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Via Electronic Mail and U.S. Post
email: Robert.Hingtgen@sdcounty.ca.gov

Robert J. Hingtgen
San Diego County Planning &
Development Services Department
5201 Ruffin Road, Suite B
San Diego, California 92123-1666

Re: Comments of The Protect Our Communities Foundation, Backcountry Against Dumps and Donna Tisdale for the Draft Programmatic Environmental Impact Report on the Soitec Solar Development Project, SCH No. 2012-121-018

Dear Mr. Hingtgen:

Pursuant to the California Environmental Quality Act ("CEQA"), Public Resources Code ("PRC") section 21000 *et seq.*, the Protect Our Communities Foundation, Backcountry Against Dumps and Donna Tisdale (collectively "Conservation Groups") submit the following comments regarding the Draft Programmatic Environmental Impact Report ("DPEIR") issued by the County of San Diego (the "County") for the Soitec Solar Development Project at the Rugged, Tierra del Sol, LanEast, and LanWest locations[1] (the "Project").

Conservation Groups advocate for the adoption of smart and effective energy policies to halt global warming, such as increased use of rooftop solar photovoltaics and other distributed generation sources. In combating global warming, San Diego may not abdicate its solemn duty to ensure the health and welfare of the County's residents and environment. *Davidson v. County of San Diego* (1996) 49 Cal.App.4th 639, 648-649. CEQA likewise requires the County to protect the health and safety of the County's residents by disapproving any project that poses

[1] Conservation Groups note that, although Soitec Solar Development (and its subsidiary LanWest Solar Farm LLC) requested that the County "withdraw the Major Use Permit Application for the LanWest solar farm project," and "close the case out" on September 5, 2013, because the facility is discussed as part of the Project in the DPEIR, Conservation Groups will address the facility as part of the Project.

significant but avoidable environmental impacts unless they are fully disclosed, analyzed and mitigated to insignificance. PRC § 21002. The DPEIR fails to meet these mandates because it does not adequately study, mitigate and consider alternatives to the Project's many significant public health and environmental impacts.

I. INTRODUCTION

This Project represents an unnecessary industrialization of scenic and environmentally sensitive rural land, including important wildlife habitat, farmland and open space.[2] Conservation Groups urge the County to analyze and adopt a non-fossil fuel distributed generation alternative that would locate energy generation near demand centers in already-disturbed areas. Distributed generation is vastly preferable to the Project's approximately 1,490 acres of solar farms that will replace scenic, mostly untrammeled rural lands. Yet the DPEIR improperly dismisses this alternative because it will "not create utility scale solar energy facilities" and is unable to contribute to the state's renewable portfolio. DPEIR 4.0-3. But assuming that only the Project can achieve the County's objectives ends the inquiry before it begins. A proper CEQA review would show that distributed energy would achieve the Project's renewable energy objectives at a vastly smaller environmental cost. As detailed below, the County's DPEIR is disorganized, incomplete, and fails to address the Project's significant impacts. In addition, although the DPEIR focuses its analysis on the proposed project, the DPEIR also identifies Alternative 7, the Relocate Tierra Del Sol, LanWest and LanEast Alternative as the environmentally superior alternative. Yet, the DPEIR's brief discussion of Alternative 7 completely fails to analyze its impacts and cannot support this conclusion. For each of these reasons, the DPEIR violates CEQA.

II. THE DPEIR'S PROJECT DESCRIPTION IS DEFECTIVE.

As an essential starting point for analysis of a project's environmental impacts, all EIRs must provide a project description. 14 Cal. Code Regs. ["CEQA Guidelines"] § 15124. Among other things, the project description "shall contain the following information:"

> (a) The precise location and boundaries of the proposed project . . . shown on a detailed map.
> (b) A statement of objectives sought by the proposed project[, which] will help the Lead Agency develop a reasonable range of alternatives to evaluate in the EIR

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[2] Conservation Groups incorporate their October 10, 2013 Scoping Comments by reference. These comments are available in the Project's Administrative Record at http://www.sdcounty.ca.gov/pds/ceqa/Soitec-Documents/Record-Documents/2013-10-10-Stephan-Volker-Letter-re-Soitec-Solar-PEIR-Scoping-Comments-of-The-Protect-Our-Communities-Foundation-et-al.pdf

> . . . . The statement of objectives should include the underlying purpose of the project.
> (c) A general description of the project's technical, economic, and environmental characteristics . . . .

Id.

*"*An accurate, stable and finite project description is the *sine qua non* of an informative and legally sufficient EIR." *County of Inyo v. City of Los Angeles* ("*County of Inyo*") (1977) 71 Cal.App.3d 185, 193. By contrast,

> [a] curtailed or distorted project description may stultify the objectives of the reporting process. Only through an accurate view of the project may affected outsiders and public decision-makers balance the proposal's benefits against its environmental cost, consider mitigation measures, assess the advantage of terminating the proposal (i.e. the "no project" alternative) and weigh other alternatives in the balance.

Id. at 192-193.

Rather than "accurate, stable and finite," the DPEIR's Project description is so "distorted" that it precludes a full and accurate analysis of the Project's environmental impacts and identification of a range of reasonable alternatives. *Id*. Many of the basic assumptions undergirding the DPEIR's analysis of the Project are either wrong, unsupported or otherwise questionable.

A. THE DPEIR FALSELY CLAIMS THAT THE PROJECT MUST BE BUILT IN SAN DIEGO COUNTY.

The DPEIR states – and its entire environmental analysis assumes – that the Project must be located in San Diego County. DPEIR S.0-1, 1.0-1 to 1.0-2. Indeed, there is not even a single out-of-county alternative. Yet we now know that the entire Project may instead be built in *Imperial County*. On January 16, 2014, the California Public Utilities Commission ("CPUC") adopted Resolution E-4637, which approves amendments to "the long-term power purchase agreements . . . between San Diego Gas & Electric Company[("SDG&E")] and Tierra del Sol Solar Farm, LLC, LanWest Solar Farm, LLC, LanEast Solar Farm, LLC, and Rugged Solar, LLC." Resolution E-4637, p. 1 (attached hereto as Exhibit 1). Among other things, the amendments "result in . . . [a] new site location [and] new interconnection point" for the projects in Imperial County, California. *Id*. The "new project sites" would be located "near Calexico, Imperial County, California," and would interconnect at the Imperial Valley Substation. *Id*. at 2.

The potential relocation of the Project to Imperial County renders the entire DPEIR and CEQA process to date obsolete. The County must accordingly revise the DPEIR in the following ways, among others: (1) amend the Project location description to include Calexico (Imperial County); (2) remove the San Diego-specific Project objectives, including objectives 2 and 4 (DPEIR 1.0-1); and (3) describe and fully analyze the environmental impacts of the Calexico alternative and any other out-of-county alternatives. After revising the DPEIR with that "significant new information," the County must recirculate it. PRC § 21092.1; *Laurel Heights Improvement Association v. Regents of the University of California* ("*Laurel Heights I*") (1992) 6 Cal.4th 1112, 1126-1132.

B. THE DPEIR'S PROJECT OBJECTIVES ARE FLAWED.

In addition to unduly circumscribing the Project objectives to focus on San Diego County, the DPEIR misleads the public by suggesting – without supporting evidence – that the Project would meet the listed objectives. For example, the DPEIR states, in objectives 1 and 7, that the Project is intended to "[a]ssist in achieving the state's Renewable Portfolio Standard (RPS) and greenhouse gas emissions (GHG) reduction objectives" by "[d]evelop[ing] up to 168.5 MW of renewable solar energy systems that reduce consumption of non-renewable resources and reduce GHG." DPEIR 1.0-1. Yet the DPEIR provides no assurance whatsoever that the Project would "reduce consumption of non-renewable resources" that produce a greater per-watt amount of greenhouse gases. It merely states the Project "would provide a *potential* reduction" in GHGs emitted "*if* the electricity generated by [the Project] *were* to be used instead of electricity generated by fossil-fuel sources." DPEIR 3.13-25 (emphasis added), 3.13-30, 3.13-32, 3.13-35 (same).

The DPEIR's statement of Project objectives thus paints a wishful and erroneous picture of the Project instead of providing the public and decisionmakers with the "accurate view" that CEQA requires. *County of Inyo*, 71 Cal.App.3d 185, 192. And in doing so, it *prevents* rather than "help[s] the [County from] develop[ing] a reasonable range of alternatives to evaluate in the EIR." CEQA Guidelines § 15124. As discussed, the County must revise its Project description, Project objectives and alternatives analysis and then recirculate the DPEIR.

III. THE DPEIR'S ANALYSIS OF THE PROJECT'S IMPACTS IS INADEQUATE.

A. GROUNDWATER, WATER SUPPLY AND OTHER HYDROLOGICAL IMPACTS

As a preliminary organizational issue, the DPEIR – as distributed on the County website – lacks the appropriate subheadings throughout Chapter 3.1.5 (Hydrology and Water Quality)'s Analysis of Project Effects and Determination as to Significance (at DPEIR Section 3.1.5.3). Thus, the reader is left guessing as to the scope of each topic discussed and analyzed in this

section, and the scope of each finding of no significant impact. *See* DPEIR 3.1.5-28 to 3.1.5-56. This runs counter to CEQA's informational mandates; indeed, "[t]he data in an EIR must not only be sufficient in quantity, it must be presented in a manner calculated to adequately inform the public and decision makers, who may not be previously familiar with the details of the project." *Vineyard Area Citizens for Responsible Growth v. City of Rancho Cordova* ("*Vineyard*") (2007) 40 Cal.4th 412, 431.

Substantively, the DPEIR underestimates the quantity of water required in both the Project's construction and operational phases; underestimates the groundwater aquifer's resilience, capacity, and recharge rate; and overstates the availability of water to support the Project.

> When discussing a project's water supply impacts, an EIR must address[] the reasonably foreseeable *impacts* of supplying water to the project. If the uncertainties inherent in long-term land use and water planning make it impossible to confidently identify the future water sources, [the] EIR may satisfy CEQA if it acknowledges the degree of uncertainty involved, discusses the reasonably foreseeable alternatives – including alternative water sources and the option of curtailing the development if sufficient water is not available for later phases – and discloses the significant foreseeable environmental effects of each alternative, as well as mitigation measures to minimize each adverse impact.

Vineyard, *supra*, 40 Cal.4th 434 (emphasis in original).

As discussed in more detail below, the DPEIR's failure to discuss the reasonably foreseeable impacts of supplying water to the Project – both by failing to adequately address the Project's water demand, and by failing to adequately address the future water sources or discuss the level of uncertainty involved with supplying water to the Project – violate CEQA's informational mandate.

1. The DPEIR Underestimates the Project's Construction Water Demands.

The DPEIR underestimates the amount of water required during the construction phase of the Project in at least five significant ways. First, the DPEIR's calculation omits several construction activities which will require water. *See* DPEIR 1.0-41 to 1.0-42, Table 1-6. For both Rugged and Tierra del Sol, the construction water estimate fails to account for *any* water demand for many phases of Project construction, including constructing (1) substations, (2) operation and maintenance ("O&M") buildings, (3) the Tierra del Sol gen-tie, (4) the rock crushing facility, (5) undergrounded electrical equipment, (6) culverts, (7) draining, (8) fencing, and (9) foundations for *anything* besides CPV trackers such as invertors, transformers or poles. *Compare* DPEIR 1.0-41 to 1.0-42, Table 1-6 *with* DPEIR 1.0-43, Tables 1-8 & 1-9. It also ignores any water required for equipment washing (as a noxious weed mitigation), or during the

final punch-list and cleanup phases of construction. *Id*. The DPEIR's discussion of groundwater and water supply impacts in sections 3.1.5 and 3.1.9.3 does not fill in these analytical gaps. *See* DPEIR 3.1.5-48 to 3.1.5-56, DPEIR 3.1.9-09 to 3.1.9-13. Section 2.4.1 of the Groundwater Resources Investigation Report for Rugged Solar Farm (DPEIR Appendix 3.1.5-6), and Section 2.4.1 of the Groundwater Resources Investigation Report for Tierra del Sol (DPEIR Appendix 3.1.5-5) make clear that these water demands were not included in any calculations for the Project. In addition, the AECOM estimation sheets for Rugged Solar and Tierra del Sol Solar Farm, which Dudek used to prepare the DPEIR,[3] show that the concrete estimates account *only* for concrete used for tracker foundations. In order to properly understand the actual construction water demands, these numbers must be recalculated; otherwise the environmental analysis is insufficient. The projections for LanWest's and LanEast's construction water use, which were extrapolated from the flawed calculations for Rugged, must also be revised to reflect the additional water demands.

Second, the DPEIR and AECOM's water use estimation sheets show that the water estimates for dust-control and grading are flawed, and are likely to repeat the mistakes found in Dudek's analysis for the East County Substation ("ECO Substation"). The FEIR/FEIS for ECO Substation, which is located less than 10 miles from the Rugged, LanWest and LanEast sites, and less than 15 miles from Tierra del Sol, vastly understated the amount of water necessary for dust suppression and grading.[4] As to grading, the ECO Substation FEIR/FEIS severely under-estimated the depth of the alluvial soil, and during construction the ECO Substation project required significant modification, including the need to construct additional sloping outside of the planned grading limits. *Id.* In addition, the ECO Substation estimate assumed that the in-situ soils had a much higher moisture content. *Id.* Taken together, the ECO Substation project required a 200% increase in water from the amount analyzed in that project's EIR. *Id.* Here, it appears that AECOM modified its moisture content calculations to reflect the dry conditions at ECO Substation.[5] However, the DPEIR's grading estimate is not based upon a thorough investigation of the depth and composition of the topsoil. While the DPEIR mentions that the topsoil at Tierra del Sol is shallow (DPEIR 3.1.2-4), it does not address the depth of the topsoil at Rugged. Given that the DPEIR fails to estimate the amount of grading to be undertaken during construction (*see, e.g.,* DPEIR 1.0-12), the County's water use estimate cannot be based on the

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[3] As available in the Administrative Record for the Project at http://www.sdcounty.ca.gov/pds/CEQA/Soitec-Documents/Record-Documents/2014-02-12-Jim Bennett-email-to-Howard-Cook-Additional-Information-on-Construction-Water.pdf.

[4] *See* San Diego Gas & Electric, East County Substation Project Minor Project Refinement Request Form, Request # 8, 10-1-2013, p. 2 (attached hereto as Exhibit 2).

[5] While AECOM's water estimation sheet purports to use the lowest observed moisture content at each site for its calculations, it appears that AECOM instead used moisture content reading from its referenced 42.1 acre site near Boulevard.

appropriate geotechnical data. In addition, the DPEIR water calculations for dust control and grading do not account for these activities on the 17 acres of access roads, pull sites, staging areas and foundations for the Tierra del Sol gen-tie. *See* DPEIR 1.0-2. In order to accurately inform decisionmakers and the public about the Project's impacts, the County must recalculate the water use estimates based upon the actual geology of the Project locations.

Fourth, the DPEIR's site preparation calculations are (1) based on the incorrect acreage for Rugged, (2) potentially based on an incorrect ratio of gallons per acre, and (3) ignore gen-tie water demands. AECOM's estimation sheet for Rugged indicates that an assumed 460 acres of land would need to be cleared, of *575 acres* for the site (subtracting 20% for previously cleared or low-lying grass lands). The DPEIR, however, indicates that Rugged will occupy *765 acres*. DPEIR 1.0-4. Assuming for the sake of argument that AECOM accurately represents that 20% of the Rugged sites will not require preparation, 612 acres would need to be cleared. Thus the County omitted *152 acres* from the DPEIR's water use estimate. Using AECOM's assumption that site preparation will take 24,204 gallons per acre, Rugged would require 14,812,848 gallons of water for site clearing rather than the 11,133,840 gallons claimed in the DPEIR. DPEIR 1.0-41, Table 1-6. This 3,679,008 gallons represents an additional 11 acre feet that are unaccounted for in the DPEIR. As with the Project's construction activities, the projections for LanWest and LanEast's water use, which were extrapolated from the flawed calculations for Rugged, must also be revised to reflect the additional water demands.

Further, it appears that the 24,204 gallon-per-acre figure is erroneous. It seems that AECOM extrapolated water use based on the 32 acre Boulevard Border Patrol Station. DPEIR 1.0-53 (acreage). Yet AECOM's estimate states that it is based on a 42.1 acre site. Consequently, it is impossible to determine whether the underlying calculation of 24,204 gallons per acre used by AECOM is accurate. If the total water use at the Boulevard Border Patrol Station was 1,018,988.4 gallons, then dividing this quantity by 32 acres yields approximately 31,843 gallons per acre.[6] Using this number, Rugged would require 19,487,916 gallons for site preparation of 612 acres (assuming 20% of the Project will not require site-clearing) or 59.8 acre feet, *25.6 more acre feet than accounted for in the DPEIR*. DPEIR 1.0-41, Table 1-6. Tierra del Sol would require 13,374,060 gallons to prepare 420 acres, or 41 acre feet, which is *almost 10 more acre feet than accounted for in the DPEIR*. DPEIR 1.0-41, Table 1-6. Further, as noted the site-preparation water calculations doe not account for dust control and grading for the 17 acres of access roads, pull sites, staging areas and foundations for the Tierra del Sol gen-tie. *See* DPEIR 1.0-2. The Tierra del Sol gen-tie omission accounts for an additional 411,468 to 535,211 gallons of water for site preparation alone.[7]

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[6] (24,204 * 42.1)/32=31,843.3875.

[7] 24,204 *17=411,468, 31843*17 =535,211

Fifth, the Project makes it clear that "disturbed areas should be revegetated as soon as possible after disturbance." *See, e.g.,* DPEIR S.0-25, 2.3-180. The DPEIR Appendices state that the cleared areas will be replanted with native groundcover. *See, e.g.,* DPEIR Appendix 3.1.5-1, p. 2; DPEIR Appendix 3.1.5-2, p. 2. Yet the hydrology section contains no discussion of the number of acres to be revegetated and no calculation of the amount of water it will require.

Sixth, in addition to AECOM's botched water estimation sheet, the DPEIR's discussion of the water use associated with site preparation, which consists of "clearing, grubbing, grinding and dust control," is fatally flawed. DPEIR 1.0-41 to 1.0-42. The DPEIR states that the water calculation assumes that 20 percent of *each* site "consists of low-lying grass and land already cleared for Sunrise Powerlink project" and thus does not include those areas in its site-preparation water-use estimate. *Id.* In looking at the vegetation surveys for Tierra del Sol, it is clear that such a blanket adjustment would be inappropriate. At Tierra del Sol, the surveys do not reveal that 20% of the site is clear; to reach 20% the calculation would have to include mixed-chaparral and areas planted with non-native species (including Tecate cypress and pine trees).[8] *See, e.g.,* DPEIR Appendix 3.1.4-5, pp. 12-13. These large plants will need to be cleared from the site, therefore it would be improper to exclude these categories from the water use calculations for any of the Project sites, including LanEast and LanWest, which are entirely based upon the Rugged conditions.

Last, the DPEIR's construction water use estimates do not add up. In Table 1-6, the total Tierra del Sol Construction Water amount is listed as 16,133,00 gallons but, when each component is added together, the total increases to 16,177,096 gallons; the total Rugged Construction Water amount is listed as 19,361,000 but, when each component is added together, the total also increases, to 19,442,464. DPEIR 1.0-41 to 1.0-42, Table 1-6. These numbers also do not match the AECOM estimation sheets, which project that Tierra del Sol would use 16,187,841 gallons, and Rugged 19,374,452 gallons. Conservation Groups urge the County to correct these mistakes, and ensure that *all* calculations are accurate and consistent.

Because the construction-related water demands are vastly underestimated, the impacts to local groundwater, and demands for imported water, have been impermissibly downplayed. Absent an accurate assessment of the water needed for Project construction, the DPEIR fails to support its conclusion that there are no significant hydrological or public services impacts.

2. The Project's Operational Water Demands Are Woefully Understated.

The DPEIR underestimates the Project's operational water use in at least three major ways. First, the DPEIR assumes that during Project operation the CPV trackers will need to be

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[8] In addition, the Southwest Powerlink, not the Sunrise Powerlink, runs through the middle of the Tierra del Sol location.

washed only nine times each year. *See e.g.*, DPEIR 1.0-42, Table 1-7. This assumption ignores the nature of the Project's desert environment. The air has fine particles – the area is in non-attainment for PM_{10} and $PM_{2.5}$ air quality standards – that blanket everything with a layer of dust. The fine desert soil will be kicked up into the air by soil disturbing activities in the Project area, such as the campground construction and associated rock crushing facility at Rough Acres Ranch near the Rugged, LanEast and LanWest sites (*see* DPEIR 1.0-55 and DPEIR 1.0-89), and the Jewel Valley Wind and Solar project near all four project locations. DPEIR 1.0-50 and DPEIR 1.0-89. These particles will collect on the surface of the CPV trackers and reduce the Project's generating capacity. The planned cleaning schedule of less than one cleaning per *month* vastly understates the potential water demand for tracker cleaning. Indeed, it appears that the CVP trackers that Soitec installed in Newberry Springs have been washed closer to once per *week*. Assuming a weekly washing schedule, the water use for tracker washing would be 9,750,000 gallons per year instead of 1,687,500. The County's assessment of the Project's water use must be corrected to more accurately reflect the conditions at the Project location.

