will not result in discontiguous patterns of urban development." The fact that the Department of Conservation may also erroneously draw this conclusion can not be used to support the conclusion in the Draft EIR.

7-17

Along similar lines, the Draft EIR on page 4.9-15 states that the project is consistent with Goal 3 of the Agricultural and Non-Agricultural Land Use Relations which states:

Goal 3: Limit the introduction of conflicting uses into farming areas, including residential development of existing parcels which may create the potential for conflict with continued agricultural use of adjacent property.

7-18

The project fails to meet this goal to the extent that solar development is introduced into farming areas and poses conflicts to farming. In support of its conclusion that the project is consistent with this goal, the Draft EIR notes that the development is an allowed use under the County's CUP. The Draft EIR also notes that surrounding agricultural lands are subject to the County's

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Right to Farm Ordinance and the project is a solar in-fill project and is required to comply with site-specific weed, pest, and dust control plans. While the project may be required to meet certain mitigation measures to minimize its impact with adjacent farmlands, the project nonetheless intrudes upon farming areas contrary to this goal and no attempt has been made to limit this intrusion.

7-18 cont.

Failure to Analyze Heat Island Impacts It is well known that the conversion of agricultural lands to solar farms alters the climate within the area of development and at adjoining properties with respect to both ground temperature and humidity. The irrigation of agricultural lands has the effect of reducing ground surface temperatures and increasing humidity levels during most months of the year. The removal these lands from agricultural production results in general temperature increases and reduced humidity. In addition, the installation of large scale photovoltaic projects in and of themselves is known to raise ambient temperatures by 3.4° Fahrenheit or more (Fthenakis V. and Yu Y., Analysis of the Potential for a Heat Island Effect in Large Solar Farms 39th IEEE Photovoltaic Specialists Conference, Tampa, Fl., June 17-23, 2013). The combined effects of these phenomena will significantly alter the climate on adjacent lands. This project and others constructed or proposed for construction pose a very significant cumulative impact with respect to both temperature and humidity changes on both project lands and lands adjacent thereto. As a landowner and farmer adjacent to the proposed project I am very concerned about these impacts and I have raised these concern before (See for example my letter dated May 27, 2014 to Patricia Valenzuela, Imperial County Planning & Development Services Department concerning the Notice of Preparation of the Draft EIR for the Iris Cluster Solar Farm). The Draft EIR fails to provide any analysis of the project in this regards either individually or on a cumulative basis and is therefore incomplete. An EIR is to disclose and analyze the direct and the reasonably foreseeable indirect environmental impacts of a proposed project if they are significant (Guidelines, §§ 15126.2, 15064, subd. (d)(3)).

Conclusion

The Draft EIR fails to identify a reasonable range of alternatives to the project which would greatly reduce or eliminate many of the project's significant impacts. The Draft EIR also fails in its assessments of environmental impacts, provides an incomplete analysis thereof, or offers inadequate mitigation measures as highlighted above. Given the magnitude of these oversights, it is appropriate that the Draft EIR be revised and recirculated for comment. If you have any questions concerning my comments, I would be happy to discuss them with you further.

7-20

7-19

Best regards,
njuhael Olott.

Michael Abatti

El Centro, California

RESPONSE TO COMMENT LETTER 7

Commenter: Michael Abatti, Imperial County Resident

Date of Letter: October 10, 2014

Response to Comment 7-1: The comment provides introductory remarks regarding review of the Wistaria Ranch Solar Energy Center Draft EIR and requests that the comments in the letter be included as part of the administrative record. This comment is noted. No response is required. The commenter raises policy concerns regarding current County policies which allow use of agricultural land for solar projects, especially in the areas near his property. He is asking for a policy change: "...the project is but one puzzle piece in the larger universe of solar projects recently constructed and/or proposed for construction on agricultural lands in this area which have also failed to consider using non-agricultural lands to minimize their impacts to agricultural resources."

Response to Comment 7-2: The comment provides a brief description of the Project noting the use of the existing gen-tie line extending to the Imperial Solar Energy Center South switchyard. The comment also notes that this Project is one of a number of similar solar developments in this portion of the County exporting electricity through the SDG&E Sunrise Powerlink transmission line. This comment does not address the adequacy of the environmental analysis. No further response is required.

Response to Comment 7-3: This comment describes the purposes of an environmental impact report according to the Public Resources Code Section 21002. The comment also cites two cases regarding the purposes of an EIR (No Oil Inc. v. City of Los Angeles (1974) 13 C3d 68, 86; and Laurel Heights Improvement Assn. v. Regents of the University of California (1988) 47 C3d 376, 390). The commenter asserts that the Draft EIR fails to achieve these purposes on two fronts: 1) an inadequate range of alternatives; and 2) the analysis of impacts is flawed and/or inadequate. The remainder of the letter expands on these assertions. Accordingly, no response is provided for this comment.

Response to Comment 7-4: The comment cites CEQA Guidelines Section 15126.6(a) which refers to the requirement that an EIR consider a reasonable range of potentially feasible alternatives. The comment asserts that the Draft EIR fails to meet this standard because the range of alternatives evaluated is limited in location only to agricultural lands. The comment contends that the EIR failed to analyze an alternative on non-agricultural lands which prevents the public and decision makers from evaluating an alternative that may avoid the proposed Project's significant effects.

The commenter states that there is an inadequate range of project alternatives because no non-agricultural site for the project, and specifically no Bureau of Land Management (BLM) site, is analyzed. First, CEQA does not require that an EIR for a private project must analyze alternative sites; Guidelines Section 15126.6(a) provides that the EIR must include a reasonable range of alternatives to the project <u>or</u> to the location of the project.

Although no discussion of an alternative site is required, in response to the comment, the County notes that there are general criteria for an alternative site to be considered: 1) does it meet project objectives; 2) does it reduce environmental impacts; and 3) is it feasible. An unspecified non-agricultural site, or specifically a BLM site, does not meet these criteria.

First, the project objectives are set out in Chapter 2.0, Project Description, and reiterated in Chapter 6.0 Alternatives, sub-section 6.1 "Project Objectives" of the EIR, which includes up to 16 CUP's covering 29 parcels providing up to 250 MW of power. The parcels which make up the

Preferred Project have 12 separate owners and cover approximately 2,661 acres. The Applicant has obtained and put together the project area working with 12 separate landowners. This project is an infill project near other solar uses and relies on proximity to the Sunrise Powerlink. Most importantly, however, the use of farmland here is temporary. The land is not being removed from the "Agricultural" category. Any "conversion" of farmland is temporary and the term "conversion" is used throughout the EIR and these responses with that limited meaning.

Second, there is no evidence presented by the commenter to support the contention that a non-agricultural site (such as BLM land) would reduce environmental impacts. One objective of the project is to place solar facilities on already disturbed land because, in many cases, unfarmed desert land will have more sensitive biological and cultural resources than land already disturbed for farming. (See Response to Comment 7-6). Unlike farmland, which can be returned to agricultural use through a bonded reclamation plan, it is less likely that impacts on native species can be reversed in the same manner, even from a temporary use.

Third, the alternative is not feasible for several reasons. The County has no control and limited legal authority over federal BLM lands and their use. The Applicant already has an interest in the land proposed to be utilized here and current County policies allow such use of the land. The Applicant could not obtain site control over BLM land within a reasonable period of time.

See also Response to Comment 8-15 and 8-16 regarding discussion of alternatives/alternative locations.

Response to Comment 7-5: The comment identifies three alternatives analyzed in Chapter 6.0 of the Draft EIR: Williamson Act Avoidance Alternative; Reduced Size Solar Generation Facility Alternative; and the No Project Alternative. This comment provides a summary description of each alternative, but does not question the adequacy of the environmental analysis in this comment. Accordingly, no response is required.

Response to Comment 7-6: The comment focuses on a non-agricultural land alternative on BLM property that was considered but not selected for analysis based on potentially greater impacts to cultural resources, native vegetation and flat-tailed horned lizard as compared to the proposed Project. The commenter contends that this logic is flawed because no formal analysis of the impacts was performed and an alternative on BLM land was not weighed against the significant impacts identified as resulting from the proposed Project.

While the Draft EIR did not specifically analyze every impact of the Project against development of the Project on BLM land, CEQA does not require such an analysis. Other projects that have involved development of solar infrastructure (e.g. Gen-Tie Line components of the Centinela Solar Energy Project and Campo Verde Solar Project) on BLM land have identified a host of impacts with regard to cultural resources, sensitive native habitat and the flat-tailed horned lizard. In addition, development on lands under Federal Jurisdiction include a host of regulations and safeguards to protect threatened and endangered species. Examining past environmental documents (Centinela Solar Energy Project [SCH No. 2010111056] and Campo Verde Solar Project [SCH No. 2011111049]) evidences that different and significant environmental impacts may be likely to occur if the Project was developed on BLM property. The County concluded that alternative would not been environmentally superior and therefore did not merit further evaluation. See also Response to Comment 7-4, 8-15 and 8-16 regarding discussion of alternatives/alternative locations.