Second, the DPEIR does not include any allocation of water for fire suppression in its estimate of the Project's operational water needs. DPEIR 1.0-42, Table 1-7; DPEIR Appendix 3.1.4-5, p. 36 (capacity of Tierra del Sol's fire suppression tanks, source of water, and other details to be determined "at the time of detailed system design"); DPEIR Appendix 3.1.4-6, p. 38 (same). While the Project includes water tanks for storing fire-suppression water, the DPEIR's failure to account for the water necessary to fill these tanks must be corrected.

Third, the DPEIR does not properly quantify the water required for Project decommissioning, despite its requirement that "all detachable aboveground elements of the installation" be removed, all "structural elements, including those that penetrate the ground" be removed, and the Project site be made ready for "reuse of the land . . . which could include ground surface restoration to surrounding grade and reseeding with appropriate native vegetation." DPEIR 1.0-17, *see also* DPEIR 1.0-18 ("decommissioning would include removal of all ground-level components and preparation of the site with a soil stabilization agent . . . or reseeded with native species" if there is no new use proposed). Removing the tracker arrays, re-grading, reseeding, and restoring the disturbed land will take considerable amounts of water but the DPEIR erroneously claims these water-intensive tasks would require less water than construction. DPEIR 1.0-21.

3. The DPEIR's Analysis of the Project's Impacts to Groundwater Resources Is Flawed and Deficient.

Contrary to CEQA, the Project's description has been manipulated to support the proponent's claim that groundwater pumping will always fall under the threshold of significance under the County's Groundwater Ordinance. *See, e.g.,* DPEIR 3.1.5-50 (Tierra del Sol groundwater pumping is projected to draw down nearest residential wells to 19.9 feet, 0.1 foot below significance threshold of 20 feet); DPEIR Appendix 3.1.5-5, p. ES-1 (18 acre feet of the

construction water to come from groundwater pumping). As shown below, it appears to the contrary that the Project's groundwater usage will substantially exceed this threshold. By misdescribing the Project to define away this significant impact, the DPEIR has eviscerated CEQA's mandate that a project's significant impacts must be mitigated to insignificance where it is feasible to do so. Unlike the rest of the DPEIR, which recognizes that key project features are either a Project Design Feature ("PDF") or a mitigation measure, the hydrology section makes no such distinction, thereby evading CEQA's requirement that significant impacts be mitigated. *See also* DPEIR 7.0-40 (no proposed mitigation or PDF for hydrology). This pumping limit should be an enforceable mitigation measure of the Project's potentially significant impact to groundwater resources, instead of an *unenforceable* Project component whose actual impacts escape review.

Second, the Project does not clearly address the location of the source of each Project component's operational water. For example, for Tierra del Sol, in the analysis of whether it will cause off-site impacts to agriculture, the DPEIR states "operational water use would be approximately 4 acre-feet per year and would come from *off-site sources*, and therefore, would not result in competition for water." DPEIR 3.1.1-23. Similarly, the DPEIR states as to Rugged that "[o]perational water use would be approximately 5 acre-feet per year and would come from *off-site sources*, and therefore, would not result in competition for water." DPEIR 3.1.1-24. Yet, in the hydrology discussion, the DPEIR states that Tierra del Sol's operating demand would be about 6 acre-feet a year, to be provided by *on-site wells*. DPEIR 3.1.5-50. It confirms that Rugged's operating demand is approximately 8.7 acre-feet a year, to be supplied "*from on-site wells.*" DPEIR 3.1.5-52. These discrepancies, both in quantity and source, call into question the fundamental veracity of the DPEIR's analysis of agricultural and water supply impacts. To the extent that the operational water will come from on-site sources, the Project impermissibly downplays the impacts of this decision.

The Project's impacts on local groundwater resources are comprehensively addressed in Dr. Victor M. Ponce's November 15, 2013 report *Impacts of Soitec Solar Projects on Boulevard and Surrounding Communities*.[9] Dr. Ponce's analysis of the interrelated hydrological connections between deeper groundwater and near-surface waters in and around the Project area details the important resources that the Project's planned groundwater pumping will imperil. The existing surface springs, wells, and the numerous plant species dependent upon the local groundwater table will all suffer from the Project's overly optimistic groundwater assessments. By focusing myopically on the groundwater ordinance's significance criteria for neighboring wells, the DPEIR mischaracterizes the Project's hydrological impacts as less than significant.

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[9] Dr. Ponce's report is attached hereto as Exhibit 3, and also available at: http://www.ponce.sdsu.edu/boulevardsoitec.pdf

Contrary to CEQA, the Project's significant impacts to groundwater-dependent vegetation have not been sufficiently addressed and will not be sufficiently mitigated. For example, the Rugged Groundwater Investigation acknowledges the potential for groundwater pumping to impact the coast live oak habitat, and calls for monitoring and mitigation of impacts, but these impacts are not addressed by the Project's mitigation measures and design features. *Compare* DPEIR Appendix 3.1.5-6, p. 3-14 *with* DPEIR 2.3.-185 to 2.3-189 (mitigation pertains only to Well B at Tierra del Sol). Further, the Rugged Groundwater Investigation map of groundwater-dependent vegetation ignores groundwater-dependent habitat solely on the basis of Rugged's Tetris-shaped site boundaries. *See, e.g.,* DPEIR Appendix 3.1.5-6, fig 11 (map of groundwater-dependent vegetation types). Groundwater and vegetation do not abide by these artificial site boundaries. The DPEIR's impact analysis must not be limited by them. And, while the Tierra del Sol groundwater resources investigation acknowledges that "Project well production may exceed the County threshold of significance that results in draw down of the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historical low groundwater levels" (DPEIR Appendix 3.1.5-5, p. 3-22), the DPEIR's mitigation measures for these impacts are not sufficient because they focus solely on the health of the neighboring oak trees without a comprehensive approach to the whole habitat. For these reasons, the impacts of groundwater pumping will neither be appropriately monitored nor adequately mitigated.

Further, mitigation measure M-BI-PP-14 requires the cessation of pumping from Well B, if pumping causes specific damage to oak woodlands. DPEIR 2.3.-185 to 2.3-189. Yet, the DPEIR makes no mention of an alternative source of water in the event that Well B is no longer available, and thus fails to examine the impacts of providing this alternative water to the Project. *Id*. This informational gap violates CEQA's mandates. *Vineyard*, *supra*, 40 Cal.4th at 434.

As Conservation Groups stated in their October 10, 2013 Scoping Letter, the Project sits directly over the Campo-Cottonwood Sole Source Aquifer.[10] Yet the County has failed to mention this aquifer in the DPEIR and its Appendices. The DPEIR fails to adequately address the importance of protecting this aquifer from (1) sources of pollution, and (2) depletion from over-pumping. While the County has included a map of the Campo-Cottonwood Sole Source Aquifer in its administrative record for this Project, its failure to discuss the aquifer's designation or existence is an informational gap that must be rectified. The potential for the projects to contaminate or deplete this sole source aquifer is a serious concern that the DPEIR improperly ignores.

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[10] The EPA designated the Campo-Cottonwood Sole Source Aquifer under the authority of Section 1424(e) of the Safe Drinking Water Act. Federal Register 49 FR 2948, 01/24/84.

4. The DPEIR's Conclusion that Alternative 7 Would Reduce Hydrological Impacts Is Unsupported.

The DPEIR fails to identify any groundwater source for Alternative 7, nor does it include groundwater supply estimates or discuss whether Alternative 7 would require imported water for construction or operation. *See* DPEIR 4.0-44. Indeed, the DPEIR admits "any use [of the on-site groundwater] would require a groundwater investigation in compliance with County regulations to determine groundwater conditions and availability of this resource for the project." DPEIR 4.0-27. Yet, the DPEIR assumes that "impacts to hydrology and water quality and utilities related to water demand would be reduced " based on Alternative 7's reduced need for landscape irrigation. *Id.* Without an adequate analysis of available groundwater at the location, identification of outside water source, and an analysis of the impacts of supplying water to Alternative 7, the DPEIR's conclusion that Alternative 7 would reduce hydrological impacts when compared to the Project is unsupported.

5. The DPEIR's Discussion of the Project's Reliance Upon Imported Water Supply Is Insufficient.

During construction, the Project will use trucked water. DPEIR 2.2-20, 2.6-31; DPEIR Appendix 3.1.5-5, p 2-10. However, it is not at all clear where the imported water will be found, and consequently what the impacts on the source watershed may be. The Project description indicates that Jacumba Community Service District ("Jacumba CSD"), Pine Valley Mutual Water Company ("Pine Valley MWC"), and Padre Dam Municipal District ("Padre Dam MD") will be available to supply water. DPEIR 1.0-19. In contrast, the air quality discussion lists Padre Dam MD and "other purveyors or offsite wells" when assessing the impacts of trucked water. *See* DPEIR 2.2-12, DPEIR Appendix 2.2-1 p. 14. The Appendices include reports on the Jacumba CSD's and Pine Valley MWC's ability to serve the Project, but do *not* include an equivalent discussion of Padre Dam MD's ability to serve the Project. *See* DPEIR Appendix 3.1.5-8 (Jacumba CSD Groundwater Investigation); DPEIR Appendix 3.1.5-7 (Pine Valley MWC Groundwater Investigation). Similarly, the hydrology discussion barely touches on the Padre Dam MD's provision of water to the Project (DPEIR 3.1.5-41), but lists the Jacumba CSD and Pine Valley MWC Groundwater Investigations as technical reports reviewed during the preparation of the chapter. DPEIR 3.1.5-1. Thus, it is not clear which water sources will be supplying the Project's water needs.

The discussion of imported water in the DPEIR's section on utilities and service systems makes clear that Jacumba CSD will cease or curtail pumping water for the Project if unanticipated impacts to groundwater storage, well interference, or groundwater-dependent habitat occur. DPEIR 3.1.9-12. This is also true of Pine Valley MWC. DPEIR 3.1.9-13. The groundwater investigation reports for Jacumba CSD and Pine Valley MWC base their recharge assumptions on the average rainfall in the area, about 11-13 inches a year for the Project area and for Jacumba CSD (Appendix 3.1.5-5, pp. ES-1, 3-5 (Tierra del Sol, 12 inches); Appendix 3.1.5-

6, pp. ES-2, ES-3 (Rugged, 13.5 inches near wells 6a, 6b, 8); DPEIR Appendix 3.1.5-6, p. 3-6 (Rugged, 11 inches); DPEIR Appendix 3.1.5-7 (Jacumba CSD using Tierra del Sol and Camp data)), and closer to 24 inches for Pine Valley MWC (DPEIR Appendix 3.1.5-7, San Diego County Pine Valley Cumulative Groundwater Study p. 4). But the last two years have had much *less* rain. For example, the Campo weather station recorded 6.81 inches of precipitation in 2013, and 6.91 inches in 2012, and the weather station on Mt. Laguna recorded 6.79 inches in 2013 and 6.20 inches 2012.[11] Absent a major shift in conditions, the continuing drought situation increases the likelihood of curtailment. This foreseeable condition is ignored.

The drought situation will also decrease the likelihood that the Padre Dam MD can serve the Project's water needs. The San Diego County Water Authority, the water wholesaler that provides water to Padre Dam MD, gets the majority of its water from the Metropolitan Water District, which in turn gets its water from the State Water Project.[12] In light of the current drought situation, the State Water Project will not be delivering water to the Metropolitan Water District in 2014. Although the Metropolitan Water District does not currently face a water shortage, if the drought conditions continue, this situation will quickly change. Again, this foreseeable condition is ignored.

Further, DPEIR Appendix 3.1.5-5, the Groundwater Resources investigation for the Tierra del Sol, improperly relies upon a water service letter from the Live Oak Springs Water Company as a potential source of trucked water. DPEIR Appendix 3.1.5-5, p. 3-22. Live Oak Springs Water Company does not have a valid Advice Letter authorizing the sale of trucked water for construction and the County should remove this remaining reference to it from the EIR.[13]

For all of these reasons, the DPEIR underestimates the Project's water demands, overstates the water supply, and fails to adequately address or mitigate the Project's groundwater pumping impacts on vegetation, neighboring wells, and public utilities.

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[11] Precipitation data from weather-station KCZZ in Campo and the from the Mt. Laguna Observatory (attached hereto as Exhibit 4).

[12] See San Diego County Water Authority press release available at: http://www.sdcwa.org/san-diego-region%E2%80%99s-water-supplies-remain-adequate-despite-statewide-drought

[13] The CPUC decision regarding Live Oak Springs ability to Truck water is attached as Exhibit 5.

B. BIOLOGICAL IMPACTS

The DPEIR's analysis of biological impacts is insufficient. The public and decisionmakers need significantly more detail on the impacts to wildlife and vegetation in order to make an informed decision, as CEQA requires. The County must provide additional information and perform the necessary studies to establish the Project's impacts to biological resources. The few surveys that were completed are inadequate and do not meet commonly accepted standards for biological surveys. "A clearly inadequate or unsupported study is entitled to no judicial deference," and does not constitute substantial evidence supporting an agency's finding. *Laurel Heights I*, *supra*, 47 Cal.3d at 409 n.12.

The Project will "result in indirect impacts related to construction effects and operational activities, as well as direct effects related to permanent removal of suitable habitat, [and therefore] the Proposed Project would result in *significant* impacts to related sensitive species." DPEIR 2.3-126. Among those "sensitive species" that the Project would likely harm are the federally endangered Quino checkerspot butterfly ("QCB"), whose critical habitat extends near the Project sites, the federally endangered Peninsular bighorn sheep ("PBS"), the federally-protected golden eagle, and the burrowing owl, which is a California State Species of Special Concern. The County must thoroughly analyze the Project's impacts to these and other species, The DPEIR fails to meet CEQA's informational requirement because the data are inadequate.

1. The DPEIR's Discussion of Biological Resources Is Missing Key Documents, Disorganized, and Confusing.

The DPEIR claims that a Biological Resources Report ("BRR") was "prepared for each project and can be found at appendices 2.3-1, 2.3-2, 2.3-3, and 2.3-4. DPEIR 2.3-17. However, no BRR is included for the LanEast portion of the Project. While BRRs are provided for Tierra del Sol (Appendix 2.3-1), Rugged (Appendix 2.3-2), and LanWest (Appendix 2.3-4), Appendix 2.3-3 – which should contain the LanEast BRR – only includes a *Quino Checkerspot Butterfly 45-Day Summary Report*. DPEIR Appendix 2.3-3. The DPEIR's failure to provide the documents necessary to understand the Project's impacts on critical environmental resources violates CEQA's informational purpose and prevents the public and decisionmakers from fully considering the impacts of the Project. CEQA Guidelines §15144; *Vineyard*, 40 Cal.4th at 428; *Berkeley Keep Jets,* 91 Cal.App.4th at 1355-1356.

Furthermore, the BRRs that are provided are unintelligible in part. For example, the discussion of the impacts of the Tierra del Sol gen-tie alignment on golden eagles fails to provide the reader with a clear understanding of what the report is trying to say. DPEIR Appendix 2.3-1, p. 1-17. That same BRR, when discussing the Project's effects on golden eagles, claims that there "would be a significant impact (the significance of the impact is determined through application of the County Significance Guidelines described in Section 3.0). Because[.]" DPEIR Appendix 2.3-1, p. 2-20. With this exciting cliffhanger, the paragraph abruptly ends. The word

"Because" is both the beginning and the end of this aborted sentence, which lacks even a period to end the suspense. There is no explanation of why the impact is significant. *Id*.

The DPEIR also asserts that the Wildlife Research Institute's ("WRI's") golden eagle report can be found in Appendices 2.3-3 and 2.3-4. DPEIR 2.3-20. However, as noted above, there is no BRR for LanEast, and Appendix 2.3-3 contains only one report on the Quino checkerspot butterfly, not the golden eagle. Furthermore, there is no golden eagle report – or any report by WRI – in Appendix 2.3-4. *See* DPEIR Appendix 2.3-4, p. ii. It is possible that the report that the DPEIR references is the WRI *Final Report: Golden Eagles and the Rugged LLC, LanEast LLC, LanWest LLC and Tierra del Sol Solar Farm LLC Projects in San Diego County, California* ("WRI Golden Eagle Report") which can be found in DPEIR Appendices 2.3-1 and 2.3-2. DPEIR Appendix 2.3-1, Appendix I; DPEIR Appendix 2.3-2, Appendix J. Burying information in non-existent or misdescribed appendices violates CEQA. *Vineyard*, *supra*, 40 Cal.4th at 442.

The analysis of impacts related to "Local Policies, Ordinances, and Adopted Plans" is also incomplete. There is no discussion of the "Project Effect as Relevant to Guideline M." *Compare* DPEIR 2.3-151 *with* DPEIR 2.3-160 to 2.3-162 (discussing Guideline L and moving directly into Cumulative impacts). The failure to discuss Guideline M - whether the Project would take any eagle, as defined under the Bald and Golden Eagle Protection Act, 16 U.S.C. § 668 ("Eagle Act") – must be rectified.

2. The DPEIR Fails to Adequately Survey for and Address the Impacts to Avian Species.

a. Golden Eagles

Golden eagles are fully protected under federal, state and local laws, including the Migratory Bird Treaty Act ("MBTA")[14] and the Eagle Act, as well as state and local designations as sensitive and protected species. DPEIR 2.3-19; 16 U.S.C. §§ 701, *et seq.*; 16 U.S.C. § 668. Indeed, the County has designated golden eagles as a sensitive species (County Group I) and its CEQA biological guidelines mandate special considerations for golden eagles. County of San Diego, Land Use and Environmental Group, *Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources*, Fourth Revision, September 2010

[14] The federal government has taken substantive action to enforce the MBTA's permit requirement against renewable energy projects that kill birds. Soitec should not dismiss the potential deaths of MBTA-protected birds at renewable energy facilities. *See*, *e.g.*, Plea Agreement, *United States of America v. Duke Energy Renewables, Inc.,* Case No. 213-cr-00268-KHR (D. Wyo., Filed 11/07/13), Attachment B (attached hereto as Exhibit 6).

(attached hereto as Exhibit 7).[15]

The DPEIR's discussion of golden eagles fails to satisfy the requirements set forth for protecting golden eagles under the MBTA and the Eagle Act, and specifically, fails to meet the requirements set forth in CEQA for a complete and informative EIR. CEQA Guidelines §15144; *Vineyard*, 40 Cal.4th at 428. The County failed to perform many of the necessary surveys, and the surveys that were completed were inadequate and did not conform to well-established guidelines for performing those studies. Furthermore, the DPEIR's analysis of impacts to golden eagles fails not only because it is based on inaccurate information, but also because the County fails to support its conclusions. Conservation Groups address each of these deficiencies in turn.

The DPEIR admits that there has been "recent golden eagle breeding activity in six golden eagle territories surrounding the Proposed Project site . . . [including t]wo active golden eagle territories ('Carrizo Gorge' and 'Table Mountain') [that] overlap with the Proposed Project site and one extirpated golden eagle territory ('Boulevard') [] within and around the Proposed Project site." DPEIR 2.3-20. The Proposed Project area is also "a potential golden eagle flyway zone." *Id.* However, the DPEIR asserts that "there are no CNDDB records of this species within the project area or surrounding quadrangles." *Id.* This entirely ignores a December 2013 golden eagle siting by a wildlife biologist on the Rough Acres Ranch, which falls *on or within the surrounding quadrangles of the Rugged site*. California Native Species Field Survey Form, 12/01/2013 (attached hereto as Exhibit 8).

The DPEIR clearly confirms that a significant adverse impact would result if the Project "alter[s]habitat within 4,000 feet of an active golden eagle nest." DPEIR 2.3-99. Such an impact can only be "considered less than significant if a *biologically based determination* can be made that the project would not have a substantially adverse effect on the long-term survival of the identified pair of golden eagles." *Id.* (emphasis added). However, without the adequate site specific surveys, the significance of this impact cannot be determined. Here, the County completely failed to perform necessary surveys for three of the four Project sites, and the one survey completed is inadequate and fails to meet well-established survey guidelines.

i. Inadequacy of Surveys for Golden Eagles

The DPEIR and its appendices only reference *one* site-specific raptor survey, done for the Tierra del Sol Project site. DPEIR 2.3-2 to 2.3-3; DPEIR Appendix 2.3-1, p. 1-10 (list of biological surveys, including a single raptor survey, for Tierra del Sol).[16] The remaining Project sites – Rugged, LanEast, and LanWest – were not surveyed for golden eagles or other raptors.

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[15] Available at: www.sdcounty.ca.gov/pds/docs/Biological_Guidelines.pdf

[16] In addition, no site-specific studies were performed for Alternative 7.

DPEIR 2.3-2 to 2.3-3; DPEIR Appendix 2.3-2, pp. 1-12 to 1-13 (no mention of raptor or golden eagle surveys for Rugged); DPEIR Appendix 2.3-3 (no mention of raptor or golden eagle surveys for LanEast); DPEIR Appendix 2.3-4 (no mention of raptor or golden eagle surveys for LanWest). Rather, the DPEIR relies on historical data and data from *other projects* to determine the impact to golden eagles in the area. DPEIR 2.3-19 to 2.3-20 (relying on golden eagle surveys for the Tule Wind project), 2.3-58 to 2.3-59 (same); DPEIR Appendix 2.3-2, Appendix J, pp. 6-13 (WRI report on golden eagles and the Project site, specifically stating that "site-specific studies have not been conducted"). This failure to perform site-specific surveys does not meet CEQA's requirement that the County make every effort to determine the impacts of the Project and inform the public of those concerns. CEQA Guidelines §15144; *Vineyard*, 40 Cal.4th at 428; *Berkeley Keep Jets,* 91 Cal.App.4th at 1355-1356. This is especially true given the DPEIR's admission that 87% of the acreage for the LanWest site is "suitable foraging habitat" for the golden eagle, and that there is a "high potential for this species to forage within the site." DPEIR 2.3-78.

The DPEIR's assumption that eagle impacts are insignificant despite the lack of site-specific studies also contradicts the DPEIR's own conclusion that impacts to golden eagles can be deemed less than significant only if a site-specific biological determination demonstrates insignificance. DPEIR 2.3-99. The County's clear direction that site-specific surveys were *required* for golden eagles on the Rugged, LanEast, and LanWest sites was completely ignored. DPEIR Appendix 2.3-2, Appendix A, Attachment A, p. 15-26; DPEIR Appendix 2.3-4, Appendix A, Attachment A, p. 15-26. Since no site-specific studies were performed, and the County itself confirmed that these surveys were necessary, the DPEIR's reliance on historical data and data from *other* projects at *different* locations is insufficient and frustrates informed decision making.

Furthermore, the one survey that was done for Tierra del Sol was on its face inadequate. A *single* wintering raptor survey was completed on January 29, 2012, and focused on the following species: golden eagle, prairie falcon, Cooper's hawk, sharp-shinned haw, turkey vulture, and red-shouldered hawk. DPEIR Appendix 2.3-1, pp. 1-10, 1-16. "The *single-visit* survey" was limited to "traversing all *roads* on the site while searching for potentially suitable nesting resources" by one solitary biologist, who also spent a brief period at four different locations on the site. DPEIR Appendix 2.3-1, p. 1-16 (emphasis added). The DPEIR claims that "all portions of the site were reviewed," but this claim is contradicted by the fact that just the areas visible from roads, and four additional undisclosed locations, were the *only areas surveyed*. *Id.* In fact, the length of the entire survey – *7 hours and 20 minutes* – is *less* than the time it would take for a single biologist to visit "four different locations" and spend "a minimum of 2 hours" at each – *8 hours*. DPEIR Appendix 2.3-1, p. 1-10. Thus, the DPEIR has exaggerated the survey's scope and duration, and its reliance upon that incomplete survey is improper.

The DPEIR's golden eagle discussion is inadequate for the additional reason that the one survey that was completed – let alone the County's failure to survey the other three sites – also contradicts the 2010 United States Fish and Wildlife Service's ("USFWS") *Interim Golden Eagle Inventory Monitoring Protocols; and Other Recommendations* ("USFWS Eagle Monitoring Protocols"). Pagel, J.E., D.M. Whittington, and G.T. Allen, 2010, Division of Migratory Bird Management, USFWS, p. 10 (attached hereto as Exhibit 9).[17] These protocols document the "*minimum* inventory and monitoring effort recommended for determining and evaluating Golden Eagle (*Aquila chrysaetos canadensis*) use of habitat" and "the *minimum* monitoring techniques to ascertain occupancy and reproductive success at [golden eagle] territories" in an attempt to standardize the process. *Id.* at 1 (emphasis added).

First, the USFWS Eagle Monitoring Protocol specifies that at least *two* ground observation periods of at least four hours each, *spaced at least 30 days apart*, are necessary to inventory a site for golden eagle nests, to be followed by monitoring of the nests, if found. Exhibit 9 (USFWS Eagle Monitoring Protocols) at p. 11. Before concluding that a site is unoccupied by golden eagles, the USFWS requires compliance with these *minimum steps*. *Id.* The *single-day*, 7 hour and 20 minute Tierra del Sol survey for golden eagles fails to meet these requirements, and the Project's determination that the site is unoccupied must fail.

Second, the USFWS Eagle Monitoring Protocols state that "[i]nventories for Golden Eagles should occur if nesting, roosting, and foraging habitat are contained within the project boundary and exist *within 10 miles of the project boundary* [and] . . . distances will be greater in xeric or other habitats where local prey may not be abundant." *Id.* at 11. There are multiple golden eagle nests known to be within 10 miles of the project area. *Golden Eagle Territories in the Iberdrola – Tule Wind Project Vicinity*, Map, May 2010 (attached hereto as Exhibit 10).[18] The DPEIR itself acknowledges that two known golden eagle territories overlap with the Rugged Solar project site and there are 10 known golden eagle territories just north of it. DPEIR 2.3-58.

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[17] *Available at*: http://www.fws.gov/southwest/es/oklahoma/documents/te_species/wind%20power/usfws_interim_goea_monitoring_protocol_10march2010.pdf. Last accessed February 21, 2014.

[18] Given this project's proximity to the U.S.-Mexico border, surveying for golden eagles should also have taken place in Mexico since the eagle will not abide by any political border.

It also admits that there are known golden eagle territories within 10 miles of the Tierra del Sol project site. DPEIR 2.3-78.[19] The focus solely on a "4,000-foot nest site buffer" ignores USFWS' clear direction that a 10-mile minimum radius is required for golden eagle surveys.

Third, WRI's characterization of the project sites as "extirpated" without having conducted any eagle surveys at the sites contradicts the USFWS Eagle Monitoring Protocol's requirement that "[a] territory or inventoried habitat should be designated as unoccupied by Golden Eagles ONLY after at least 2 complete aerial surveys in a single breeding season." Exhibit 9 (USFWS Eagle Monitoring Protocols) at pp. 11-12. The Protocol also requires that where ground surveys occur, "at least 2 ground observation periods lasting 4 hours or more are necessary [and] should be at least 30 days apart for inventory, and at least 30 days apart for monitoring of known territories." *Id.* WRI did not complete any such survey in its Golden Eagle Report. DPEIR Appendix 2.3-1, Appendix I; DPEIR Appendix 2.3-2, Appendix J. Instead, WRI relied entirely on historical data and data gathered for other projects.

Fourth, the USFWS Eagle Monitoring Protocol does not allow a "best estimate" of breeding territories as the DPEIR tries to substitute for actual inventorying and monitoring at the project site. Exhibit 9 (USFWS Eagle Monitoring Protocols) at pp. 11, 13. Instead, the Eagle Monitoring Protocol requires scientific data. *Id.* Yet, while WRI's Golden Eagle Report lists the Project sites in its title, the document *does not rely on any site-specific studies*. DPEIR Appendix 2.3-1, Appendix I, p. 13 ("site-specific studies have not been conducted for any projects in the . . . project area."); DPEIR Appendix 2.3-2, Appendix J, p. 13 (same). WRI provides no site-specific data to back up its anecdotal statements that the project site "has been considered extirpated since the 1980s" and "no resident golden eagles have been seen breeding for over 40 years." DPEIR Appendix 2.3-1, Appendix I, pp. 29-30; DPEIR Appendix 2.3-2, Appendix J, pp. 29-30. The names of the biologists who have allegedly been monitoring this territory every year since 1980, the dates of their survey observations, the locations of their observations, the archives holding their observations, or anything else that would allow independent third-party review of their claims are either not provided or redacted.[20] *Id.* The

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[19] The DPEIR does not analyze environmental impacts at the LanEast and LanWest sites to the same extent as it does the Rugged and Tierra del Sol Solar sites, so it does not contain a similar discussion of golden eagle territories. However, the map provided allows for the logical inference that they are also within 10 miles of golden eagle territories, and therefore site-specific analyses should have been done. Exhibit 10 (map).

[20] This is especially significant since one of the federal government's criminal complaints to which David Bittner and his company, WRI, pled guilty as discussed below, was that he had not provided the required avian data to the government. *See* Government's Sentencing Memorandum ("Sentencing Memo"), U.S. v. John David Bittner, Criminal Case No. 13-CR-01391-DHB, filed July 11, 2013, p 2-3.

DPEIR's failure to provide relevant and reliable data precludes informed decision making under CEQA.

If WRI were to provide relevant data at a later time, the County must ensure that the data comply with the USFWS Eagle Monitoring Protocol. It must contain the (1) date and time of observation, (2) weather during observation, (3) duration of observation, (4) names of observers, and (5) location and description of observation. Exhibit 9 (USFWS Eagle Monitoring Protocols) at p. 19. This data must also be provided by an observer with "the equivalent of 2 seasons of intensive experience conducting survey and monitoring of Golden Eagle and/or cliff-dwelling raptors [or] at least 3 field seasons experience in helicopter-borne raptor surveys around cliff ecosystems" for observers completing aerial surveys. Exhibit 9 (FWS Eagle Monitoring Protocols) at p. 18. WRI's report admits these training protocols were not followed. It utilized a far less vigorous training regimen, stating that "[t]raining is accomplished by taking each individual into the field numerous times during their first year. Most[, but not all,] new biologists also undergo an intensive four-week training regimen during golden eagle migration in Montana." DPEIR Appendix 2.3-1, Appendix I, p. 4; DPEIR Appendix 2.3-2, Appendix J, p. 4.

The County's failure to complete the necessary and adequate surveys also contradicts USFWS' December 2012 comments on this Project which "recommend *current* habitat assessment and *focused* surveys be performed as appropriate to fully assess the potential for . . . impacts to these species." Letter from Karen Goebel, USFWS, to Robert Hingtgen, County of San Diego Planning and Land Use, December 17, 2012, Re: Notice of Preparation of an Environmental Impact Report for the Soitec Solar Development Program, Unincorporated San Diego County, available in the Project's Administrative Record at: http://www.sdcounty.ca.gov/pds/ceqa/Soitec-Documents/Record-Documents/2012-12-17-Karen-Goebel-Letter-to-Robert-Hingtgen-re-NOP-of-EIR-for-Soitec-Solar-Development-Program.pdf. Because these necessary surveys were not conducted, the DPEIR fails to meet the criteria adopted by the expert federal agency tasked with protecting wildlife.

Furthermore, the historical data and data from *other projects* – including the Tule Wind project – that the DPEIR and BRRs rely upon are also inadequate to assess the impacts of the proposed Project or Alternative 7. *See, e.g.,* DPEIR 2.3-19 to 2.3-20 (relying on golden eagle surveys for the Tule Wind project), 2.3-58 to 2.3-59 (same); DPEIR Appendix 2.3-1, p. 1-61 to 1-62 (BRR relying on Tule Wind project data to determine existing conditions); DPEIR Appendix 2.3-1, Appendix I, p. 13 ("WRI has conducted aerial and ground [sic] surveys in neighboring areas since 1988 and aerial surveys since 1996 . . . [and] used this accumulated data to *create a best estimate* of the breeding territories of golden eagles in the area"); DPEIR Appendix 2.3-2, Appendix J, pp. 13 (same); Exhibit 9 (USFWS Eagle Monitoring Protocols) at

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http://www.kcet.org/news/rewire/Bittner.sent.mem.filed6-27-13.pdf Why is the County relying on the work of a discredited scientist?

pp. 11, 13. Not only does reliance on this data violate CEQA's requirement that the agency "use its best efforts to find out and disclose all that it reasonably can" about the environmental consequences of the Project, but it also contradicts the USFWS, the DPEIR, and the County's own conclusions that directed site-specific studies are necessary to determine the Project's impacts on golden eagles. Exhibit 9 (USFWS Eagle Monitoring Protocols) at pp. 11, 13; DPEIR 2.3-99; DPEIR Appendix 2.3-2, Appendix A, Attachment A, p. 15-26; DPEIR Appendix 2.3-4, Appendix A, Attachment A, p. 15-26; CEQA Guidelines §15144; *Vineyard*, 40 Cal.4th at 428; *Berkeley Keep Jets,* 91 Cal.App.4th at 1355-1356.

For example, in 2010 a USFWS raptor expert severely criticized the avian studies that were conducted for the Tule Wind project as "inadequate to provide the level of detail which will assist action and regulatory agencies in determining short and long-term effects to raptors, including golden eagles." USFWS, Pagel, Joel E., *Memo about the Tule Wind Project*, January 21, 2010 (attached hereto as Exhibit 11). These surveys were not on the Project site, "the survey effort expended was insufficient to detect nesting raptors," "the surveys did not appear to be comprehensive or stratified in any way," "there did not appear to be a comprehensive search of all available habitat to find tree nesting raptors, nor were presence of cliff habitat discussed," and "surveys for raptors require different techniques than was detailed in the [Tule Wind avian study]." *Id*. Since this data was insufficient for the Tule Wind project, it is insufficient here as well.

WRI's data is also flawed because it fails to account for the impact that helicopters have on golden eagles. DPEIR Appendix 2.3-1, Appendix I, p. 8 ("WRI data support golden eagles' indifference to helicopters"); DPEIR Appendix 2.3-2, Appendix J, p. 8 (same). Most of WRI's data is collected by helicopters, and they claim that these helicopters have no impact on the eagles despite their noise and obtrusive presence. *Id.* The scientific basis for WRI's conclusion is both inadequate and counterintuitive: data for this conclusion was collected where eagles had already become habituated to helicopters and human interaction; testing only occurred during incubation and neglected "the concern that helicopter activity during courtship and nest repair may disrupt or preclude subsequent nesting"; and data tends to support a habituation hypothesis rather than indifference. Grubb, Teryl G., *Golden Eagle Indifference to Heli-Skiing and Military Helicopters in Northern Utah*, The Journal of Wildlife Management, 2010, 74(6): 1275-1285, 1282.[21] Golden eagles are a highly sensitive species known to flush when disturbed by hikers and other human disturbance, and even to attack small fixed-wing aircraft and helicopters. *Id.* at 1275. Therefore it is absurd to suggest that they are indifferent to

[21] Available at: http://www.wildlife-research.org/Grubb%20et%20al%202010,%20Golden%20Eagle%20Indifference%20to%20Heli-Skiing%20and%20Military%20Helicopters%20in%20Northern%20Utah, and attached hereto as Exhibit 12.

helicopters.[22] Thus, the golden eagle report provided for the DPEIR is inadequate because it fails to provide accurate survey data. Further, by adopting WRI's erroneous conclusions, the DPEIR fails to address the impacts of the Project's helicopter use on golden eagles in the area.

Any data based on satellite telemetry research is also flawed. The DPEIR admits that "[g]olden eagles equipped with telemetry are a small sample size of the local population; many other unmarked golden eagles could have traversed the area near or within Proposed Project area." DPEIR 2.3-20; DPEIR Appendix 2.3-1, Appendix I, p. 28; DPEIR Appendix 2.3-2, Appendix J, p. 28. This incomplete data is not sufficient to determine the impacts of the Project, especially where the data is based on historical sightings or surveys for a different project, and not *site-specific* surveys.

Finally, the County should temper its reliance on WRI data since WRI's Senior Biologist and Executive Director, David Bittner, recently pleaded guilty for the unlawful take of a golden eagle.[23] Indeed, in 2010, the United States Geological Survey refused to issue a renewed federal bird banding permit to David Bittner, the lead author and primary researcher of WRI's golden eagle report. It did so because Mr. Bittner was not in compliance with the terms of his permit, which requires him to report his banding data to the government. *Id.* Mr Bittner continued to capture and banded at least 144 migratory birds before the permit was renewed in August 2010. *Id.* It was this unpermitted banding activity that led to Mr. Bittner's prosecution and conviction for an "unlawful take" of a female golden eagle pursuant to 16 U.S.S. section 668(a). Sentencing Memo, p. 1.

The Department of Justice's Sentencing Memo raised serious questions regarding Mr. Bittner's methodology. It states that other eagle experts know of no scientific basis for Mr. Bittner's habit of attaching multiple transmitters to a single bird. Sentencing Memo, p. 8. It also states that witnesses heard Mr. Bittner report "a nine month mortality rate of approximately 90% for birds mounted with transmitters, when they would expect to see a survivorship rate of approximately 85%." *Id.* Further, Mr. Bitter has a history of failing to provide the regulatory agencies which issue bird banding permits the data he is required to provide as a condition of receiving these permits. Sentencing Memo, pp. 8-9. Mr. Bittner's belief that providing relevant

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[22] Eagle Management Guidelines recommend a 1000-foot buffer for helicopters around nests for bald and golden eagles. USFWS, *National Bald Eagle Management Guidelines*, May 2007 (attached hereto as Exhibit 13), available at: http://www.fws.gov/migratorybirds/currentbirdissues/management/baldeagle/nationalbaldeaglemanagementguidelines.pdf.

[23] *See Wildlife Researcher Pleads Guilty to Unlawful Taking of Golden Eagle,* Office of the United States Attorney, Southern District of California, April 18, 2013, pp. 1-2, available at: http://www.justice.gov/usao/cas/press/2013/cas13-0418-BittnerPR.pdf

information regarding banded birds is giving away his "intellectual property" (Sentencing Memo, p. 8) has tainted the DPEIR. The WRI report's heavy redactions prevent informed public comment addressing the report's observations and conclusions regarding Golden Eagles.

ii. Inadequacy of Discussion of Impacts to Golden Eagles

The Project poses significant threats to golden eagles but the DPEIR's analysis of these threats is inadequate. Without any surveys for three of the four Project sites, and with a clearly inadequate survey for the remaining site, the public and decisionmakers cannot accurately determine the impacts of the Project on golden eagles and their habitat, in violation of CEQA. CEQA Guidelines §15144; *Vineyard*, 40 Cal.4th at 428; *Berkeley Keep Jets,* 91 Cal.App.4th at 1355-1356.

Despite the lack of focused avian studies conducted for this Project, the DPEIR nonetheless claims that there will be significant impacts to golden eagles, including impacts to foraging habitat, and to nesting success of tree-nesting raptors – although it subsequently asserts that all those impacts will be mitigated to *in*significance.. DPEIR 2.3-114 to 2.3-116, 2.3-124 to 2.3-126, 2.3 194 to 2.3-195, 2.3-211 to 2.3-212, 2.3-217, 2.3-218, 2.3-228, 2.3-234. However, the calculations that were used to determine the number of acres of habitat that will be impacted for each species are unexplained. Consequently the public and decision makers are unable to discern how the "existing acreage" and "impacts acreage" were determined.[24] Therefore neither the decisionmakers nor the public can judge whether the planned mitigation will be adequate, contrary to CEQA.

b. Raptors

As discussed above with regard to golden eagles, only one survey was conducted to determine the presence of raptors in the Project area and the potential impacts to those species. DPEIR 2.3-2 to 2.3-3; DPEIR Appendix 2.3-1, p. 1-10; DPEIR Appendix 2.3-2, pp. 1-12 to 1-13; DPEIR Appendix 2.3-3; DPEIR Appendix 2.3-4. That *one-day* survey, completed by a single biologist, is insufficient to determine the impacts of either the proposed Project or Alternative 7 on raptors as required by CEQA. CEQA Guidelines §15144; *Vineyard*, 40 Cal.4th at 428; *Berkeley Keep Jets,* 91 Cal.App.4th at 1355-1356.

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[24] Furthermore, some references to habitat impact calculations appear to be misnumbered or at least poorly explained. For example, the DPEIR states that "[l]ong-term direct impacts to nesting habitat for Cooper's hawk and red-shouldered hawk are summarized in table 2.3-9," but table 2.3-9 is a summary of direct impacts to four special-status plant species, not to specific habitat types. DPEIR 2.3-124, 2.3-201 (table).