Response to Comments 7-7 & 7-8: The commenter contends that the proposed Project as well as the Williamson Act Avoidance Alternative and Reduced Size Solar Generation Alternative will

result in impacts to Prime Farmland. Section 4.9, Agricultural Resources of the Draft EIR disclose and analyzes impacts of the Project with regard to temporary use of farmland. The approximate acreage converted in association with the Preferred Project totals 349.7 acres of Prime Farmland; 2,188.5 acres of Farmland of Statewide Importance, and 2.2 acres of Unique Farmland. Table 4.9-26 on page 4.9-60 of the Draft EIR has been revised to reflect the reduction in acreage associated with the Preferred Project as follows:

"TABLE 4.9-26
PERCENTAGE CONVERSION OF FARMLAND BY THE PROPOSED PROJECT

Agriculture Classification	(A) Total Acreage in Imperial County	(B) Approximate Acreage Converted on Solar Field Site Parcels	(B÷A x 100) Project Percent of County Acreages
Prime Farmland	196,137	394.8 <u>349.7</u>	0.20 <u>0.18</u>
Farmland of Local Importance	35,774	0.0	0.00
Farmland of Statewide Importance	307,221	2,188.7 <u>2,188.5</u>	0.71
Unique Farmland	2,141	5.5 <u>3.2</u>	0.25 <u>0.10</u>
Total	539,273	2,589 <u>2,540.7</u>	0.48 <u>0.47</u>

Source: Source: DOC 2012b, EGI 2014."

The Draft EIR identified mitigation measures that will limit the Project's effect on agricultural production. These measures include options to:

- Acquire an agricultural conservation easement on a 1:1 (non-prime farmland) or 2:1 (prime farmland) ratio of impacted acres, thus ensuring the availability of an equal amount of agricultural land for production;
- Payment of an in-lieu mitigation fee to be used by the County's Agriculture Commissioner to promote active agriculture production; or
- Enter into a voluntary Public Benefit Agreement that will include, among other things, payments which total no less than the in lieu mitigation fee contemplated above (Draft EIR, page 4.9-49 [mitigation measure MM 4.9.1b] and page 4.9-51 [mitigation measure MM 4.9.1b].)

As explained in the EIR, the County and the Applicant will enter into an enforceable Development Agreement based upon the third option set out above. In 2012, the Board of Supervisors adopted Resolution 2012-005 establishing "Guidelines for the Public Benefit Program for Use with Solar Power Plants in Imperial County". Through its Resolution 2012-005, the County Board of Supervisors found that Agricultural Benefit and the Community Benefit payments constitute appropriate and specific mitigation measures for solar projects' temporary use of agricultural land. The Resolution states that solar energy projects may not create the economic advantages or permanent employment opportunities that other development could offer and that in meeting the state's renewable energy goals, it did not want to accomplish the state's goals at the expense of its residents because solar power plants commit areas to energy production that may preclude all other potential uses, including agricultural and open spaces uses. The Resolution further states that the Board of Supervisors held public scoping meetings, public hearings and formed a committee that provided input on a Public Benefit Program that was designed to address concerns expressed by the local community and others related to negative effects of these projects, particularly the loss of agricultural jobs. Finally, the Board found that utility-scale solar developers who voluntarily participated in the Public Benefit Program would "properly address the concerns

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of the community." Such payments including an Agricultural Benefit payment and Community Benefit payment, both of which increase pursuant to the CPI. In addition, there is a minimum sales tax guarantee as well as other benefits.

The County tracks performance of these mitigation measures. For example, the level of sales tax guarantee for the project is calculated based upon the anticipated expected sales associated with the project. The County tracks such estimates against the actual sales tax received. That tracking confirms that the guarantees are being met.

These otherwise voluntary payments have been made mandatory by the provisions of the Development Agreement between the project proponent and the County. The Development Agreement contains a procedure for administrative and judicial enforcement.