Likewise, the DPEIR's reliance on historical data and data for *other projects* also fails. *See, e.g.,* DPEIR 2.3-21 ("While no project-specific bird count studies were conducted for the Proposed Project [on Swainson's hawk], data was collected for two proposed project areas located in close proximity to the Proposed Project: Tule Wind project and a now defunct project in the McCain Valley"), 2.3-58 to 2.3-59 (relying on Tule Wind helicopter surveys for golden eagles), 2.3-61 (relying on Tule Wind surveys for QCB). As with golden eagles, directed, site-specific surveys for raptors must be completed for *all* of the Project sites.

c. Burrowing Owl

The DPEIR concludes, with no evidentiary support, that the Project site "does not support occupied burrowing owl habitat; therefore, there are no impacts to occupied burrowing owl habitat." DPEIR 2.3-122 to 2.3-123. However, the body of the DPEIR fails to provide *any* discussion of what that habitat comprises, so there is no way for the public or decisionmakers to know if this is accurate. The only discussion of burrowing owl habitat can be found in the appendices to the BRRs, and that information *contradicts* the DPEIR's conclusions. DPEIR Appendix 2.3-1, Appendix F, p. F-8; DPEIR Appendix 2.3-2, Appendix H, p. H-6. The BRRs for Terra del Sol and Rugged document that burrowing owls *have the potential to occur* on these sites, yet the DPEIR erroneously concludes otherwise. *Compare* DPEIR 2.3-122 to 2.3-123 *with* DPEIR Appendix 2.3-1, Appendix F, p. F-8; DPEIR Appendix 2.3-2, Appendix H, p. H-6. Furthermore, the DPEIR admits that no site-specific surveys have been completed for burrowing owls at the LanEast site. DPEIR 2.3-122. Without such surveys, no accurate assessment of impacts can be made. The DPEIR's failure to analyze the proposed Project, and Alternative 7's impacts to burrowing owls, precludes informed decision making in violation of CEQA. CEQA Guidelines §15144; *Vineyard*, 40 Cal.4th at 428; *Berkeley Keep Jets,* 91 Cal.App.4th at 1355-1356.

d. Pseudo-Lake Effect

The Project's CPV trackers will also harm avian species through the pseudo-lake effect, where glare makes solar panels look like water to passing birds. Both the solar Genesis project, approximately 75 miles east of Indio, and Desert Sunlight, 25 miles to the west of Genesis, have attracted water birds such as teals, grebes, avocets, egrets, loons, pelicans and clapper rails, in many instances with deadly results.[25] The DPEIR claims that, because the Project is "east of the

[25] *See, e.g.,* the August 2013 Monthly Compliance Report, Genesis Solar Energy Project, Avian Reporting Data Table and Forms, pp. 1-11 (182- 193 of the pdf) (available at: http://docketpublic.energy.ca.gov/PublicDocuments/09-AFC-08C/TN200657_20130930T120056_August_2013_Monthly_Compliance_Report.pdf) and Appendix B – Avian and Bat Mortality Solar Farm – of the 2013 Yearly Biological Resources Report for Desert Sunlight (available for download at:

main coast migration route and west of the primary route between the Gulf of California and the Salton Sea" the Project should not attract migratory species. DPEIR 2.3-158 to 2.3-160. But the Project's location within the Pacific Flyway should not be downplayed; indeed, egrets and other water birds are known to visit the wetland in close proximity to the Rugged sites,[26] and nearby Lake Domingo is known to host migrating blue-winged teal.[27] Ring-neck duck,[28] ruddy duck,[29] cinnamon-teal,[30] green-winged teal,[31] and many other water birds frequent both natural and artificial ponds and wetlands in the vicinity of the Project. The Project claims that the impact of the pseudo-lake effect will be minimized because there will be between 30 and 80 feet between each tracker, depending on the position during the day. DPEIR 2.3-158 to 2.3-160. But even with space between solar panels, when viewed from elevation, the Project is likely to appear like marshy wetlands to birds, potentially luring them to try to land on the trackers. Instead of examining the impacts of the Project on avian species, the DPEIR claims that any discussion of this impact would be speculative because there is not much scientific information available on the pseudo-lake effect. *See* DPEIR 2.3-158 to 2.3-160; DPEIR Appendix 2.3-1, p. 2-25; DPEIR Appendix 2.3-2, p. 2-21. Under CEQA, a lead agency must "use its best efforts to find out and disclose all that it reasonably can," to demonstrate it has fully "considered the environmental consequences of [its] action." CEQA Guidelines §15144; *Vineyard*, 40 Cal.4th at 428; *Berkeley Keep Jets*, *supra*, 91 Cal.App.4th at 1355-1356; *Citizens to Preserve the Ojai v. County of Ventura* (1985) 176 Cal.App.3d 421, 431. Here, the DPEIR's dismissal of the pseudo-lake effect's impacts on these species runs afoul of this mandate.

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http://www.firstsolar.com/en/about-us/projects/desert-sunlight-solar-farm/biological%20monitoring%20report%20-%20annual/biological%20monitoring%20report%20annual%20report%202013?dl=1).

[26] See Exhibit 14, documenting an egret between the Rugged site locations.

[27] Blue-winged teal, San Diego Bird Atlas hosted by the San Diego Natural History Museum, available at: http://sdplantatlas.org/birdatlas/pdf/Blue-winged%20Teal.pdf

[28] San Diego Bird Atlas, available at: http://sdplantatlas.org/birdatlas/pdf/Ring-necked%20Duck.pdf

[29] San Diego Bird Atlas, available at: http://sdplantatlas.org/birdatlas/pdf/Ruddy%20Duck.pdf

[30] San Diego Bird Atlas, available at: http://sdplantatlas.org/birdatlas/pdf/Cinnamon%20Teal.pdf

[31] San Diego Bird Atlas, available at: http://sdplantatlas.org/birdatlas/pdf/Green-winged%20Teal.pdf

3. The DPEIR Fails to Adequately Address the Impacts to Peninsular Bighorn Sheep.

While the DPEIR admits that PBS migrate "along the Peninsular Mountain Range and south in mountain ranges of Baja California," and use areas nearby for habitat connectivity and migration corridors, it erroneously concludes that "development in the project area would not affect bighorn sheep movement or lambing areas." DPEIR 2.3-33. This conclusory statement finds no support in the record. Indeed, the record indicates that PBS are found within five miles of the Tierra del Sol and Rugged sites, and within *0.8 miles* of the LanEast site. DPEIR 2.3-40 (Tierra), 2.3-56 (Rugged), 2.3-73 (LanEast); DPEIR Figures 2.3-8, 2.3-12, 2.3-20. The DPEIR's claim that the Project area "does not contain constituent elements required for [PBS]" ignores the proximity of the sheep to the Project site and the importance of habitat connectivity and migration corridors for their survival. DPEIR 2.3-56; DPEIR Appendix 2.3-1, p. 1-58.

4. The DPEIR Fails to Adequately Address Impacts to Quino Checkerspot Butterfly.

The DPEIR downplays the Project's impacts to the endangered Quino Checkerspot Butterfly ("QCB") and its habitat. All of the proposed Project locations have adult nectar plants DPEIR 2.3-42, 2.3-61, 2.3-100 to 2.3-101. Indeed, Rugged and Tierra del Sol contain at least nine different species of QCB adult nectar plants,[32] including *Lomatium*, *Achillea millefolium* (yarrow), *Amsinckia* spp. (fiddleneck), *Lasthenia* spp. (goldfields), *Plagiobothrys* spp. (pocornflower), *Gilia* spp., *Eriogonum fasciculatum* (California buckwheat), *Eriodictyon* spp. (yurba santa), *Salvia columbariae* (Chia), and *Dichelostemma capitatum* (blue dicks). DPEIR Appendix 2.3-1, pp. A-1 to A-2, A-5, A-7; DPEIR Appendix 2.3-2, pp. B-1 to B-3, B-6 to B-7, B-11. Further, Rugged, Tierra del Sol, and LanWest have QCB larval food plants, including *Plantago erecta* (dot-seed or dwarf plantain) and *Collinsia* spp. (Chinese houses) at Rugged, *Cordylanthus rigidus* (dark-tip bird's beak) at LanWest, and *Collinsia* spp. (Chinese houses) at Tierra del Sol. DPEIR 2.3-61, 2.3-101; DPEIR Appendix 2.3-1, p. A-5; DPEIR Appendix 2.3-2, p. B-7. While the surveys performed in connection with the DPEIR did not identify QCB at Project locations, the DPEIR indicates that there are QCB populations 2.6 miles to the southwest and 6 miles to the north of the Rugged project site. DPEIR Appendix 2.3-2, p. 1-170. Further, there are QCB populations to the southeast of the project site, in Mexico south of Jacumba. Recovery Plan, p. 52. In addition, the California Department of Fish and Wildlife's California Natural Diversity Database's list of unprocessed data indicates potential sightings of QCB in both the Tierra del Sol and Live Oak Springs quadrangles.[33] This contradicts the DPEIR's

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[32] Adult nectar feeding list for QCB, U.S. Fish and Wildlife Service's 2003 Recovery Plan for the Quino Checkerspot Butterfly, *Euphydryas editha quino* ("Recovery Plan"), p. 19, available at http://ecos.fws.gov/docs/recovery_plan/030917.pdf.

[33] California Natural Diversity Database, data for Live Oak Springs Quadrangle (3211663) and Tierra del Sol Quadrangle(3211653) (attached hereto as Exhibit 15). The database can be

statement that "there are no CNDDB records for this species within the solar farm area or surrounding 6-quad quadrangle search." DPEIR 2.3-42 to 2.3-43.

According to the Recovery Plan, the risks for the QCB within the Southeast San Diego Recovery Unit include habitat destruction, disruption and fragmentation. Recovery Plan, pp. 84-85. Further, the particular locations used by QCB shift over time, as the QCB consume host plants and require new host habitat. Recovery Plan, 28-29. The known locations for QCB, including those identified in the Recovery Plan and those mentioned in the DPEIR, show that QCB occur in close proximity to the Project. The Project will remove a significant source of QCB host plants, which in turn will prevent these plants from propagating and replenishing depleted host habitat in the QCB recovery area. The Project will also contribute to the fragmentation of potential QCB host habitat, and remove potential habitat otherwise available during times of population expansion. Recovery Plan, p. 28-29.

The Project's impacts to QCB and QCB habitat do not end there. As discussed below, the Project's groundwater pumping will reduce the available near-surface water for plant species. In addition, the Project's use of herbicides to suppress vegetation at the Project sites, including the Tierra del Sol gen-tie, will further reduce the propagation of QCB host species. The DPEIR's incorrect conclusion that the Project will have no significant impact on QCB is unsupported and must be revised.

5. The DPEIR Fails to Adequately Address Impacts to Water-Dependent Vegetation and Special Status Plan Species.

As discussed above in Section A 3, Dr. Ponce has documented many areas in the Boulevard region, including those adjacent to the Rugged site, where plants depend upon near-surface groundwater and water "exfiltrating to the surface in the form of springs." Ponce, p. 31. As discussed above, the DPEIR fails to acknowledge the interplay between near-surface groundwater, artesian springs, and groundwater pumping in the area. By focusing solely on the impacts of groundwater pumping on oaks – and by incorrectly assuming that water-dependant vegetation with root systems less than three-feet deep will not be impacted by groundwater pumping – the DPEIR ignores the significant impacts of groundwater pumping on vegetation adjacent to the Project sites. The Project's reliance upon groundwater pumping will impact QCB host plants, and other sensitive habitat in the Project area, by lowering the water level to below the root zones.

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accessed at: https://imaps.dfg.ca.gov/viewers/cnddb_quickviewer/app.asp

In addition, the Project has already induced an unexamined impact on native habitat at the Rugged site, including communities of semi-desert chaparral, flat-topped buckwheat scrub, and *stragalus douglasii* var. *perstrictus* (Jacumba milk-vetch).[34] During the Sunrise Powerlink construction, an area of native habitat was removed for a large construction yard; this habitat contained 836 rare Jacumba milk-vetch plants which were to be replaced at the site once construction was finished, as a condition of project approval. CPUC Approval, p. 2. The impact to these communities of semi-desert chaparral, flat-topped buckwheat scrub and Jacumba milk-vetch was deemed temporary, as SDG&E would mitigate the impacts through revegetation. *Id.* Before SDG&E could begin remediating the construction yard, Soitec exercised an option to use the land and applied for the Major Use Permit triggering this environmental review. CPUC Approval, p. 3. The owner of Rough Acres Ranch indicated that the Rugged solar installation would occur on the construction yard site, and for this reason, the construction yard was never revegetated. *Id.* Thus, Soitec's application caused the temporary impact to Rough Acres Ranch to become *permanent*. While the DPEIR states that there are between 302 and 2,660 instances of Jacumba milk-vetch at the Rugged site (DPEIR 2.3-53), and that the Rugged site will cause a significant direct impact on 66 to 480 of them (DPEIR 2.3-104), the Project's off-site mitigation plans ignores the impacts already induced by the Project. DPEIR 2.3-174.

6. The DPEIR's Mitigation Measures Are Insufficient to Reduce the Project's Potentially Significant Wildlife Impacts.

The DPEIR claims that off-site open-space preservation of an acreage of native habitats equivalent to or greater than the acreage of project impacts will mitigate the Project's potentially significant impacts. DPEIR 2.3-174 (M-BI-PP-1). The DPEIR recognizes that the offsite parcel must be evaluated to see if it provides similar or greater biological function and value than the impacted Project locations. *Id.* In order for this assessment to have value, however, the County must know what the Project's impacts are. As discussed above, the incomplete and inadequate golden eagle and other raptor surveys render any conclusions regarding the degree of impacts unfounded. The DPEIR's flawed assessments as to PBS and QCB impacts likewise make this comparison impossible. Without an adequate assessment of the Project's impacts the County cannot determine whether the off-site mitigation location is suitable using the 1:1 – or any other – replacement ratio.

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[34] *See* California Public Utilities Commission *Approval of Alternative Program to Mitigate for Impacts at Rough Acres Yard*, June 18, 2013 ("CPUC Approval"), p. 1-3 available in the Project's Administrative Record at: http://www.sdcounty.ca.gov/pds/ceqa/Soitec-Documents/Record-Documents/2013-06-18-Fritts-Golden-email-re-Mitigation-Restoration-in-lieu-of-using-Rough-A.pdf

In any event, the proposed mitigation property identified in the DPEIR fails to adequately protect wildlife. The USFWS and California Department of Fish and Wildlife have indicated that the mitigation property's value will depend on whether it can be connected to land north of Interstate 8.[35] However, Conservation Groups have reviewed the Project's Administrative Record, and there is nothing currently available to indicate that the mitigation parcel will include the northern land bridge that these resource agencies requested. In addition, portions of this proposed mitigation property, Lansing's Empire Ranch, appear to be potential future sites for the Project's Los Robles alternative (used in Alternative 7) and gen-tie power line. *See* DPEIR Figs. 2.6-2a and 2.6-2b (Maps of mitigation parcel and Alternative 7 sites). Although Conservation Groups support the concept of keeping habitat mitigation within the general community area of a project, it must be done without damaging the conservation values for which mitigation is being sought. Otherwise, impacts will not be reduced to below the level of significance. In this case, there should not be an overhead power line for the Project running through mitigation property, given the well-known risks of collision and electrocution that power lines pose to birds and since mitigation for loss of bird habitat is being sought.

Further, despite the DPEIR's statements to the contrary (DPEIR 2.3-152, DPEIR 2.3-206), this off-site mitigation parcel cannot assist the County in achieving the Preliminary Conservation Objectives in the East County Multiple Species Conservation Planning ("ECMSCP") Agreement. The DPEIR claims that "the project is designed in accordance with the Preliminary Conservation Objectives outlined in the Planning Agreement for ECMSCP." However, since the mitigation for the Project is inadequate, as discussed above, the Project does not meet the Preliminary Conservation Objectives for the ECMSCP.

Finally, the DPEIR lacks a mitigation measure for post-construction monitoring of avian mortality. Without such monitoring, neither the County nor the public will know if this Project causes direct take of legally protected species, in violation of the MBTA. It is Conservation Groups' understanding that this Project will be the first large-scale installment of the Soitec CPV technology in the United States. Ongoing collection and distribution of avian mortality data is vital to the ongoing assessment of this emerging technology. If ongoing monitoring reveals fewer bird fatalities at the Project as compared to more traditional solar projects, everyone will benefit from that knowledge. On the other hand, if the Project has high levels of bird mortality, robust and enforceable monitoring measures are necessary to ensure that such harms are measured, and reduced if possible. The County should work with USFWS and other appropriate agencies to develop an enforceable avian mortality monitoring program for the Project.

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[35] Goebel, Karen and Gail Sevrens. Letter to Patrick Brown. December 4, 2013. Available at http://www.sdcounty.ca.gov/pds/ceqa/Soitec-Documents/Record-Documents/2013-12-04-Karen-Goebel-Gail-Sevrens-Letter-re-Biological-Evaluation-of-the-Proposed-Soitec-Mitigation-Site-San-Diego-County-CA.pdf. Last accessed February 28, 2014.

7. The DPEIR's Cumulative Biological Impacts Analysis In the Project's DPEIR Is Inadequate.

First, the DPEIR understates cumulative impacts by failing to include all of the renewable energy projects that are proposed in the immediate project area. DPEIR Table 2.3-16, "Cumulative Projects List within the Biological Cumulative Analysis Study Area," lists Tule Wind as the *only* solar or wind project that should be cumulatively considered. DPEIR 2.3-206 to 2.3-207. However, there are numerous other projects in the Boulevard area that must be cumulatively considered. *Compare* DPEIR 2.3-206 to 2.3-207 *with* the map of Boulevard Energy Projects available at: http://www.sdcounty.ca.gov/pds/ceqa/Soitec-Documents/Record-Documents/2014-01-02-MindyFogg-email-Energy-Map.pdf; *see also* DPEIR 2.3-299.

Second, the DPEIR understates the cumulative impacts of existing and reasonably foreseeable energy projects. Although it mentions the Tule Wind and San Diego Gas & Electric's (SDG&E's) Master Special Use Permit project as energy-related foreseeable cumulative projects, it dismisses their potential impacts, stating that "it is reasonable to expect" that under existing laws and regulations appropriate measures will be taken to prevent avian collision and electrocution. DPEIR 2.3-170. The mere presence of laws and regulations does not prevent avian collisions and electrocutions at this and other foreseeable project sites.

Collisions with transmission lines are estimated to kill up to 175 million birds annually in the U.S.; electrocutions by these lines are estimated to kill up to hundreds of thousands more. Manville, Albert M., USFWS senior wildlife biologist, *Anthropogenic-related Bird Mortality Focusing on Steps to Address Human-caused Problems – a White Paper for the Anthropogenic Panel*, International Partners in Flight Conference, August 27, 2013, p. 6, attached hereto as Exhibit 16. Since this impact is so detrimental the DPEIR should have addressed it in detail, taking into account any recent bird strikes or electrocutions at the nearby Southwest and Sunrise Powerlinks. The DPEIR must say more than "transmission towers and lines are designed to conform to Avian Power Line Interaction Committee (APLIC) standards" in its analysis. APLIC standards, while quite helpful, are only guidelines, not requirements. Furthermore, birds will still be killed at transmission facilities that "follow" APLIC standards. The exact measures that will be taken to reduce electrocution and collision deaths must be fully explained, and the bird kills that will result nonetheless must be disclosed, assessed and mitigated. In addition, the collision and electrocution impacts of this Project must be considered for all birds, not just the special-status birds mentioned in the DPEIR.

Third, the cumulative impacts to golden eagles are not adequately analyzed in the DPEIR. Looking only at the predicted golden eagle mortality of the Tule Wind project combined with the loss of golden eagle foraging habitat predicted for the Soitec Solar project, these impacts are likely to be severe. DPEIR 2.3-206. USFWS has expressed concern about the potential for Phase II of the Tule Wind project to kill golden eagles on an ongoing basis and cause the loss of a golden eagle territory. USFWS Memorandum to Bureau of Indian Affairs, Re: Draft Avian and

Bat Protection Plan for the Tule Reduced Ridgeline Project, June 22, 2012, p. 3. The Tule Wind project would be considered high risk to golden eagles with little opportunity to minimize effects. This Project's impacts, when taken with Tule's, are cumulatively significant.

Fourth, the DPEIR predicts that impacts to foraging habitat for raptors, including for golden eagles, will be potentially significant at the Tierra del Sol, Rugged, LanEast, and LanWest sites. DPEIR 2.3-114 to 2.3-116.[36] The DPEIR states that the San Diego black-tailed jackrabbit, a golden eagle prey species, is present at the Tierra del Sol and Rugged solar project sites. DPEIR 2.3-44, 2.3-65. The species was also observed at the LanWest site and may also be present at the LanEast and Los Robles sites. DPEIR 2.3-80. There may be additional prey within the Project site that are not listed in the DPEIR because they are not special-status species. Although the DPEIR claims that these impacts will be mitigated to less than significant, the proposed mitigation is inadequate to achieve that level of amelioration, as discussed above. DPEIR 2.3-167 to 2.3-169. The ongoing mortality and reduced productivity of golden eagles at the Tule Wind project, when combined with impacts of the Soitec Solar Project, will cause significant negative impacts to a fully protected species whose population is already declining in the County. [7]3

Fifth, because the Project's avian studies were inadequate as discussed above, this lack of adequate data carries over into the DPEIR's cumulative impacts analysis for all Project sites. These portions of the DPEIR will also need to be revised once adequate avian studies have been conducted. [8]3

Finally, the DPEIR reflects a fundamental misunderstanding of the importance of habitat to wildlife. It states, "most of the special status wildlife species can adequately move out of the way of project disturbance, with the possible exception of small mammals and reptiles" and then concludes that cumulative impacts would be less-than-significant to special status wildlife species. DPEIR 2.3-168. Both the premise and the conclusion are mistaken. On the contrary,

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[36] The Los Robles site, Alternative 7, was not included in the DPEIR's assessment of significance of impacts to foraging and functional foraging habitat; and in fact no biological assessment of the Los Robles site was included in the DPEIR at all, which compounds the previously discussed inadequacies of the DPEIR's environmental analysis.

[37] Unitt, Phil, *San Diego County Bird Atlas*, San Diego Natural History Museum, San Diego, California, p. 171, available at: http://sdplantatlas.org/birdatlas/pdf/Golden%20Eagle.pdf**.**

[38] The DPEIR acknowledges that the Soitec solar project will have potentially significant direct and indirect impacts on 29 sensitive wildlife species, including Bell's sage sparrow, Cooper's hawk, prairie falcon, golden eagle, loggerhead shrike, turkey vulture, northern harrier, red-shouldered hawk, Southern California rufous-crowned sparrow, and tricolored blackbird. DPEIR 2.3-126.

wildlife is dependent on habitat for its survival, and the very act of having to move from one area to another is a significant impact that can be detrimental to an animal's survival. It is a fundamental principle of conservation biology that habitat is usually fully occupied. [39] Consequently if wildlife is displaced by a project, usually the areas into which it is dispersed will *already* be fully occupied. The resulting lack of unoccupied habitat for the displaced wildlife typically results in their death – or that of the host species. For example, if half of a 1000-acre valley is developed, the remaining 500 acres will not suddenly be able to support double the population of wildlife that previously inhabited that acreage. Rather, the population density will over time return to its previous level, and half of the wildlife that originally occupied the valley will die. Thus, the DPEIR's erroneous conclusion that wildlife will "move out of the way" and therefore not be harmed nor create a cumulative impact is wrong as a matter of fundamental conservation biology.

C. NOISE

The DPEIR's noise impact analysis suffers from at least two fatal flaws. First, the geographic scope of its cumulative impact analysis is too narrow. Second, the DPEIR is defective because it fails to analyze the Project's low-frequency noise and infrasound ("ILFN")[40] emissions, and instead dismisses them as causing no significant impacts without *any* supporting evidence.

1. The Geographic Scope of the DPEIR's Cumulative Noise Impact Analysis Is Too Narrow.

Agencies "should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used." CEQA Guidelines § 15130(b)(3). An agency's failure to include a project in the EIR's cumulative impact analysis because of a geographic limitation violates CEQA if "it was reasonable and practical to include the project[]" and, without it, "the severity and significance of the cumulative impacts were [not] reflected adequately." *Kings County Farm Bureau v. City of Hanford* ("*Kings County*") (1990) 221 Cal.App.3d 692, 723. "A cumulative impact analysis which understates information concerning the severity and significance of cumulative impacts impedes meaningful public discussion and skews the decisionmaker's perspective concerning the environmental consequences of a project, the necessity for mitigation measures, and the appropriateness of

[39] This principle is often expressed with the simple truism that "nature abhors a vacuum." Bolen, *Ecology of North America*, New York: John Wiley & Sons; 1998, p. 9.

[40] "Infrasound is defined as sound with a frequency of less than 20 Hz, and low frequency noise as sound with a frequency of less than 200 Hz." Farboud *et al.*, 2013, "'Wind Turbine Syndrome': Fact or Fiction?," *The Journal of Laryngology & Otology*, 127(3):222-226, at p. 226 (attached hereto as Exhibit 17).

project approval." *Citizens to Preserve the Ojai v. County of Ventura* ("*Ojai*") (1985) 176 Cal.App.3d 421, 431.

Here, the DPEIR's cumulative noise impact analysis is unduly circumscribed within a 0.25-mile radius of the Project, omits discussion of essential cumulative projects, and thereby "impedes meaningful public discussion" and violates CEQA. *Id.*; DPEIR 2.6-46 to 2.6-47. Regardless of whether the Project itself causes significant noise impacts more than 0.25 miles away, many other projects outside of that 0.25-mile radius will contribute to significant noise disturbances within that boundary. For example, the Tule Wind Project is expected to generate 8-hour-averaged construction noise levels of up to *94 dBA* at two of the four noise sensitive land uses ("NSLUs") included in the Rugged Solar noise analysis (NSLUs 2 and 4), and up to 76 and 69 dBA, respectively, for NSLUs 1 and 3. Tule Wind Project FEIS D.8-25 (section D.8 is attached hereto as Exhibit 18).[41] The Tule Wind Project's wind turbines are also projected to generate significant levels of operational noise, up to 54 dBA (L_{eq}) for NSLU 4 (homes 2-27), 42 dBA for NSLUs 1 and 2 (homes 30 and 27), and 43 dBA for NSLU 3 (home 31). *Id*. at D.8-35. Even after taking into account the proposed noise mitigation measures for Rugged Solar, the combined noise impacts of Tule Wind and Rugged Solar would likely be significant at the sensitive land use sites identified in the DPEIR.

"Because the [DPEIR] does not provide information regarding" the noise emissions and impacts of Tule Wind and other "similar developments" nearby, "the County could not . . . determine whether such information would have revealed a more severe [cumulative] impact. Accordingly, the EIR is inadequate." *Kings County*, 221 Cal.App.3d at 724. The County must therefore expand the geographic scope of its cumulative noise impact analysis and evaluate the noise impacts of Rugged Solar when combined with Tule Wind and other existing and foreseeable projects in the area. Failing to include Tule Wind, among other projects, in the cumulative impact analysis is "inaccurate and misleading" and violates CEQA. *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 724; *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1216 (same).

2. The DPEIR Fails to Analyze the Project's ILFN Emissions and Impacts.

An EIR's factual determinations must be "supported by substantial evidence." *Vineyard*, *supra*, 40 Cal.4th 426. "A clearly inadequate or unsupported study is entitled to no judicial deference," and does not constitute substantial evidence supporting an agency's finding. *Laurel*

[41] As seen by comparing DPEIR figure 2.5-1 and DPEIR Appendix 2.6-2 Figure 4 with Figure 5 of HDR Engineering, Inc.'s February 2011 Tule Wind Project Draft Noise Analysis Report (excerpts of which are attached hereto as Exhibit 19), homes 2-26, 27, 30 and 31 identified in the Tule Wind EIS and noise analysis report correspond respectively to NSLUs 4, 2, 1 and 3 in DPEIR Appendix 2.6-2 figure 4.

Heights I, *supra*, 47 Cal.3d 409 n.12. An *unprovided* or *nonexistent* study is *a fortiori* insufficient to support an EIR's factual conclusion. *See Kings County*, 221 Cal.App.3d at 712 ("A prejudicial abuse of discretion occurs" where the EIR fails "to include relevant information [and that failure] precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process").

Here, the DPEIR purports to analyze the Project's ILFN emissions, but in reality it just cursorily dismisses them as having "no health effects" without any supporting evidence. DPEIR 2.6-57 to 2.6-58. Because the two central assumptions underlying the DPEIR's "no health effects" conclusion are entirely unsupported, the DPEIR's "analysis" is fatally flawed. *Vineyard*, 40 Cal.4th at 426; *Laurel Heights I*, 47 Cal.3d at 409 n.12; *Kings County*, 221 Cal.App.3d at 712, 723-724.

First, the DPEIR states that the Project would not produce much low-frequency noise or infrasound because the "amount of sound power generated by the inverters and transformers is low." DPEIR 2.6-57. Yet the DPEIR *entirely fails* to estimate how much ILFN – either the frequencies or the decibels – the Project will produce. The only estimates the DPEIR provides are A-weighted values from which the ILFN components of the Project-generated noise cannot be calculated.[42] DPEIR 2.6-65 to 2.6-68, Appendices 2.6-1 and 2.6-2. The DPEIR provides neither the unweighted and G-weighted noise level estimates nor the noise frequency spectra necessary to assess the Project's ILFN emissions and impacts.[43]

Second, the DPEIR wrongly assumes that ILFN – including both audible and inaudible ILFN – cannot hurt you. DPEIR 2.6-57 ("inaudible sound is generally not assessed in analyses of environmental noise because it cannot be heard"), 2.6-58. The DPEIR asserts that "several reviews of currently available scientific data have determined that there is no direct causal relationship between low frequency sound and health effects," but it fails to cite *any* such reviews or studies, let alone analyze them. *Id*. at 2.6-57 to 2.6-58. Moreover, as Conservation Groups discussed in their October 10, 2013, Scoping Comments, ILFN has recently been shown to have a much greater potential to impact humans than previously thought.

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[42] Because "the inner ear, specifically the [outer hair cells ("OHCs")], [is] farm more sensitive to low-frequency sounds than is hearing," the common method used by the renewable energy industry and governmental agencies for expressing wind turbine noise measurements – A-weighting, denoted as "dBA" – "do[es] not give a valid representation of whether [ILFN] affects the ear or other aspects of human physiology mediated by the OHC and unrelated to hearing." Salt & Kaltenbach, 2011, "Infrasound from Wind Turbines Could Affect Humans," *Bulletin of Science, Technology and Society*, 31(4): 296-302, at p. 299 (attached hereto as Exhibit 20).

[43] Using G-weighting (expressed as "dBG"), Salt and Kaltenbach (2011) have demonstrated that sound levels of 60 dBG will stimulate the OHC of the human ear," which is likely one source of the significant physiologic impacts discussed below. Exhibit 20 at p. 300.

As one recent published literature review concludes, "there is an increasing body of evidence suggesting that infrasound and low frequency noise have physiological effects on the ear." Exhibit 17(Farboud *et al*.) at p. 226. Another recent review similarly concludes that, "research has demonstrated that [low-frequency sound] can elicit adverse physical health effects, such as vibration or fatigue, as well as an annoyance or unpleasantness response." Roberts & Roberts, 2013, "Wind Turbines: Is There a Human Health Risk?," *Journal of Environmental Health*, 75(8): 8-17, at p. 13 (attached hereto as Exhibit 21).

Furthermore, ILFN does not need to be audible to be harmful. Recent research demonstrates that "infrasound elicits larger electrical potentials in the apical regions of the cochlea than those generated by any other frequencies in the range of audibility. . . . The apical regions of the cochlea should therefore be regarded as highly responsive to infrasound stimulation with responses occurring at stimulus levels well below the estimated level that is perceived" (*i.e.* heard). Salt *et al.*, 2013, "Large Endolymphatic Potentials from Low-Frequency and Infrasonic Tones in the Guinea Pig," *The Journal of the Acoustical Society of America*, 133(3): 1561-1571, at p. 1569 (attached hereto as Exhibit 22); Salt & Lichtenhan, 2012, "Perception-Based Protection from Low-Frequency Sounds May Not Be Enough," presented at InterNoise 2012 in New York City, New York, August 19-22, 2012, at p. 5 (attached hereto as Exhibit 23). One study found that the cochlear outer hair cells "could be stimulated [by very low frequency sounds] at levels up to 40 dB *below* those that stimulate the [inner hair cells]" and can be heard. Salt & Hullar, 2010, "Responses of the Ear to Low Frequency Sounds, Infrasound and Wind Turbines," *Hearing Research*, 286: 12-21, at p. 16 (emphasis in original) (attached hereto as Exhibit 24).

In sum, because the two central assumptions underlying the DPEIR's "no health effects" conclusion are entirely unsupported, the DPEIR's "analysis" of ILFN emissions and impacts is fatally flawed. *Vineyard*, 40 Cal.4th at 426; *Laurel Heights I*, 47 Cal.3d at 409 n.12; *Kings County*, 221 Cal.App.3d at 712, 723-724.

D. ELECTRIC AND MAGNETIC FIELD POLLUTION

As Conservation Groups discussed in their October 10, 2013, Scoping Comments, the Project – primarily through its transmission lines, transformers and inverters – would expose Project workers, nearby residents, wildlife, and others to electric and magnetic field ("EMF") radiation. People and wildlife living near the Project's substations many transformer and inverter modules would be particularly susceptible to harm.[44] Recent studies, such as those by Dr.

[44] All four of the Project's CPV systems – Tierra del Sol, Rugged, LanWest and LanEast – would use "inverter and transformer units" to convert direct current ("DC") to alternating current ("AC"). DPEIR 1.0-3 (quote; Tierra del Sol), 1.0-4 (Rugged), 1.0-5 (LanWest and LanEast). The process of converting the DC electricity to AC electricity interrupts current flow and produces EMF pollution in the form of "dirty electricity" (contamination of the 60 Hz electricity

Samuel Milham and Dr. Magda Havas, have linked EMF exposure with an increase in ailments such as diabetes, fibromyalgia, chronic fatigue syndrome, and attention deficit disorder, among others.[45] Similarly, as reported in Lovich and Ennen's 2011 *BioScience* article, Doctor Alfonso Balmori (in a 2010 article) found the "possible impacts of chronic exposure to athermal electromagnetic radiation" on mammalian species to include "damage to the nervous system, disruption of circadian rhythms, changes in heart function, impairment of immunity and fertility, and genetic and developmental problems."[46]

Rather than analyze these serious EMF risks, the DPEIR "does not consider EMFs in the context of CEQA for determination of environmental impact because" (1) "there is no agreement among scientists that EMFs create a health risk and" (2) "there are no defined or adopted CEQA standards for defining health risks from EMFs." DPEIR 3.1.4-1, 3.1.4-50. Both excuses fail.

First, the DPEIR's conclusion that "there is no agreement among scientists that EMFs create a health risk" is out of date, unsupported, and refuted by the numerous recent studies cited

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on the electrical grid with high-frequency voltage transients). *See* Exhibits 8-10 to Conservation Groups' October 10, 2013, Scoping Comments, available electronically in the Administrative Record for the Project at: http://www.sdcounty.ca.gov/pds/ceqa/Soitec-Documents/Record-Documents/2013-10-10-Stephan-Volker-Letter-re-Soitec-Solar-PEIR-Scoping-Comments-of-The-Protect-Our-Communities-Foundation-et-al.pdf.

[45] *See*, *e.g.*, Exhibits 8-10 to Conservation Groups' October 10, 2013, Scoping Comments, available electronically in the Administrative Record for the Project at: http://www.sdcounty.ca.gov/pds/ceqa/Soitec-Documents/Record-Documents/2013-10-10-Stephan-Volker-Letter-re-Soitec-Solar-PEIR-Scoping-Comments-of-The-Protect-Our-Communities-Foundation-et-al.pdf; Magda Havas, "Dirty Electricity Elevates Blood Sugar among Electrically Sensitive Diabetics and May Explain Brittle Diabetes," *Electromagnetic Biology and Medicine*, 27:135-146, 2008; Magda Havas, "Electromagnetic Hypersensitivity: Biological Effects of Dirty Electricity with Emphasis on Diabetes and Multiple Sclerosis," *Electromagnetic Biology and Medicine*, 25:259-268, 2006, available at: http://www.next-up.org/pdf/Magda_Havas_EHS_Biological_Effets_Electricity_Emphasis_Diabetes_Multiple_Sclerosis.pdf; The National Foundation for Alternative Medicine, "The health effects of electrical pollution," available at: http://d1fj3024k72gdx.cloudfront.net/health_effects.pdf.

[46] Lovich & Ennen (2011) is attached as Exhibit 4 to Conservation Groups' October 10, 2013, Scoping Comments, which are available electronically in the Administrative Record for the Project at: http://www.sdcounty.ca.gov/pds/ceqa/Soitec-Documents/Record-Documents/2013-10-10-Stephan-Volker-Letter-re-Soitec-Solar-PEIR-Scoping-Comments-of-The-Protect-Our-Communities-Foundation-et-al.pdf.

and discussed by Conservation Groups herein and in their October 10, 2013, Scoping Comments. *Id*. The DPEIR relies on some type of California Public Utilities Commission document or decision from 2006 – cited as "CPUC 2006" – yet *nowhere* in the EIR is that document identified, not even in the References section. DPEIR 3.1.4-50. As discussed above, an omitted – or worse, a nonexistent – study is insufficient to support an EIR's factual conclusion. *Kings County*, 221 Cal.App.3d at 712. Nor can an EIR rely on an existing study that is "buried in an appendix." *Vineyard*, 49 Cal.4th at 442. Furthermore, even if the DPEIR had provided – or at least properly referenced – the 2006 CPUC document, it would still be outdated. The CPUC itself acknowledged in its Decision 93-11-013 that "the body of scientific evidence [on EMFs and their impacts] continues to evolve." Yet the DPEIR fails to mention, let alone analyze, any of the scientific evidence produced in the last *8 years*, including the studies and articles that Conservation Groups have cited and discussed. The fact that "the California Department of Public Health, Environmental Health Investigations Branch, ceased its inquiry into EMF in the mid-2000s" just confirms that the public agency conclusions on which the DPEIR relies are outdated. DPEIR 3.1.4-50.

Second, even if true, the fact that "there are no defined or adopted CEQA standards for defining health risks from EMFs" does not excuse the County from fully analyzing EMF impacts in the EIR. DPEIR 3.1.4-50. To paraphrase the Court of Appeal's holding in an analogous case involving air pollution from an airport expansion, "[t]he fact that a single methodology does not currently exist that would provide [the County] with a precise, or 'universally accepted,' quantification of human health risk from [EMF] exposure does not excuse the preparation of a health risk assessment – it requires [the County] to do the necessary work to educate itself about the different methodologies that *are* available." *Berkeley Keep Jets*, *supra*, 91 Cal.App.4th 1370.

Furthermore, the minimal discussion the DPEIR *does* provide on EMFs is wholly insufficient as a CEQA analysis. The DPEIR admits that "[s]olar farms create . . . EMFs and related harmonic components from the associated power facilities and transmission lines." DPEIR 3.1.4-50. Yet it concludes without *any* evidentiary support that "the Proposed Project is not anticipated to result in measurable levels of EMF at nearby residences that would result in adverse effects to public health or safety." *Id.* Without an estimation of the EMF levels that the Project components would generate at various distances, it is impossible to confirm that they would not be "measurable" or cause "adverse effects" at nearby residences. *Id.* The DPEIR therefore lacks the requisite "substantial evidence" to support its conclusion that nearby residents would not be harmed by the Project's EMF emissions. *Vineyard*, 40 Cal.4th at 426; *Laurel Heights I*, 47 Cal.3d at 409 n.12. Moreover, the DPEIR *entirely fails* to address the impacts of the Project's EMF emissions on Project workers and on-site or nearby wildlife despite Conservation Groups' warnings.

The DPEIR admits that "[s]tray voltage" – a type of EMF pollution – "could occur if electrical equipment is not maintained properly," and that "[i]nduced current or stray voltage has the potential for adverse health effects if not properly grounded." DPEIR 3.1.4-51. The DPEIR

nonetheless concludes that "no health effects would be anticipated to occur from stray voltage" because "electrical equipment would be examined to confirm that they are properly grounded and that there are no stray voltage issues" as "part of the regular operations and maintenance measures of the project." *Id*. But there is *absolutely no* assurance that these measures will actually be undertaken – nor that if they are undertaken, they would eliminate these impacts. Mere grounding does nothing, since the primary medium through which stray voltage is transmitted is the *ground*. The DPEIR must address these impacts fully, rather than dismissing them based on unsupported premises. And, any measures proposed to mitigate these impacts must be adopted as enforceable mitigation measures of the Project's potentially significant EMF impacts, rather than as unenforceable Project components that supposedly render the EMF impacts less than significant. *Cf.* PRC § 2183(d) (for the Project to qualify as an environmental leadership development project, the Project applicant must "agree[]" that, "as an ongoing obligation, [all environmental mitigation] measures will be monitored and enforced by the [County] for the life of the obligation").

E. AGRICULTURAL AND OPEN SPACE IMPACTS

The DPEIR fails to adequately address the Project's impacts on agriculture, and improperly concludes that the Project's impacts to agriculture will be less than significant. DPEIR 3.1.1-1. Based on the lack of available water at the Project locations, the DPEIR claims that the loss of these sites will have no on-site impacts. DPEIR 3.1.1-19 to 3.1.1-21. This is mistaken. There is a history of grazing at the Rugged, LanEast, and LanWest locations, and Rugged currently hosts an active ranching operation. *Id*. Further, part of the Tierra del Sol location is an agricultural preserve, and was in the past managed under the Williamson Act; this parcel also abuts land presently managed under the Williamson Act. DPEIR 3.1-22. By converting this land from low-intensity agricultural use to solar farms, for *at least 25 years* – with "additional terms anticipated" – (DPEIR 1.0-17), and stripping those lands of their legal agricultural use protections, the Project makes it unlikely that the lands would be ever again be available – let alone used – for agriculture. At Tierra de Sol, the soil quality is sufficient that "almost all" of the 95% of the site currently available for agricultural use meets "the criteria for Farmland of Statewide Importance." DPEIR 3.1.1-10. At Rugged, about 40% of the site has " soil types that are candidates for Prime Farmland or Farmland of Statewide Significance." DPEIR 3.1.1-11. As the lands are converted from low-intensity grazing, agricultural, and other rural uses, the Project would likely cause substantial disruption of these important fertile and difficult-to-replace topsoils, during site preparation, grading, and through ongoing erosion. The Project's decommissioning provisions, while requiring removal of the Project fixtures, cannot replace the valuable topsoil once it is gone, and thus are insufficient to mitigate this loss. DPEIR 1.0-17 to 1.0-19. At a minimum, the acquisition of offsite agricultural preservation easements must be considered to mitigate this loss. *Masonite Corp. v. County of Mendocino* (2013) 218 Cal.App.4th 230, 237-242.