That Development Agreement provides that the County will utilize the proceeds of the Agricultural and Community Benefit payments in part for mitigation of the impacts of this project as well as overall to address mitigation of loss of farmland. On February 11, the Board of Supervisors adopted the Agricultural Benefit Committee's Recommended Funding Allocation. The funding allocation was recommended by a committee of agricultural and economic development experts that included the County Agricultural Commissioner, County Executive Officer, County Farm Bureau, Imperial Valley Vegetable Growers, Imperial County cattle industry, and two members of the general public. This allocation confirms use of these fees are to be used for the stewardship, protection and enhancement of agricultural lands within the County (Resolution 2012-005).

The Agricultural Business Development Category, such as funding for agricultural commodity processing plants and energy plants that use agricultural products, which was identified as the greatest job creator category, would receive 50 percent of the funds; the Research & Development Category, such as funding for development of new high-yield or water-efficient crops, new water conservation techniques, new technology to improve yields in existing crops, and partial funding for an endowment to support an agricultural research specialist, would receive 20 percent of the funds. Improved water conservation and efficient crop production keeps more farmland in production during drought cycles and therefore supports job creation and maintenance. The Agricultural Stewardship Category, such as programs that bring fields back into production, implement soil reclamation, and improve existing fields to improve crop yields, would receive 20 percent. Increased production of crops again leads to more agricultural jobs to prepare and harvest the fields. The Education/Scholarship Category, such as matching funds for scholarships awarded by agricultural organizations for agricultural studies, student loans, Future Farmers of America and 4-H loans, would receive 10 percent. Training the next generation of farming operations also supports agricultural job creation.

While the Preferred Project will cause the Project site to be unavailable for agricultural production for the operational life of the Project, this temporary loss is mitigated to less than significant by the above mitigation measures, which ensure that opportunities for active agriculture production in the County will continue to be available, supported, and promoted.

Based on the above, the County is within its discretion to determine that the Preferred Project is consistent with the various policies, goals, and objectives of the Imperial County General Plan promoting alternative energy and economic diversity. The General Plan does not "forbid" solar projects on Agriculture-designated lands. See also Response to Comment 7-13 below as well as Response to Comment 8-9.

See Reponses to Comment 7-4, 7-5, and 7-6, above.

Finally, it is worth noting that reduced impacts to agricultural land is within the range of alternatives considered because the Reduced Size Solar Generation Facility Alternative (Alternative 2) would keep more farmland in production. The comment itself admits that the Reduced Size Solar Generation Facility Alternative would only impact 45.1 acres of Prime Farmland, compared to 394.8 acres of Prime Farmland under the Original Project. The Applicant has formally requested the withdrawal of CUP 13-0047 and requested approval of the Reduced Size Solar Generation Facility Alternative (i.e. the Preferred Project). Refer to the discussion in sub-section 1.1.2.3 Final EIR in Chapter 1.0 of this Final EIR.

- **Response to Comment 7-9:** The commenter asserts that the DEIR analysis is incomplete because it does not conclude that impacts will be mitigated, and that the mitigation measures are speculative. See Response to Comment 7-7, above and Response to Comment 7-10 below. The DEIR analysis does discuss the mitigation measures for temporary use of farmland.
- Response to Comment 7-10: The commenter states that there is no conclusion the mitigation measures will reduce the impact to less than significant. Two types of impacts from the temporary non-agricultural use of the project land are addressed: soil impacts to the actual land itself, and economic impacts from the loss of jobs and other contributions made by agricultural uses to the County's economy. Page 4.9-49 of the Draft EIR provides for a bonded reclamation plan as further explained in Response to Comment 7-12 below. The mitigation provided by the Agricultural and Community Benefit payments are discussed in Response to Comment 7-7.
- Response to Comment 7-11: The commenter states that the Agricultural Benefit fee, conservation easements and or Agricultural in lieu Mitigation Fees do not protect or offset physical loss of agricultural lands. See Response to Comment 7-7, 7-8 and 7-10. Furthermore, the conservation easement and Agricultural in lieu Mitigation Fees are not applicable to the Preferred Project, which has already selected the Public Benefit payment option, made enforceable through the Preferred Project's Development Agreement. See CEQA Guidelines Section 15064(e) and the analysis on page 4.9-52 of the Draft EIR.
- Response to Comment 7-12: The commenter asserts that preparation of a Reclamation Plan is not a guarantee that the lands will be restored. The Reclamation and Decommissioning Plan is an appropriate mitigation for a temporary non-agricultural use, as it addresses the specific impact to the soil of the area taken out of agricultural use. (See Section 4.9 (B) Department of Conservation. The Reclamation and Decommissioning Plan here uses the Department soil model, LESA, to determine when reclamation has been achieved. (See mitigation measure 4.9.1) In addition, each CUP must be accompanied by a separate security instrument for the reclamation and decommissioning plan. Therefore, if the applicant did not perform the restoration work, then the County would use the security to perform the restoration work. This assures that the lands will actually be restored to the proper level for continued agricultural use.
- Response to Comment 7-13: The commenter asserts the Draft EIR does not contain a thorough analysis of consistency with all applicable General Plan goals and policies. CEQA does not require consistency with all General Plan General Plan goals and policies. Generally, "because policies in a general plan reflect a range of competing interests, the governmental agency must be allowed to weigh and balance the plan's policies when applying them, and [the agency] has broad discretion to construe its policies in light of the plan's purpose." Pfeiffer v. City of Sunnyvale City Council (2011) 200 Cal.App.4th 1552. "An action, program, or project is consistent with the general plan if, considering all its aspects, it will further the objectives and policies of the general plan and not obstruct their attainment. State law does not require perfect conformity between a proposed project and the applicable general plan ... [because] it is nearly impossible for a project