Further, the DPEIR's conclusions regarding off-site impacts to agriculture are fatally flawed. As discussed above, for Tierra del Sol, the DPEIR states "operational water use would be approximately 4 acre-feet per year and would come from off-site sources, and therefore, would not result in competition for water." DPEIR 3.1.1-23. Similarly, the DPEIR states as to Rugged: "Operational water use would be approximately 5 acre-feet per year and would come from off-site sources, and therefore, would not result in competition for water." DPEIR 3.1.1-24. The assumption that neither site will use on-site water contributes to the DPEIR's claim that the Project will not cause land use conflicts with the adjacent farm lands, including adjacent agricultural preserves. DPEIR 3.1.1-23 & 3.1.1-24. Yet, in the hydrology discussion, the DPEIR states that Tierra del Sol's operating demand would be about 6 acre feet a year, and anticipates that on-site wells would supply this demand. DPEIR 3.1.5-50 to 3.1.5-51. It states that Rugged's operating demand of about 8.7 acre-feet a year would likewise be supplied "from on-site wells." DPEIR 3.1.5-52. These statements contradict the DPEIR's finding of no significant groundwater impact.

In addition, Conservation Groups noted in their October 10, 2013 Scoping Comments that the conversion of ranch land creates snowballing secondary effects: it becomes harder and more expensive for the remaining ranchers and farmers to cost-effectively obtain the supplies and services (e.g. veterinarian care) they need to maintain their pastures, crops, and animals. This in turn results in more ranch land and farmland conversion, and even greater reductions in agricultural services. The Project's failure to acknowledge and adequately evaluate these secondary and cumulative impacts of the Project on agriculture and open space must be remedied. *See* DPEIR 3.1.1-21 to 3.1.1-32.

F. GLARE AND THE PSEUDO-LAKE EFFECT

The Project poses significant glare impacts as the CPV trackers reflect the sun's light during the day. For reference, Conservation Groups attach a picture of the glare from Soitec's experimental CPV tracker at the campus of the University of California, San Diego, as Exhibit 25. The DPEIR concludes that glare impacts are "potentially significant" but attempts to trivialize the full extent of those impacts. DPEIR 2.1-62 to 2.1-63 (Tierra del Sol), 2.1-63 to 2.1-66 (Rugged), 2.1-67 to 2.1-68 (LanEast and LanWest), 2.1-69 (Proposed Project). Appendix 2.1.3, the Boulevard Glare Study, claims that the Project's glare impacts to drivers and residents will be minimized because the CPV trackers will reflect light almost-directly back to the sun instead of directing light towards other surfaces. Even so, the appendix acknowledges that it will create glare in homes and along local roads. DPEIR Appendix 2.1-3, pp. 20-22. The DPEIR's discussion of the Project's glare ignores significant information about the severity of the Project's glare impacts.

First, the DPEIR relies upon the Boulevard Glare Study to address the Project's glare impacts, and this study assumes that all of the Project's CPV trackers will be face the sun as designed, every day. *See, e.g.,* DPEIR 2.1-26; DPEIR Appendix 2.1-3 pp. 14. But the trackers

have two storage positions: vertical and east-facing for night-time storage and horizontal for high wind events. DPEIR 1.0-31 (horizontal stow/storm position); DPEIR Appendix 2.1-3, p. 14 (east-facing night-time storage). Thus, in times of high wind the trackers will reflect glare with a high incidence angle (*see* DPEIR Appendix 2.1-3, fig. 13), directly towards residents with elevated views of the Project sites. *See* DPEIR Appendix 2.1-3, pp. 8-10 & figs. 6(a)-6(c) (detailing impacted residents). And, if the trackers remain stuck in their night-time storage position during daytime they will very easily direct glare towards McCain Valley Road from the Rugged, LanWest and LanEast sites. DPEIR Appendix 2.1-3, pp. 8-9 & figs. 6(a) & 6(b). While the Project is off-line, the trackers will ostensibly be positioned horizontally (DPEIR 1.0-9) yet the DPEIR does not study the glare impacts of the horizontal storage/storm position. *See, e.g.,* DPEIR Appendix 2.1-3 (no mention of storm positioning or horizontal storage when power is lost). Thus, the Glare Study fails to adequately account for the full range of potential glare impacts, and the DPEIR's analysis of the glare impacts to residents and drivers is insufficient.[47] In addition, while the DPEIR admits that the potentially significant impacts of glare cannot be fully mitigated (DPEIR 2.1-78 to 2.1-79) the DPEIR continues to downplay the significance of those unmitigated impacts.

Second, the DPEIR claims that adopting Alternative 7 would reduce "impacts related to glare" (DPEIR 4.0-41), even though the Boulevard Glare Study does not address this alternative. *Compare* DPEIR fig. 4-3, with DPEIR Appendix 2.1-3, figs. 6(a) to 6(c). Indeed, even as the DPEIR states that these impacts would be reduced, it also acknowledges a long list of primary receptors of glare from Alternative 7, including residences and roads. DPEIR 4.0-41. The DPEIR confusingly states that "[i]ntervening topography would may [sic] conceal the solar farm from the view of motorists along much of these roadways" under Alternative 7. DPEIR 4.0-40. This is not sufficient to support a conclusion that Alternative 7 will reduce the Project's potentially significant glare impacts.

Third, as discussed above in section II(B)(2)(d), the DPEIR fails to adequately assess the impacts of the Project's glare on avian species. The Glare Study assumes that glare is solely a terrestrial issue. DPEIR Appendix 2.1-3, p. 8. But the pseudo-lake effect is a serious biological problem for avians in flight. The pseudo-lake effect will be exacerbated during high wind events or other times when the trackers are in the horizontal position and more closely mimicking a wetland habitat. The DPEIR's failure to acknowledge the serious impacts of glare and pseudo-lake effect on avian species frustrates CEQA's informational purpose and must be rectified.

G. FIRE

As the DPEIR admits, "a high-intensity fire can be expected to occur in the Proposed Project area at some point in the future, whether it is started by natural or man-made causes. Fire

[47] In addition the Glare Study ignores the residential community directly to the south of Tierra del Sol, notwithstanding its proximity to and potential harm from the Project's glare.

behavior in the Proposed Project area can be extreme with intense heat, above average flame-lengths, fast spread, and spotting, thus causing a hazard both on and off the Proposed Project sites." DPEIR 3.1.4-5 to 3.1.4-6. Yet the DPEIR incorrectly concludes that there will be no significant impacts associated with fires. This conclusion ignores (1) the impacts of the Project on emergency response, (2) the ways that the Project escalates the potential harms of a fire in the Project area, and (3) the insufficiency of the mitigation measures and design features to minimize these harms.

First, the Project will have a significant impact on emergency response. The Tierra del Sol gen-tie will create significant hazards for any aerial firefighting required at or near the Project location. Conservation Groups notified the County of this concern in their October 10, 2013 Scoping Comments. The DPEIR assumes that, because the "gen-tie would not conflict with FAA rules or regulation, nor would it constitute a hazard based on FAA review of Form 7460-1," that the Project would have no significant impacts to emergency response. DPEIR 3.1.4-43. The Administrative Record for the Project shows that the FAA's evaluation of the Project and determination that it will not create a hazard to air navigation does *not* address Conservation Group's concerns regarding aerial fire-fighting, but instead only addresses the proposed Project's potential hazard to normal air traffic under non-emergency conditions.[48]

Second the Project will increase the risks and potential harms associated with a fire event. Absent contrary evidence, fire fighters must assume fires at the Project site are electrical, and must be use extreme caution to avoid electrocution. DPEIR Appendix 3.1.4-6, pp. J-5, J-7. For example, Rugged's fire protection plan indicates that firefighters must coordinate with a local CPV technician to disable the solar farm, and "avoid all potential electrical hazards until there is confirmation that the solar farm no longer poses an electrical shock hazard." DPEIR Appendix 3.1.6.4-6, pp. J-7, J-8. Firefighters must use dry chemical extinguishers when fighting fires on or near the CPV trackers to avoid electrocution hazards, and "be cautious of water pooling when CPV solar farm could become energized." DPEIR Appendix 3.1.4-6, p. J-5. All of these factors make quick responses to fires at the Project site more difficult. While the Project's fire protection plans include a goal of providing additional training to local fire stations, because local volunteer fire stations are ill-prepared to fight electrical fires effectively, this goal does not alleviate the risks associated with complicated and dangerous electrical fires. *See* DPEIR 3.1.4-41, 7.0-40 to 7.0-41. The Project will introduce a slew of ignition sources not otherwise present, but the DPEIR concludes that it considers them to "have a low likelihood of causing fires" and thus downplays this impact. *See* DPEIR 3.1.4-36. The use of on-site energy storage will increase the Project's fire risks. As the fire protection plan for Rugged admits, solar farms equipped with battery storage will require these special electrical-fire precautions even at night. DPEIR Appendix 3.1.4-6, p. J-7. The hazards associated with battery storage do not end

[48] Conservation Groups reviewed the letter available at http://www.sdcounty.ca.gov/pds/CEQA/Soitec-Documents/Record-Documents/2013-09-25-Joan-Tengowski-Letter-to-Patrick-Brown-re-Determination-of-no-Hazard-to-Air-Navigation.pdf

there; the batteries themselves increase the risk of fire at the Project location. Instead of acknowledging that the CPV trackers and other Project components will increase the risks associated with fires, the DPEIR concludes that the Project's removal of vegetation, notice to neighbors, traffic control plans, and emergency response funding will render any harm less than significant. DPEIR 3.1.4-38 to 3.1.4-41. While the Project contemplates onsite water storage for fire suppression, this is not sufficient to mitigate the Project's significant impacts to public safety due to fire, especially in situations when firefighters cannot use water without jeopardizing their own safety.

Third, the DPEIR fails to discuss the impacts associated with a fire at the Project sites. As discussed, the DPEIR admits the high likelihood of a fire in the Project area; thus this reasonably foreseeable occurrence should be addressed. For example, as the Rugged fire protection plan states, "burning CPV modules may produce toxic vapors." DPEIR Appendix 3.1.4-6, p. J-5. Yet there is no discussion of the toxic vapors, or the long term harms associated with CPV tracker– or other Project component – combustion in the hazardous materials section of the DPEIR.

Last, the Hazards and Hazardous Materials discussion (DPEIR 3.1.4), and Public Services discussion (DPEIR 3.1.7), incorrectly conclude that any potential fire associated impacts would be reduced to insignificance by Construction Fire Prevention Plans, site-specific fire Protection Plans, construction traffic control plans, construction notifications, and payments for additional firefighting resources. *See* DPEIR 3.1.4-38 to 3.1.4-41 (wildland fires); DPEIR 3.1.4-42 to DPEIR 3.1.4-46 (hazards associated with interference of emergency response); DPEIR 3.1.7-8 to 3.1.7-18 (public services). But the fire protection plans (DPEIR Appendices 3.1.4-5 and 3.1.4-6), cannot serve as appropriate mitigation, as they contain significant flaws. First, each claims that the Boulevard Fire Station is staffed 24 hours a day, seven days a week. DPEIR Appendix 3.1.4-5, p. 29; DPEIR Appendix 3.1.4-6, p. 31. For this reason, each states that Boulevard Fire Station would be expected to provide the initial response to any fire at Tierra del Sol. *Id.* Conservation Groups note that the Boulevard Fire Station's *volunteer* staff are not always available, and thus the fire station is often closed. Conservation Groups have been informed that in 2013, from January to the first half of October, the Boulevard Fire Station was unmanned for at least 133 days. Thus, the Fire Protection Plan's reliance upon Boulevard Fire Station as the first response option overlooks its significant lack of appropriate staffing. One of the other local stations that is expected to provide additional responses is the Jacumba Volunteer Fire Station (DPEIR 3.1.7-2; DPEIR Appendix 3.1.4-5, p. 30; DPEIR Appendix 3.1.4-6, p. 32) , which was unmanned for 15 days during the same period. Although there are plans to alleviate some of these staffing issues in a few years, any future solution would occur long after the Project is expected to be constructed. Thus, the DPEIR's analysis and conclusions regarding the Project's fire risks are fatally flawed.

H. VALLEY FEVER

The *coccidioides immitis* fungus, which causes the disease coccidioidomycosis – known as Valley Fever – naturally occurs in the soil in the Project area. In San Diego County from 2008 through 2012 there were between 138 and 159 confirmed cases of Valley Fever each year,[49] up from between 56 and 79 cases a year in 2003 through 2007.[50] Valley Fever, which has no known cure, can cause debilitating lung damage, infect the bone, skin, or meninges of the brain, and cause death; the anti-fungal medication used to treat the disease can cost $3,000 a *month*. *See* Death Dust: the Valley Fever Menace, Dana Goodyear January 20, 2014 *New Yorker*, p. 3 (attached hereto as Exhibit 26). Valley Fever is released into the air when soil disturbing activities, such as construction, release the spores from the ground. And using water as dust-suppression "can cause more cocci to bloom in the following dry season." *Id.*

Each solar farm constructed under the Project will require "grading necessary for the construction of access and service roads and the installation of trackers, trenching for the electrical DC and AC collection system including the telecommunication lines; installation of the inverter stations," "construction of the project substation, an O&M building, and the gen-tie line from the project substation to the identified regional substation." DPEIR 1.0-12. All of these activities will be soil-disturbing; however the DPEIR does not specify how many acres will be graded as part of the Project because grading quantities have not been finalized. *Id*. Even without this information, however, it is clear that the Project's installation of 2,667 trackers on 420 acres at Tierra del Sol and 3,588 trackers on 765 acres at Rugged – not to mention LanEast and LanWest – will disturb huge – albeit unquantified – amounts of soil. The DPEIR is silent regarding the potential for increased Valley Fever infections as a result of the Project's soil-disturbing activities, despite the serious risks to human health posed by the fungus. This deficiency must be remedied.

I. GLOBAL WARMING

Global Warming will have an immense impact on San Diego County. Sea level rise and reduced precipitation have disastrous implications for County communities. DPEIR 3.1.3-3. The federal government and the State of California have alerted regional governments to the dangers posed by global warming with legislation and regulation such as that listed in the

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[49] Reportable Diseases and Conditions by Year, 2008 - 2012 County of San Diego, Health and Human Services Agency, Public Health Service, available at http://www.sdcounty.ca.gov/hhsa/programs/phs/documents/5yrTableAug2013.pdf

[50] County of San Diego Health & Human Services Agency, Communicable Disease Report 2007, p. 9, available at http://www.sdcounty.ca.gov/hhsa/programs/phs/documents/CommunicableDiseaseReport2007.pdf

DPEIR. DPEIR 3.1.3-3 to 3.1.3-14. Yet the DPEIR details few if any efforts by the County to institute concrete and verifiable measures to reduce greenhouse gas ("GHG") production.

The DPEIR's reliance on the Climate Action Plan ("CAP") invalidated by Judge Taylor in *Sierra Club v. County of San Diego*, 37-2012-00101054-CU-TT-CTL (appeal pending in 4th DCA, case no. D064243) (attached hereto as Exhibit 27), to mitigate the Project's impacts violates CEQA. Judge Taylor rightly invalidated the CAP because it "should have been the subject of a supplemental EIR instead of an addendum to the PEIR that concluded the CAP is within the scope of the PEIR." *Id*. at Minute Order, p. 7. Because no supplemental EIR was completed, there was no review of the CAP to determine whether it "met the necessary GHG emission reductions," as "the CAP is merely hortatory and contains no enforcement mechanism for reducing GHG emissions." *Id*.

Furthermore, the CAP failed to meet the requirements of a mitigation measure adopted by the County in order to mitigate GHG emissions from County operations. *Id*. The CAP only contains recommendations and thus cannot assure that the County will meet "GHG emission reduction goals and targets." *Id*. As Judge Taylor ruled, "[t]here is no time for 'building strategies' or 'living documents;' as the PEIR quite rightly found, enforceable mitigation measures are necessary now." *Id*. Without "detailed deadlines" or "enforcement mechanisms for reducing GHG emissions," the CAP "does not comport with the requirements of Mitigation Measure CC-1.2, and thus violates CEQA." *Id*. at 7-8.

An EIR may not rely upon a plan such as the CAP that has been invalidated, or was never adopted. *County of Amador v. El Dorado County Water Agency* (1999) 76 Cal.App.4th 931, 951 (water agency's reliance upon draft general plan, when prior general plan was invalidated, was improper); *Friends of the Santa Clara River v. Castaic Lake Water Agency* (2002) 95 Cal.App.4th 1373, 1375-1376, (tiered EIR could not rely on a prior EIR that had been decertified); *California Oak Found. v. City of Santa Clarita* (2005) 133 Cal.App.4th 1219, 1236 (CEQA did not allow reliance on decertified EIR). Yet the DPEIR relies extensively on the CAP. DPEIR 3.1.3-14, 3.1.3-37 to 3.1.3-42. In fact, the DPEIR's determination that "impacts would be considered **less than significant**" is largely based on its determination that various elements of the Project "comply with the goals and objectives of the state and the CAP." *Id*. (emphasis in original). The DPEIR's reliance upon compliance with the CAP to satisfy its CEQA duties is a fatal flaw. The County should address the significance of GHG emissions without reference to invalidated planning documents.[51]

The DPEIR's reliance on "900 metric tons (MT) of carbon dioxide equivalent ($MTCO_2E$) per year" as a valid threshold for its significance determination is never adequately explained.

[51] Once the County has approved a valid CAP, or an equivalent replacement for the invalidated strategic GHG reduction analysis contained in the CAP, the County must offer a comprehensive analysis of how the Project is consistent with the new CAP or analysis.

DPEIR 3.1.3-17. The DPEIR references a white paper published by the California Air Pollution Control Officers Association ("CAPCOA White Paper"),[52] but fails to comply with CEQA Guidelines §15064.7(b), which requires that if thresholds of significance are adopted as part of an environmental review process they must be adopted by ordinance, resolution, rule, or regulation, developed through a public review process, and be supported by substantial evidence. None of that is present in the CAPCOA White Paper, which primarily concerns projects that do not involve stationary sources. CAPCOA White Paper, p.18. Furthermore, according to the CAPCOA White Paper,

> While many public agencies adopt regulatory standards as thresholds, the standards do not substitute for a public agency's use of careful judgment in determining significance. They also do not replace the legal standard for significance (i.e., if there is a fair argument, based on substantial evidence in light of the whole record that the project may have a significant effect, the effect should be considered significant) (CEQA Guidelines §15064(f)(1). Also see *Communities for a Better Environment v. California Resource Agency* 103 Cal. App. 4th 98 (2002)). In other words, the adoption of a regulatory standard does not create an irrebuttable presumption that impacts below the regulatory standard are less than significant.

CAPCOA White Paper, p. 11. The DPEIR fails to do this; the County's analysis must be revised to show why it concluded that 900 $MTCO_2E$ represents a threshold beneath which no further analysis and mitigation is required.[53]

While the DPEIR acknowledges that the Global Warming Solutions Act of 2006 ("AB 32") requires a statewide reduction in GHG emissions to 1990 levels by 2020, it fails to explain the analytical leap between the concrete numbers required by AB 32 and the DPEIR's rabbit-hole reference to whatever "the Interim Guidance indicates that the project needs to demonstrate [so] that it would not impede" AB 32's implementation. DPEIR 3.1.3-7 to 3.1.3-8, 3.1.3-17. The DPEIR's cryptic reference fails to explain what – if any – connection this Project's reduction of

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[52] Cited at DPEIR 5-23.

[53] The DPEIR refers to several significance threshold tables, as well. It is unclear where Table 3.3.1-3 is to be found, but Table 3.1.3-3 – possibly the table the DPEIR intended to refer to – contains nothing but an extrapolation based on the arbitrary 900 $MTCO_2E$ threshold chosen without rational explanation or proper CEQA process. DPEIR 3.1.3-17. Additionally, the DPEIR refers to "Interim Guidance," but fails to explain what document is being referred to. *Id.* These comments will proceed under the assumption that "Interim Guidance" refers to *DPLU Interim Approach to Addressing Climate Change in CEQA Documents* (County of San Diego 2010a), or in the alternative, that "Interim Guidance" refers to something similar to the Interim Approach. *See* DPEIR 3.1.3-16 to 3.1.3-17.

GHG emissions to "33% below projected Business As Usual (BAU)" has to AB 32's mandated 1990 levels by 2020. DPEIR 3.1.3-17. First, the DPEIR's abstruse reference is insufficient under CEQA. Rational decisionmaking must be based on thorough analysis with the opportunity for public comment. No such process is present here. Second, the Project has not been studied as part of the County's GHG inventory because it *has not yet been built*, so any reduction in "Business As Usual" is still a net *increase* in GHG levels. The County must explain how a net increase in GHG levels does not impede the goals of AB 32, preferably by listing concrete corresponding reductions in GHG emissions from other sources.

The DPEIR's calculation of construction impacts also fails to connect the dots to its conclusions. The DPEIR briefly notes that construction impacts will be "annualized over the 30-year life of" its various projects without explaining why such amortization is an appropriate means of GHG emission calculation. DPEIR 3.1.3-19 to 3.1.3-20. Construction emissions will actually occur *during construction*, not 30 years later. AB 32 mandates 1990 levels by 2020, not more than a decade later. The County must explain why a 30-year amortization is superior to a calculation that measures emissions as they occur.

The DPEIR states that while the Project will produce some GHGs through construction and operation, it "would provide a potential reduction of 81,334 $MTCO_2E$ per year if the electricity generated by the Tierra del Sol solar farm were to be used instead of electricity generated by fossil fuel sources." DPEIR 3.1.3-25; *see also* DPEIR 3.1.3-29 to 3.1.3-30, 3.1.3-32, 3.1.3-35, 3.1.3-37 to 3.1.3-41. Yet the DPEIR contains no guarantee that the Project's generation will *replace* exsting fossil fuel sources. Indeed, the possibility remains that the Project will *supplement* these existing sources, and thus provide *no reduction* in GHG emissions. The County must analyze all of the Project's potential GHG emission sources and compare the total emissions per expected kilowatt-hour (averaged over the expected life of the Project) to the other energy sources the County implies will be displaced. In the absence of specific displacement scenarios, it is misleading to include this discussion in the DPEIR because there is no explanation of the rational basis for the numbers utilized. Because they are misleading, and because they are not considered as a part of the County's significance determination,[54] the County must replace them with concrete displacement scenarios based on substantial evidence or remove them from its analysis.

[54] Though the DPEIR includes the disclaimer that this displacement "is not considered in the significance determination" (DPEIR 3.1.3-25, 3.1.3-30), it nonetheless repeatedly cites a "net reduction in GHG emissions" as a result of such displacement in its CEQA compliance rationales. DPEIR 3.1.3-37 to 3.1.3-41. This is misleading and unacceptable under CEQA. Any GHG displacement numbers must be explained so that the public and decision makers know what they are based on. With no concrete plans to displace existing GHG emissions, the DPEIR's displacement numbers are nothing more than tantalizing baubles bereft of substantial evidence.

For the DPEIR to be sufficient, the County must do more than just calculate GHG emissions from construction activities, construction-related vehicle traffic, and employee vehicle use during Project operation, which is all the DPEIR indicates will be done. DPEIR 3.1.3-18 to 3.1.3-20 (Tierra del Sol), 3.1.3-25 to 3.1.3-26 (Rugged), 3.1.3-30 to 3.1.3-31 (LanEast), 3.1.3-33 (LanWest). The County must also assess the Project's substantial *embedded* greenhouse gas emissions such as those emissions associated with production of the materials used to construct the Project, like photovoltaic panels. For instance, the Tierra del Sol calculations do not take into account the substantial GHG emissions associated with concrete production. DPEIR Appendix 3.1.3-1, p. 33 (concrete to be generated at the Rugged batch plant, so not calculated as part of Tierra del Sol emissions). One of the major shortcomings in the DPEIR's global warming analysis is that it leaves out GHG emissions that occur due to manufacturing and transport of Project components and construction materials. By only addressing on-site construction and operation impacts, the DPEIR underestimates the Project's GHG emissions. Instead, it should include a full life-cycle analysis of those emissions.

Nor does the DPEIR consider the GHG impacts associated with constructing temporary housing, even though this housing is cited as a rationale for reducing GHG emissions through shorter vehicle trips. DPEIR 3.1.3-20, fn. 6. Furthermore, DPEIR fails to compute the change in GHG emissions from the soil on the Project site resulting from the Project's conversion of the land from grazing, agricultural production, and other lower-intensity rural uses to the proposed industrial-scale CPV facilities. Detailed analysis of offsets is also omitted, though they are cited as resulting in the absence of a "net-increase in GHG emissions following implementation of" Project components. DPEIR 3.1.3-23. CEQA does not allow the unfounded assumption that offsets will reduce GHG emissions; instead the County must analyze where these offsets are coming from and how effective they are.

The DPEIR fails to precisely address operational GHG impacts, and its conclusions are not explained. Thus decisionmakers and the public cannot understand how the DPEIR got from point A to point B. For instance, the DPEIR uses Bell 206 helicopters to calculate emissions but never states that this is the type of helicopter that will be used during Project operations, or provides any other rationale. DPEIR 3.1.3-21. Additionally, the DPEIR assumes that LanEast and LanWest will stay below the arbitrary 900 $MTCO_2E$ significance threshold established by the County, but fails to indicate any rationale for why this is so. DPEIR 3.1.3-31, 3.1.3-33. The County must correct these omissions.

The DPEIR's cumulative impact analysis is equally undeveloped. The DPEIR's description of the geographic extent of the Project states that it should be "primarily contingent upon the area over which lead agencies have authority. As such, the geographic extent for the purposes of the Proposed Project is the southeastern corner of the San Diego Air Basin." DPEIR 3.1.3-40. This is insufficient. The County must explain why it selected the southeastern corner of San Diego County's air basin, instead of the entire basin or county. *Kings County*, 221 Cal.App.3d at 723-724. The County must also correct the DPEIR's failure to detail concrete

GHG displacement of "fossil-fuel-fired power plants" as part of its analysis of cumulative impacts. DPEIR 3.1.3-40.

For all these reasons, the DPEIR's global warming analysis precludes informed decisionmaking both by the agency and by the public, in violation of CEQA. *Kings County*, 221 Cal.App.3d at 712.

J. GROWTH INDUCING IMPACTS

The Project is designed to generate 168.5 MW of solar energy to be supplied to SDG&E for distribution to end users. DPEIR 1.0-1 to 1.0-2. Yet, the DPEIR claims that the Project will "not induce substantial population growth." DPEIR 1.0-39. By increasing the amount of available energy, the Project will facilitate the expansion of SD&E's service areas, and allow the utility to sell energy to more customers and at higher amounts. Without a reduction in non-renewable energy to offset the energy generated by the Project, the DPEIR's claim that this will not facilitate or induce growth is unfounded.

IV. INADEQUATE ALTERNATIVES

CEQA requires EIRs to "describe a range of reasonable alternatives to 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." Guidelines § 15126.6(a). Alternatives that would lessen significant effects should be considered even if they "would impede to some degree the attainment of the project objectives, or be more costly." *Id.* § 15126.6(b); *California Native Plant Society v. City of Santa Cruz* ("*CNPS*") (2009) 177 Cal.App.4th 957, 991. The range of alternatives considered must "foster informed decisionmaking and public participation." Guidelines § 15126.6(a); *CNPS*, 177 Cal.App.4th at 980, 988. Alternatives may only be eliminated from "detailed consideration" when substantial evidence in the record shows that they either (1) "fail[] to meet most of the basic project objectives," (2) are "infeasibl[e]," or (3) do not "avoid significant environmental impacts." Guidelines § 15126.6(c).

The DPEIR here fails to analyze a reasonable range of alternatives and impedes, rather than fosters, informed decisionmaking and public participation for at least three reasons. First, the DPEIR *entirely fails* to analyze the Calexico (Imperial County) alternative despite evidence that the entire Project may be developed there. Second, the DPEIR dismisses from detailed consideration the distributed generation alternative without adequate reasons or support. Third, the DPEIR improperly designates Alternative 7 as the environmentally superior alternative without adequate support.

A. THE DPEIR FAILS TO ANALYZE THE CALEXICO (IMPERIAL COUNTY) ALTERNATIVE.

The DPEIR fails to analyze a *single* out-of-county alternative. Yet, as discussed above in section II.A, recent evidence suggests that the entire Project may now be developed in *Imperial County*. On January 16, 2014, the California Public Utilities Commission adopted Resolution E-4637, which approves amendments to "the long-term power purchase agreements . . . between [SDG&E] and Tierra del Sol Solar Farm, LLC, LanWest Solar Farm, LLC, LanEast Solar Farm, LLC, and Rugged Solar, LLC." Exhibit 1 at p. 1 (Resolution E-4637). Among other things, the amendments "result in . . . new site location [and] new interconnection point" for the projects in Imperial County, California. *Id*. The "new project sites" would be located "near Calexico, Imperial County, California," and would interconnect at the Imperial Valley Substation. *Id*. at 2. CEQA requires the County to fully analyze the Calexico site as a Project alternative, if not as the proposed Project itself, which it appears it may now be.

The DPEIR asserts that under CEQA Guidelines section 15126.6(f)(1) "alternative locations only need be considered if the project proponent can reasonably acquire, control or otherwise have access to the alternative site (or the site is already owned by the proponent)." DPEIR 4.0-7. Because, the DPEIR continues, the "Proposed Project applicants do not own or have the ability to easily acquire other sites within San Diego County [besides the Los Robles site] that meet [the Project] objective[s]," no "other alternative location[s] [are] further considered in this EIR." *Id*. at 4.0-7 to 4.0-8. The DPEIR is wrong for two reasons, and its out-of-hand dismissal of all alternative locations besides the Los Robles site violates CEQA.

First, the DPEIR grossly misstates the CEQA Guidelines. The Guidelines do *not* provide that agencies are free to ignore alternative locations in their EIRs so long as "the project proponent can reasonably acquire, control or otherwise have access to the alternative site," as the DPEIR asserts. *Id*. at 4.0-7. To the contrary, that is only *one* of the "factors that *may* be taken into account when addressing the feasibility of alternatives." Guidelines § 15126.6(f)(1) (emphasis added). As section 15126.6(f)(1) makes clear, "*[n]o one* of these factors is a fixed limit on the scope of reasonable alternatives." *Id*. (emphasis added). And where, as here, the project applicants *themselves* are considering – if not likely to adopt – alternative locations that "already have all of the required major permits," the "alternative site" factor is *no limit at all*. Exhibit 1 at p. 2 (Resolution E-4637).

Second, as discussed above in section II.A, the County is not justified in limiting the project description, project objectives and scope of alternatives to San Diego County. The potential relocation of the Project to Imperial County renders the entire DPEIR and CEQA process to date obsolete. *County of Inyo*, 71 Cal.App.3d at 193. The County must accordingly (1) amend the Project location description to include Calexico (Imperial County), (2) remove the San Diego-specific Project objectives, including objectives 2 and 4 (DPEIR 1.0-1), and (3) describe and fully analyze the environmental impacts of the Calexico alternative and any other

out-of-county alternatives. After revising the DPEIR with that "significant new information," the County must recirculate it. PRC § 21092.1; *Laurel Heights II*, 6 Cal.4th 1112 at 1126-1132.

B. THE COUNTY MUST ANALYZE THE DISTRIBUTED GENERATION ALTERNATIVE IN DETAIL.

In their October 10, 2013, Scoping Comments, Conservation Groups urged the County to adopt as an alternative to the proposed Project the development of non-fossil fuel distributed generation projects near demand centers in already-disturbed areas. Conservation Groups also demonstrated in their comments that a distributed generation alternative is not only feasible, it is better for the environment and the economy than remote, industrial-scale generation projects like Soitec Solar. Many other commenters on the Project have likewise voiced their support for and demonstrated the feasibility and benefits of a distributed generation alternative. Nonetheless, the DPEIR fails to analyze distributed generation as an alternative.

The DPEIR proposes a distributed generation policy alternative under which "distributed generation including but not limited to residential and commercial roof-top solar panels, biofuels, hydrogen fuel cells, and other renewable distributed energy sources would be installed throughout San Diego County in place of the Proposed Project." DPEIR 4.0-4. Yet while the DPEIR admits that "this alternative, including rooftop solar, would result in a *significant net reduction in project impacts* as compared with the Proposed Project," it dismisses the distributed generation alternative without any detailed analysis. *Id*. (emphasis added).

The DPEIR provides six excuses for not analyzing the distributed generation alternative. To wit, the DPEIR asserts that

1. The alternative "is outside the control of, and could not be implemented by, the project applicant" (DPEIR 4.0-4);
2. The "alternative would not meet Objective 2 since it would not create utility scale solar energy facilities (*id*.);
3. The alternative would not "meet Objective 1 of assisting in achieving the state's [Renewables Portfolio Standard ("RPS")] and GHG reduction objectives of obtaining 33% of electricity from renewable resources by 2020" (*id*.);[55]
4. The "alternative would not meet Objective 5 because distributed energy installers are not required to offset GHG emissions for installation of each system" (DPEIR 4.0-5);
5. The "alternative would not commit to an investment of at least $100 million in economic development through the creation of high-wage, highly skilled jobs

[55] Under the RPS, which was formally codified in April 2011 by Senate Bill X1-2 (Skinner), all electricity retailers in the state – including investor-owned utilities like SDG&E – must supply at least 33 percent of their retail sales from "renewable" energy by 2020.

(Objective 6)" (*id*.); and

6. A distributed solar photovoltaic ("PV") alternative is "infeasible from a technical and commercial perspective" (*id*.).

All six of the DPEIR's excuses fail, as discussed in turn below.

1. The County Is Not Limited by the Project Applicant's Access to or Control over Land and Resources.

The DPEIR concludes that because the distributed generation alternative "is outside the control of, and could not be implemented by, the project applicant," it is infeasible and need not be analyzed. DPEIR 4.0-4. Wrong.

As discussed above, "whether the proponent can reasonably acquire, control or otherwise have access to the alternative site" is *only one* of the many "factors that may be taken into account when addressing the feasibility of alternatives." Guidelines § 15126.6(f)(1). "*No one* of these factors establishes a fixed limit on the scope of reasonable alternatives." *Id*.; *Citizens of Goleta Valley v. Board of Supervisors* ("*Goleta*") (1990) 52 Cal.3d 553, 575 n. 7 ("We emphasize that . . . site ownership [and] jurisdictional borders are simply a factor to be taken into account and *do not establish an ironclad limit* on the scope of reasonable alternatives" (emphasis added)); *Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal.App.4th 1437, 1464-1465 (need for "an act of Congress" to enable use of an alternate project site "does not necessarily render the alternative infeasible").

Where an alternative – like the distributed generation policy alternative here – can be implemented by the lead agency without either the assistance or land ownership of the project proponent, it is irrelevant to the alternative's feasibility that it "is outside the control of, and could not be implemented by, the project applicant." DPEIR 4.0-4. It is within the County's constitutional purview to adopt a distributed generation policy incentivizing or otherwise providing for expanded distributed generation installation. Cal. Const. art. X, § 7 ("A county . . . may make and enforce within its limits all local, police, sanitary, and other ordinances and regulations not in conflict with general laws"). It does not need Soitec Solar to do so.

2. Distributed Generation Would Increase Local Generation and Preserve Grid Reliability.

Project Objective 2 is to "[c]reate utility-scale solar energy in-basin to improve reliability for the San Diego region by providing a source of local generation." DPEIR 1.0-1. The DPEIR dismisses the distributed generation because it "would not meet Objective 2 since it would not create utility scale solar energy facilities." *Id*. at 4.0-4. But because Objective 2 is unreasonably narrow, it may not be used to eliminate alternatives.

"The case law makes clear that . . . overly narrow objectives may unduly circumscribe the agency's consideration of project alternatives." Remy *et al.*, "Guide to CEQA," 11th ed. (2007) at p. 589. That is exactly what happened here. The DPEIR uses the "utility-scale" generation limitation in Objective 2 to dismiss the distributed generation alterative. Yet the "utility-scale" limitation *impedes* rather than *fosters* the three primary and beneficial goals within Objective 2, *i.e.* to (1) promote "solar energy"(2) in the San Diego "basin" to (3) "improve reliability for the San Diego Region." DPEIR 1.0-1.

While the distributed generation alternative would not result in "utility-scale" electrical generation, it would meet all three of Objective 2's primary goals. First, the distributed generation alternative would promote "solar energy" by "including rooftop solar." DPEIR 4.0-4. Second, it would create "in-basin" generation by "install[ing] throughout San Diego County" distributed generation "including but not limited to residential and commercial roof-top solar panels . . . and other renewable distributed energy sources." *Id*. Indeed, because distributed generation alternative would be produced on the same site as the electrical demand, it would result in *even more local* than the Soitec Project. Third, as discussed below in section IV.B.6, it would preserve local reliability and create no imbalances in the grid system.

Because the "utility-scale" generation limitation in Objective 2 is unduly restrictive, and because the distributed generation alternative would achieve all three of Objective 2's core goals, the County may not dismiss the alternative for "not meet[ing] Objective 2." DPEIR 4.0-4.

3. The Distributed Generation Alternative Would Assist California in Achieving Its RPS and Greenhouse Gas-Reduction Goals.

The DPEIR concludes that the distributed generation alternative would not "meet Objective 1 of assisting in achieving the state's RPS and GHG reduction objectives of obtaining 33% of electricity from renewable resources by 2020." DPEIR 4.0-4. The DPEIR offers two reasons for its conclusion. Both are misplaced and fail to support the DPEIR's conclusion, as discussed in turn below.

a. Increased Distributed Generation Will Assist SDG&E in Achieving Its RPS Goals.

The DPEIR's first rationale for why the distributed generation alternative would not meet assist in "achieving the state's RPS and GHG reduction objectives" is that "[a]lthough the [distributed generation] alternative would result in increased generation of renewable resources , at present most rooftop solar is ineligible to contribute towards the RPS." DPEIR 4.0-4. But the DPEIR ignores the fact that even though rooftop PV and other distributed generation sources are not directly RPS-eligible, they have a *major* impact on the quantity of RPS procurement necessary to meet the RPS target of 33 percent renewables by 2020. If distributed generation displaces electricity that would otherwise be purchased from the grid, the amount of RPS-eligible

resources that must be purchased to achieve that 33-percent-renewables goal is reduced.

By way of example, recent legislation (AB 327 (Perea), signed into law in October 2013) has greatly expanded the net energy metering "pie" through the middle of 2017. AB 327 states that SDG&E must provide net metering "until such times as the large electrical corporation reaches its net energy metering program limit [607 MW][56] or July 1, 2017, whichever is earlier." Cal. Pub. Util. Code § 2827(c)(4)(B).

There was 123 MW of net-metered PV in SDG&E's[57] territory at the end of 2012. DPEIR 4.0-5. The increase in rooftop, net-metered PV in SDG&E territory between the end of 2012 and mid-2017 will be: 607 MW – 123 MW = 484 MW. Assuming this PV has a composite annual capacity factor of 20 percent, the additional 484 MW of net-metered PV will produce 484 MW × 8,760 hr/yr × 0.20 = 847,968 MW-hr/yr of solar energy.

This means that SDG&E will require 847,968 MW-hr/yr less from the grid due to the expansion of rooftop PV. This also means that SDG&E will require 279,829 MW-hr/yr – 33 percent of 847,968 MW-hr/yr – less of RPS-eligible project capacity. This reduction in need for RPS-eligible project capacity is almost enough by itself to offset the 341,339 MW-hr/yr in RPS-eligible generation that the Soitec Project will produce.

The annual output of 168.5 MW[58] of Soitec Project capacity, assuming an annual capacity factor of 25 percent, would be: 168.5 MW × 8,760 hr/yr × 0.25 = 369,015 MW-hr/yr. The California Energy Commission ("CEC") estimates annual average transmission losses in California of approximately 7.5 percent. Adjusting for this percentage of transmission losses, the Project would produce net solar energy at the distribution level of: 369,015 MW-hr/yr × (1 – 0.075) = 341,339 MW-hr/yr.

The amount of RPS benefit from the non-speculative addition of 484 MW of new rooftop PV by mid-2017 in SDG&E territory is close, at 279,829 MW-hr/yr, to the 341,339 MW-hr/yr of solar power that would be produced by the Soitec Project's 168.5-MW capacity. Also, assuming that (at least) the average annual rooftop PV installation rate in SDG&E territory of 80 to 100

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[56] SDG&E's net metering program limit is 606.7 MW, as calculated and discussed on SDG&E's own website: http://www.sdge.com/clean-energy/net-energy-metering/overview-nem-cap (a screenshot of which is attached hereto as Exhibit 28). *See also* Energy Policy Initiatives Center – U. of San Diego, PV Forecast for City of San Diego CMAP, Draft for Discussion 10-22-13.

[57] SDG&E is the utility to whom the Project's generated electricity will be sold, pursuant to a power purchase agreement approved by the CPUC. Exhibit 1 at pp. 1-2.

[58] Note that this 168.5 MW in nameplate capacity is a *best-case scenario*. Depending on many factors, including which of the four proposed Soitec projects get approved and built, the Project's nameplate capacity may actually be much less.