County of Imperial December 2014 to be in perfect conformity with each and every policy set forth in the applicable plan ... It is enough that the proposed project will be compatible with the objectives, policies, general land uses and programs specified in the applicable plan." *Id.* (internal quotations and citations omitted). Thus, the County has the authority to interpret the meaning of its General Plan and determine whether the proposed project is consistent

The County's General Plan includes a variety of goals, policies, and objectives that are implicated by the proposed Project and must, in some instances, be balanced against each other:

Imperial County's Goals and Objectives are intended to serve as long-term principles and policy statements representing ideals which have been determined by the citizens as being desirable and deserving of community time and resources to achieve. The Goals and Objectives, therefore, are important guidelines for agricultural land use decision making. It is recognized, however, that other social, economic, environmental, and legal considerations are involved in land use decisions and that these Goals and Objectives, and those of other General Plan Elements, should be used as guidelines but not doctrines. (General Plan Agricultural Element, page 29 [Section III.A Preface].)

The role of the Board of Supervisors is to consider and determine consistency with existing policies. Table 4.9-1 charts consistency of this use with the general plan. Goal 1, as quoted by the commenter, states a policy or goal, not a requirement (i.e. "All Important Farmland....should be reserved for agriculture.") Goal 1 also is modified by the later-adopted Alternative Energy Element. See Response to Comment 7-15.

Objective 1.8 of the General Plan allows conversion of agricultural land to non-agricultural uses only where a clear and immediate need can be demonstrated, based on population projections and lack of other available land (including land within incorporated cities) for such non-agricultural uses (County of Imperial 1996b, p. 30). This need includes economic considerations. The Wistaria Ranch Solar Economic Impact Analysis (EIA), Employment (Jobs) Impact Analysis (JIA), Fiscal Impact Analysis (FIA) has been prepared for this project for a variety of purposes (outside the CEQA process). The FIA supports the clear and immediate need for the Project. Refer to Response to Comment 5-4.

Response to Comment 7-14: The commenter states that mitigation measure 4.9.1a provides no offset for loss of Agricultural lands from agricultural production. See Response to 7-11.

Response to Comment 7-15: The commenter asserts the project is not compatible with agricultural uses because they cannot coexist on the same property at the same time. However, compatibility means that the uses cannot exist in the same zone. The Agricultural Element as well as the Alternative Energy Element of the General Plan provide that industrial uses, such a temporary renewal energy projects, are consistent with on-going Agricultural uses. Land Use Element IV C1 provides for conditionally compatible uses with a CUP. County Ordinance 90508.2 and 90509.2 authorize the issuance of CUP for major electrical generation facilities in agricultural areas. Solar power plants are treated differently than heavy industrial uses by implementing zoning through use of such a CUP. In making the findings for such a CUP, the Board must find that the use proposed is compatible with agriculture in surrounding areas, will not have an adverse impact on agriculture, and will not lead to its premature elimination. In fact, this project is located in an area where there already surrounding solar projects. See also the Response to Comment 7-19 and 8-9.

- Response to Comment 7-16: The commenter asserts that Objective 1.5 has not been met. Objective 1.5 states that development should be directed to less valuable farmland when conversion of agricultural land is justified. Again, the use of the project area for a temporary solar use is not conversion; or, if considered conversion, it is temporary. Furthermore, page 4.9-49 of the Draft EIR states that on July 18, 2013 the Applicant modified the CUP application to reduce the project foot print in order to reduce impacts to agricultural lands, including five APNs totaling 430.48 acres of land that were under Williamson Act contract.
- Response to Comment 7-17: The commenter asserts that the Department of Conservation (DOC) comments cannot be used to support the DEIR conclusions regarding Objective 2.1. Objective 2.1 states that new non-agricultural land uses should not be placed so that agricultural fields or parcels become isolated or more difficult to economically and conveniently farm. The role of the DOC is to monitor and, in some cases, administer farmland throughout the state; as such the opinion of the DOC provided for a project should be considered. See Response to Comment 8-10. The commenter also states that his land has been isolated by this project and two other solar projects asserts that other agricultural lands have been "isolated" as well. The commenter does not state that this "isolation" has made it more difficult to economically or conveniently farm and presents no evidence of that. See the discussion of Impact 4.9.3 (pages 4.9-56 and 5.9-57 of the Draft EIR) regarding impacts on adjacent land.
- Response to Comment 7-18: The commenter asserts the project is not consistent with Goal 3 because the project intrudes upon farming areas. See also Response to Comments 7-16 and 7-17. Goal 3 states a policy to limit the introduction of conflicting uses into farming areas, and specifically cites residential development. This project is not residential development. As explained above in Response to Comment 7-15 and 7-18, temporary solar use has been determined to be consistent with on-going agricultural uses. Again, the commenter provides no specific evidence of conflicts with his or other existing farming operations, stating that the project "intrudes upon farming areas." As noted, the commenter is making a policy statement, rather than a CEQA comment.
- Response to Comment 7-19: The commenter claims the EIR is inadequate because it does not analyze the possible indirect or cumulative effects of the project in altering "ground temperature and humidity," an effect called "heat island impacts." Commenter and others did raise this issue during the scoping process and it is addressed at page 4.10-19 of the EIR.

CEQA encourages lead agencies preparing a draft EIR to engage in early consultation with other public agencies, the public and the applicant to help inform the lead agency on the scope of the analysis of the EIR. CEQA Guidelines 15083 provides that this early consultation/scoping process can both help identify effects that should be analyzed in depth and in eliminating from detailed study issues found to not be important. As explained, and based upon a review of the study prepared by Columbia University faculty cited there, and based upon data provided by First Solar, there is insufficient evidence of a heat island impact here.

First, temperatures in Imperial Valley during 2013 ranged from as cold as 27 degrees Fahrenheit in the winter to as warm as 120 degrees Fahrenheit in the summer. Likewise, temperatures in Hanford, in the Central Valley, during 2013 ranged from 21 degrees Fahrenheit to 111 degrees Fahrenheit. The Imperial Valley and the Central Valley are each productive farming regions that enjoy a significant range of temperature variation such that small, localized changes in temperature do not have a significant impact on agricultural production.

An empirical study was conducted by Columbia University on a utility-scale photovoltaic ("PV") solar farm in Ontario, Canada which demonstrated that there was no significant increase in ambient air temperature near the solar farm.

- (1) The study revealed that at 100 meters from the solar farm the air temperature increase was only 0.5 degrees Celsius (0.9 degrees Fahrenheit, not 3.4 degrees Fahrenheit). The study concluded that a PV solar farm, similar to the Preferred Project does not have a significant impact on ambient air temperatures. Logically, such a PV solar farm project does not have a significant effect on cattle that are already exposed to temperatures that reach 115 degrees Fahrenheit and are located 132 meters away.
- (2) The study demonstrated that solar panels actually cool to temperatures *below* ambient at night. Accordingly, the study concluded that the PV solar farm did not induce a dayafter-day increase in ambient temperature, and no such increase would be expected at the proposed Project.
- (3) The study concluded that access roads between solar fields allow for substantial cooling. Not only are there access roads proposed within the proposed Project, there is also a road separating the Project from Meloland. Consequently, adverse micro-climate changes from a potential PV plant such as the proposed Project should not be a concern. Therefore, the study does not support the request for a buffer between cattle operations and the solar panels.

See also Response to Comment 8-28.

Response to Comment 7-20: The comment provides a conclusion summarizing the Comments 7-1 to 7-19. See Responses to Comments 7-1 through 7-19.