MW[59] is maintained through 2020, these rooftop solar additions will reduce SDG&E's 2020 RPS procurement need by substantially more than the Soitec Project's 168.5-MW maximum nameplate capacity.

Furthermore, the DPEIR entirely ignores the fact that large-scale RPS-eligible commercial rooftop projects have been developed in California and can readily be developed in SDG&E's service territory and count directly towards its RPS-eligible project capacity. The first utility project of this type was Southern California Edison's 250-MW warehouse rooftop project approved by the CPUC in June 2009. In voting for the approval of the project, former CPUC Commissioner John Bohn stated that "[u]nlike other generation sources, [distributed generation] projects can get built quickly and without the need for expensive new transmission lines. And . . . these projects are extremely benign from an environmental standpoint, with neither land use, water, or air emission impacts."[60]

b. CPUC Decision 11-01-025 Lifted the Stay on the Eligibility of Net-Metered Rooftop PV as Tradeable Renewable Energy Credits for RPS Compliance.

The DPEIR's second rationale for why the distributed generation alternative would not meet assist in "achieving the state's RPS and GHG reduction objectives" is that

> current trading mechanisms by which distributed generation facilities could contribute to the RPS target are either impractical for small-scale systems or ineligible for utility participation. While a CPUC decision was issued authorizing the use of tradable renewable energy credits (RECs) (CPUC Decision 10-03-021), the decision was stayed, and so the market has yet to be defined and is not yet active.

DPEIR 4.0-4.

The DPEIR's rationale is outdated and wrong. The CPUC lifted its stay on D.10-03-021 *more than three years ago* in Decision 11-01-025.[61] And the CEC subsequently approved as RPS eligible (at least some) RECs associated with energy from customer-side distributed

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[59] This is the rate necessary to achieve the 607-MW allocation of total installed rooftop PV between 2013 and mid-2017.

[60] CPUC, "CPUC Approves Edison Solar Roof Program," Press Release, June 18, 2009, available at: http://protectourcommunities.org/wp-content/uploads/2009/07/cpuc_pressrelease_sceurbanpv.pdf.

[61] D.11-01-025 is attached hereto as Exhibit 29, and available online at: http://docs.cpuc.ca.gov/word_pdf/FINAL_DECISION/129517.pdf.

generation installations.[62] In practical terms, this means that the entire 484 MW of rooftop PV to be added by mid-2007 can be converted into RPS capacity through the sale of the RECs associated with the rooftop PV capacity to SDG&E.

4. The Distributed Generation Alternative Would Reduce Greenhouse Gas Emissions.

The DPEIR asserts that the distributed generation "alternative would not meet Objective 5 because distributed energy installers are not required to offset GHG emissions for installation of each system." DPEIR 4.0-5. But the DPEIR ignores the forest for the trees. As the DPEIR itself acknowledges, the distributed generation alternative would significantly reduce greenhouse gas emissions by "increas[ing] generation of renewable energy sources," and would "result in a significant net reduction in [overall] project impacts as compared with the Proposed Project." *Id*. at 4.0-4.

That the County decided to not include any measures in the distributed generation alternative to offset the greenhouse gas emissions from "distributed energy installers," for example, does not change the fact that the alternative would result in significant greenhouse gas emissions reductions. *Id*. at 4.0-5. Furthermore, the DPEIR provides *no evidence whatsoever* demonstrating that the County could not adopt mitigation measures along with the distributed generation alternative to offset the greenhouse gas emissions resulting from implementation of the alternative. BLM's unsupported and myopic excuse fails.

5. The Distributed Generation Alternative Would Produce a Substantial Investment in Economic Development through the Creation of High-Wage, Highly Skilled Jobs.

The DPEIR concludes that the distributed generation "alternative would not commit to an investment of at least $100 million in economic development through the creation of high-wage, highly skilled jobs (Objective 6)." DPEIR 4.0-5. This excuse for dismissing the alternative fails, just like all the others.

Distributed rooftop PV projects generation good jobs at an equal or greater rate than the construction and operation of the Soitec Project would. Using the numbers and formulas from a 2010 peer-reviewed study of the employment potential of renewable energy in United States, the construction of 168.5 MW of local PV would produce about 260 job-years of activity.[63]

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[62] *See* CEC, April 2013, "Renewables Portfolio Standard Eligibility Guidebook," Seventh Edition (attached hereto as Exhibit 30), available at: http://www.energy.ca.gov/2013publications/CEC-300-2013-005/CEC-300-2013-005-ED7-CMF.pdf.

[63] Wei *et al.*, January 2010, "Putting Renewables and Energy Efficiency to Work: How Many Jobs Can the Clean Energy Industry Generate in the US?," *Energy Policy*, 38:919-931, at p. 923, Figure 1 (attached hereto as Exhibit 31). Assume 168.5 MW of PV produces 295 GWh per year

6. Distributed Solar PV Is Feasible.

The DPEIR's final excuse for dismissing the distributed generation alternative from detailed consideration is that distributed solar PV is "infeasible from a technical and commercial perspective" because (1) a large "number of new [distributed PV] installations [would be] required to deliver up to an additional 168.5 MW of solar electricity by 2020 (Objectives 1 and 7)," and (2) "[a]s yet undefined technical hurdles associated with high levels of PV development exist that create imbalances in the grid system." DPEIR 4.0-5. Both rationales for infeasibility are wrong.

First, as discussed above in section IV.B.3.a, at least 484 MW of new rooftop PV will be added in SDG&E territory by mid-2017, which would reduce the need for RPS-eligible project capacity by nearly the same amount – 279,829 MWh/yr – as the Soitec Project would add in RPS-eligible capacity – 341,339 MWh/yr. Furthermore, the DPEIR is mistaken in its assumption that the distributed generation alternative would only add generation capacity in the form of very-small-scale "domestic systems." DPEIR 4.0-5. As discussed above in section IV.B.3.a, large-scale RPS-eligible commercial rooftop projects have been developed in California – like Southern California Edison's 250-MW warehouse rooftop project – and can readily be developed in SDG&E's service territory.

Second, replacing the Soitec Project's capacity with rooftop PV capacity would create no imbalances in the grid system. SDG&E has an ambitious smart grid deployment plan intended in part to permit the absorption of ever greater amounts of distributed rooftop solar with no impacts on grid reliability.[64] The installation of 607 MW of net-metered local solar capacity in SDG&E territory by mid-2017 will represent only about 13 percent of the typical SDG&E summer peak load of approximately 4,500 MW. Daytime distributed generation solar inputs of less than 30 percent in aggregate are considered to presumptively have no impact on grid reliability.[65] The reason is that at his relatively low level of PV penetration, there is little or no possibility of backflow through the electric distribution system to the transmission system.

In sum, all six of the DPEIR's excuses for dismissing the distributed generation alternative without detailed analysis fail. Because the distributed generation alternative is feasible, would "result in a significant net reduction in project impacts as compared with the Proposed Project," and would meet many if not all of the Project objectives, CEQA requires that the County fully analyze the alternative. DPEIR 4.0-4 (quote); Guidelines § 15126.6(b); *CNPS*,

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(168.5 MW x 8,760 hr/yr x 0.20 x 1 GWh/1,000 MWh). PV produces 0.87 job-years per GWh. Therefore, 0.87 x 295 = 257 job-years.

[64] SDG&E Smart Grid Deployment Plan 2011-2020, June 2011, available at: https://www.sdge.com/sites/default/files/regulatory/deploymentplan.pdf.

[65] Powers, March 2012, *Bay Area Smart Energy 2020*, Chapter 11 (attached hereto as Exhibit 32), available at

177 Cal.App.4th at 991.

C. THE DPEIR IMPROPERLY DESIGNATES ALTERNATIVE 7 AS THE ENVIRONMENTALLY SUPERIOR ALTERNATIVE WITHOUT ADEQUATE SUPPORT FOR THIS CONCLUSION.

"An EIR's discussion of alternatives must contain analysis sufficient to allow informed decision making." *Laurel Heights I*, *supra*, 47 Cal.3d at 403. The DPEIR lacks this analysis. As discussed above, the DPEIR improperly designates Alternative 7 as the environmentally superior alternative without adequate support. Neither the DPEIR nor its Appendices reveal site surveys, geotechnical investigations, groundwater investigations, glare analysis, or any other detailed investigation that would allow the County to examine whether relocating LanEast, LanWest, and Tierra del Sol to the Los Robles site would, in fact, reduce any project impacts. Without filling these important data gaps, the County cannot conclude that this site is superior. *Laurel Heights I*, 47 Cal.3d at 404. The DPEIR's unsupported conclusions fly in the face of CEQA's informational mandate.

V. INADEQUATE MITIGATION MEASURES CANNOT CURE THE ENVIRONMENTAL HARMS OF THE PROJECT.

The County has a duty to fully consider feasible alternatives and mitigation measures and to "not approve [this] project[] as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of [this] proposed project[]." PRC §§ 21002; 21002.1(b); 21081(a),(b); CEQA Guidelines §§ 15091; 15093. CEQA mandates that "[*a*]*ll* phases [and components] of a project must be considered when evaluating its impact on the environment." CEQA Guidelines § 15126. The DPEIR's selective analysis – and its conclusions based thereon – stymie CEQA's informational goals and violate CEQA's mandate that EIRs "be prepared with a sufficient degree of analysis to provide decisionmakers with information which enables them to make a decision which intelligently takes account of environmental consequences." CEQA Guidelines § 15151.

The mere preparation of reports is insufficient to satisfy this requirement. For example, one project design feature ("PDF") requires only the preparation of reports on GHG emissions without any concrete requirement that reported emissions comply with a set standard. DPEIR 3.1.3-41 (PDF-GHG-1). In doing so, the DPEIR fails to document significant impacts and mitigation measures to address them, rather deferring such analysis to the future. When an agency preparing an impact report is required to examine future events that may be difficult to forecast, the agency "must use its best efforts to find out and disclose all that it reasonably can." CEQA Guidelines § 15144; *Planning and Conservation League v. Castaic Lake Water Agency* (2009) 180 Cal.App.4th 210, 242. The uncertainty this builds into the DPEIR renders

impractical the informational goals of CEQA. The Revised DPEIR must remedy this deficiency by mandating concrete requirements for the mitigation of significant impacts from future projects.

The DPEIR relies upon future compliance with management plans to mitigate significant impacts, introducing the very uncertainty in decisionmaking that CEQA was designed to avoid. Merely ensuring that a traffic control plan will be prepared at some future date does nothing for present day decisionmakers and the public, especially in the eventuality that a future traffic control plan produces significant impacts to other categories of resources. DPEIR 7.0-41 to 7.0-42. Similarly, the DPEIR calls for implementation of a Glare Study and states that "[i]f potential visual resource impacts associated with project-generated glare are identified, then measures shall be identified to reduce impacts." DPEIR 7.0-2 (PDF-AE-5).[66] Other deferred plans, reports, and studies include site specific air quality technical reports for LanEast and LanWest (DPEIR 7.0-2 to 7.0-3), Resource Management Plans (DPEIR 7.0-6 to 7.0-7), Stormwater Pollution Prevention Plans (DPEIR 7.0-8 to 7.0-9), final biological monitoring reports (DPEIR 7.0-9 to 7.0-10), Fugitive Dust Control Plans (DPEIR 7.0-10 to 7.0-11), final Fire Protection Plans (DPEIR 7.0-12), Nesting Bird Management, Monitoring, and Reporting Plans (DPEIR 7.0-12 to 7.0-14), groundwater monitoring programs (DPEIR 7.0-15 to 7.0-19), Revegetation Plans (DPEIR 7.0-20), grading monitoring programs (DPEIR 7.0-22 to 7.0-30), Archaeological Treatment Plans (DPEIR 7.0-31), Cultural Treatment Plans (DPEIR 7.0-31), Helicopter Noise Control Plans (DPEIR 7.0-33, 7.0-35 to 7.0-36), Construction Management Plans (DPEIR 7.0-33), Blasting Plans (DPEIR 7.0-34 to 7.0-35), Site-Specific Noise Technical Reports (DPEIR 7.0-36), geotechnical studies (DPEIR 7.0-38 to 7.0-39) and final Construction Fire Prevention Plans. DPEIR 7.0-39 to 7.0-40. Deferring this analysis until *after* the County has completed the CEQA process and approved the Project could pose impacts that were never evaluated, thus violating CEQA.

The DPEIR defers critical decisionmaking on mitigation. Instead of determining whether "the significant and unmitigated effects associated with aesthetics and air quality can be reduced" the DPEIR instead defers this decision to the Board. DPEIR S.0-72. This is insufficient. The DPEIR itself must determine the extent of these effects and what mitigation measures might be available to reduce those effects, even if those mitigation measures would not reduce the effects below the threshold of significance. *Id*. CEQA's informational purpose is not served by an impact report that neglects a final conclusion about the feasibility of mitigation measures. This information is critical both to the Board, as the decisionmaking body, and to the public's ability to comment. *Laurel Heights I*, *supra*, 47 Cal.3d at 403.

[66] Indeed, the Glare Study included as Appendix 2.1-3 and used to analyze the Project's significant glare impacts is merely a *draft*.

The DPEIR thus improperly defers specification of numerous mitigation measures until after the completion of environmental review in violation of CEQA. "[M]itigation measure[s] [that do] no more than require a report be prepared and followed" do not provide adequate information for informed decisionmaking under CEQA. *Endangered Habitats League, Inc. v. County of Orange* (2005) 131 Cal.App.4th 777, 794; CEQA Guidelines § 15126.4(a)(1)(B). The Revised DPEIR must address this deficiency by completing its reports, plans, and studies before any final decision is made.

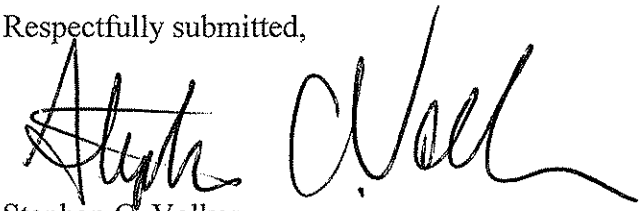
Compounding the confusion that reliance on future compliance with management plans and deferring critical decision making injects into the CEQA process is the DPEIR's insistence on avoiding mitigation measures in favor of what it terms "Project Design Features." *See, e.g.*, DPEIR 1.0-29 to 1.0-30 (PDFs are intended "to reduce or avoid the potential for environmental effects . . . [and] would be made conditions of the Proposed Project to ensure these features are incorporated into the project design"). For example, the DPEIR lists wetting down dusty construction sites as a PDF rather than as a mitigation measure for otherwise significant air quality impacts. DPEIR 7.0-2 to 7.0-5. As a result, the DPEIR foregoes discussion of the harms associated with construction dust in the PDF section addressing ground wetting, resulting in counterintuitive segmentation of the harm from the mitigation measure that addresses it. *See, e.g.*, DPEIR S.0-9 to S.0-71 (table listing significant impacts and mitigation measures, but omitting any PDFs). It is unacceptable under CEQA for the County to assume that mitigation will be sufficient without a comprehensive understanding of the significance of the impacts that the mitigation measures are meant to address. Thus, PDFs are not a replacement for mitigation measures under CEQA, and to the extent the DPEIR uses the term PDF interchangeably with mitigation measures, it frustrates the informational purposes of CEQA.

Finally, there are components missing from the list of mitigation measures and PDFs in Chapter Seven of the PDEIR. For instance, no mitigation measures are listed under population and housing (DPEIR 7.0-43), yet temporary worker housing is listed as a reason why GHG emissions from transportation to and from the Project site would be reduced. DPEIR 3.1.3-20, fn. 6. And, as discussed above, the groundwater limits and the requirements that the Project be properly grounded should also be included as enforceable mitigation measures

VI. CONCLUSION

The County's DPEIR is disorganized, incomplete, and confusing. The DPEIR severely understates and ignores the Project's significant environmental impacts, and any purported benefits of the Project cannot outweigh its environmental harms. The County must overhaul the DPEIR to address the significant deficiencies identified above.

Respectfully submitted,



Stephan C. Volker
Attorney for The Protect Our Communities Foundation.,
Backcountry Against Dumps and Donna Tisdale

LIST OF EXHIBITS

List of exhibits in order of appearance in the comment letter

- **Exhibit 1**: CPUC, January 16, 2014, Resolution E-4637
- **Exhibit 2**: SDG&E, October 1, 2013, East County Substation Project Minor Project Refinement Request Form, Request # 8
- **Exhibit 3**: Impacts of Soitec Solar Projects on Boulevard and Surrounding Communities
- **Exhibit 4**: Precipitation data from weather station KCZZ in Campo and from the Mt. Laguna Observatory in Mt. Laguna, as accessed via www.wunderground.com
- **Exhibit 5**: CPUC, December 19, 2013, Letter to Nazar Najor of Live Oak Springs Water Company re: Rejection of Advice Letter 28
- **Exhibit 6**: Plea Agreement, *United States of America v. Duke Energy Renewables, Inc.,* Case No. 213-cr-00268-KHR (D. Wyo., Filed 11/07/13)
- **Exhibit 7**: County of San Diego, Land Use and Environmental Group, *Guidelines for Determining Significance and Report Format and Content Requirements: Biological Resources*, Fourth Revision, September 2010
- **Exhibit 8**: California Native Species Field Survey Form, December 1, 2013
- **Exhibit 9**: 2010 United States Fish and Wildlife Service *Interim Golden Eagle Inventory Monitoring Protocols; and Other Recommendations*, Pagel, J.E., D.M. Whittington, and G.T. Allen, 2010, Division of Migratory Bird Management
- **Exhibit 10**: *Golden Eagle Territories in the Iberdrola – Tule Wind Project Vicinity*, Map, May 2010
- **Exhibit 11**: USFWS, Pagel, Joel E., January 21, 2010, *Memo about the Tule Wind Project*
- **Exhibit 12**: Grubb, Teryl G., 2010, *Golden Eagle Indifference to Heli-Skiing and Military Helicopters in Northern Utah*, *The Journal of Wildlife Management*, 74(6): 1275-1285
- **Exhibit 13**: National Bald Eagle Management Guidelines (2007)
- **Exhibit 14**: Photographic evidence of an egret between the Rugged site locations
- **Exhibit 15**: California Natural Diversity Database, data for Live Oak Springs Quadrangle (3211663) and Tierra del Sol Quadrangle(3211653)
- **Exhibit 16**: Manville, *Anthropogenic-related Bird Mortality Focusing on Steps to Address Human-cause Problems – a White Paper for the Anthropogenic Panel*, International Partners in Flight Conference, August 27, 2013
- **Exhibit 17**: Farboud *et al.*, 2013, "'Wind Turbine Syndrome': Fact or Fiction?," *The Journal of Laryngology & Otology*, 127(3):222-226
- **Exhibit 18**: Tule Wind Project FEIS section D.8
- **Exhibit 19**: Excerpts from HDR Engineering, Inc., February 2011, "Tule Wind Project Draft Noise Analysis Report"
- **Exhibit 20**: Salt & Kaltenbach, 2011, "Infrasound from Wind Turbines Could Affect Humans," *Bulletin of Science, Technology and Society*, 31(4): 296-302
- **Exhibit 21**: Roberts & Roberts, 2013, "Wind Turbines: Is There a Human Health Risk?," *Journal of Environmental Health*, 75(8): 8-17
- **Exhibit 22**: Salt *et al.*, 2013, "Large Endolymphatic Potentials from Low-Frequency and

Infrasonic Tones in the Guinea Pig," *The Journal of the Acoustical Society of America*, 133(3): 1561-1571

- **Exhibit 23**: Salt & Lichtenhan, 2012, "Perception-Based Proteection from Low-Frequency Sounds May Not Be Enough," presented at InterNoise 2012 in New York City, New York, August 19-22, 2012
- **Exhibit 24**: Salt & Hullar, 2010, "Responses of the Ear to Low Frequency Sounds, Infrasound and Wind Turbines," *Hearing Research*, 286: 12-21
- **Exhibit 25**: picture of the glare from Soitec's experimental CPV tracker at the campus of the University of California, San Diego
- **Exhibit 26**: Goodyear, January 20, 2014, "Death Dust: the Valley Fever Menace," *New Yorker*
- **Exhibit 27**: *Sierra Club v. County of San Diego*, 37-2012-00101054-CU-TT-CTL (appeal pending in 4th DCA, case no. D064243)
- **Exhibit 28**: SDG&E, "Overview – NEM Cap," webpage, http://www.sdge.com/clean-energy/net-energy-metering/overview-nem-cap, last accessed March 1, 2014
- **Exhibit 29**: CPUC, January 14, 2011, Decision 11-01-025
- **Exhibit 30**: CEC, April 2013, "Renewables Portfolio Standard Eligibility Guidebook," Seventh Edition
- **Exhibit 31**: Wei *et al.*, January 2010, "Putting Renewables and Energy Efficiency to Work: How Many Jobs Can the Clean Energy Industry Generate in the US?," *Energy Policy*, 38:919-931
- **Exhibit 32**: Powers, March 2012, *Bay Area Smart Energy 2020*, Chapter 11